

**HARYANA POWER GENERATION CORPORATION LIMITED**

**1X800 MW EXPANSION UNIT  
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT  
YAMUNA NAGAR, HARYANA**

**EPC PACKAGE TENDER SPECIFICATION**

**SPECIFICATION #**

**SECTION - VII**

**BOOK 3 OF 3**

# **FORMS OF DEED OF JOINT UNDERTAKING**

**ROUTE-1 (FOR STEAM GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13A11	Applicable for <b>Bidder/Bidder's Associate as Qualified Steam Generator Manufacturer (QSGM)</b> along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13A12	Applicable for <b>Bidder/Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13A13	Applicable for <b>Bidder/Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13A14	Applicable for <b>Bidder/Bidder's Associate as QSGM</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13A15	Applicable for <b>Bidder/Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13A16	Applicable for <b>Bidder/Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable to Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-1 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13A21	Applicable for <b>Bidder/Bidder's Associate as Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> along with <b>Indian Subsidiary/JV Company of QSTGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13A22	Applicable for <b>Bidder/Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13A23	Applicable for <b>Bidder/Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13A24	Applicable for <b>Bidder/Bidder's Associate as QSTGM</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13A25	Applicable for <b>Bidder/Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13A26	Applicable for <b>Bidder/Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F2	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-2 (FOR STEAM GENERATOR AND AUXILIARIES):**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13B1	Applicable for <b>Bidder (Indian SG &amp; STG Manufacturer) along with Qualified Steam Generator Manufacturer(QSGM)</b>
2	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-2 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13B2	Applicable for <b>Bidder (Indian SG &amp; STG Manufacturer) along with Qualified Steam Turbine Generator Manufacturer(QSGM)</b>
2	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-3 (FOR STEAM GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13C11	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM), Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13C12	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13C13	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13C14	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13C15	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13C16	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-3 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES) :**

S.No.	DJU Format No.	Executants of DJU
1	13C21	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM), Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13C22	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13C23	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13C24	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13C25	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13C26	Applicable for <b>Bidder/Bidder's Associate as Indian Subsidiary of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F2	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-4 (FOR STEAM GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13D11	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM), Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13D12	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13D13	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13D14	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13D15	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13D16	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSGM along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets



**ROUTE-4 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13D21	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM), Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13D22	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13D23	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13D24	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13D25	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13D26	Applicable for <b>Bidder/Bidder's Associate as Indian JV of QSTGM along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F2	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-5 (FOR STEAM GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13E11	Applicable for <b>Bidder/Bidder's Associate as Indian Company who holds atleast 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM), Indian Subsidiary/JV Company of QSGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13E12	Applicable for <b>Bidder/Bidder's Associate as Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13E13	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13E14	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13E15	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13E16	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Generator Manufacturer (QSGM)</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-5 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13E21	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM), Indian Subsidiary/JV Company of QSTGM and Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13E22	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13E23	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds at least 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13E24	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds atleast 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13E25	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds atleast 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13E26	Applicable for <b>Bidder/Bidder's Associate Indian Company who holds atleast 51% equity in Joint venture Company along with Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)], <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F2	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
8	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-6 (FOR STEAM GENERATOR AND AUXILIARIES):**

S.No.	DJU Format No.	Executants of DJU
1	13F11	Applicable for <b>Bidder, Bidder's Associate as Qualified Steam Generator Manufacturer (QSGM)</b> along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13F12	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13F13	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13F14	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13F15	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13F16	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets

**ROUTE-6 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13F21	Applicable for <b>Bidder, Bidder's Associate as Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> along with <b>Indian Subsidiary/JV Company of QSTGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
2	13F22	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13F23	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13F24	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13F25	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13F26	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13F2	Applicable for Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company" meeting clause 1.7.1 of item no. 4 of Bid Data Sheets

**ROUTE-7 (FOR STEAM GENERATOR AND AUXILIARIES):**

**FORMS ARE AT THE END OF BOOK**

<b>S.No.</b>	<b>DJU Format No.</b>	<b>Executants of DJU</b>
1	13F1	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
2	13G11	Applicable for <b>Bidder, Bidder's Associate as Qualified Steam Generator Manufacturer (QSGM)</b> along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13G12	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13G13	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13G14	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13G15	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13G16	Applicable for <b>Bidder, Bidder's Associate as QSGM</b> [Where <b>QSGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of SG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company of QSGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
8	13G17	Applicable for <b>Bidder/Bidder's Associate as "Indian SG Manufacturer"</b> along with <b>QSGM</b> meeting clause 1.2.1 of item no. 4 of Bid Data Sheets
9	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**ROUTE-7 (FOR STEAM TURBINE GENERATOR AND AUXILIARIES):**

**FORMS ARE AT THE END OF BOOK**

S.No.	DJU Format No.	Executants of DJU
1	13F2	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.7.1 of item no. 4 of Bid Data Sheets
2	13G21	Applicable for <b>Bidder, Bidder's Associate as Qualified Steam Turbine Generator Manufacturer (QSTGM)</b> along with <b>Indian Subsidiary/JV Company of QSTGM</b> and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
3	13G22	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
4	13G23	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
5	13G24	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
6	13G25	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (iii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
7	13G26	Applicable for <b>Bidder, Bidder's Associate as QSTGM</b> [Where <b>QSTGM is a Holding Company</b> as per <b>Note 4 (ii)</b> of Clause 1.0.0, Item 4 of BDS and Manufacturing of STG sets is carried out by another <b>subsidiary of Indian subsidiary / JV Company</b> as per <b>Note 8</b> of Clause 1.0.0, Item 4 of Bid Data Sheets (BDS)] along with <b>Indian Subsidiary/JV Company</b> of QSTGM and <b>Other Promoter</b> having 25% or more equity in Indian Subsidiary/JV Company
8	13G27	Applicable for <b>Bidder/Bidder's Associate as "Indian STG Manufacturer"</b> along with <b>QSTGM</b> meeting clause 1.2.1 in conjunction with 1.2.3 (if applicable) of item no. 4 of Bid Data Sheets.
9	13K	Applicable for <b>Bidder/Bidder's Associate as "Indian Subsidiary Company/ JV Company/ Indian Manufacturing Company"</b> meeting clause 1.8.0 of item no. 4 of Bid Data Sheets

**(FOR STEAM GENERATOR MANUFACTURER WITH TECHNOLOGY TIE-UP FOR VARIABLE PRESSURE DESIGN AS PER NOTE 5 OF CLAUSE 1.0.0, ITEM-4 OF BDS):**

S.No.	DJU Format No.	Executants of DJU
1	13H1	Applicable for Bidder (QSGM) along with VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR)

S.No.	DJU Format No.	Executants of DJU
1	13H2	Applicable for Bidder, Bidder Associate (QSGM) along with VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR)

**(FOR BIDDER AND ASSOCIATE PROJECT MANAGEMENT ORGANIZATION AS PER CLAUSE 4.0.0, ITEM-4 OF BDS):**

S.No.	DJU Format No.	Executants of DJU
1	13I1	BIDDER AND ASSOCIATE PROJECT MANAGEMENT ORGANIZATION

**(FOR BIDDER AND ASSOCIATE ARCHITECT ENGINEERING FIRM AS PER CLAUSE 5.0.0, ITEM-4 OF BDS):**

S.No.	DJU Format No.	Executants of DJU
1-4	13I2, 13I2A, 13I2B, 13I2C	BIDDER AND ASSOCIATE ARCHITECT ENGINEERING FIRM

S.No.	Letter Format No.	Letter as per format to be submitted by Bidder as per QR
1	13J	Format of Letter to ensure satisfactory performance.

**Note:** Bidder shall necessarily be an executants in each applicable DJU



# **DJU FORMS**

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR  
AND AUXILIARIES AS PER CLAUSE 1.1.3, ITEM 4.0 OF BID DATASHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, \*THE QUALIFIED STEAM GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet should have formed an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS and, shall associate with **EITHER** i) \*Qualified Steam

Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and ratings specified in the Contract(s)) in the

form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, \*the Qualified Steam Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Contractor / Indian Manufacturing Company shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and

the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and \*the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contract or in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

WITNESS :

1.....

.....  
(Official Address)

WITNESS :

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*OTHER PROMOTER)

WITNESS :

1.....

.....

(Signature of the Authorised Representative)

.....

Name.....

(Official Address)

Designation.....

Common Seal of the

Company.....

**Notes:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**



## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES), \*THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES), THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b) and note 4 iii) of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of super critical Steam Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, \*the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Contractor /Indian Manufacturing Company shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and

suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and \*the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s.....  
(\*the Qualified Steam Generator Manufacturer i.e. HOLDINGCOMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....



Common Seal of the  
Company.....

For M/s.....  
(\*OTHER PROMOTER )

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- (i) **The Bidder/\*the Qualified Steam Generator Manufacturer shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, \*the Bidder/\*the Qualified Steam Generator Manufacturer shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**
  
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
  
- (iii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (\*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2 (a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "the Qualified Steam Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (the Subsidiary(ies) of the bidder/\*the Qualified Steam Generator Manufacturer who are lending strength/ experience to the bidder/\*the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1 (A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b) and note 4 ii) of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the

bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
  - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian

Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.



The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....

Designation.....

Common Seal of the Company .....

For M/s.....  
(\*the Qualified Steam Generator  
Manufacturer i.e. HOLDINGCOMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....

Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING  
COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDINGCOMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Joint Venture/ Indian Subsidiary  
Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....

Common Seal of the  
Company.....

For M/s.....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- (i) **The Holding Company shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiary(ies) lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1A, item 4.0 of Bid Data Sheet, the bidder shall arrange for separate on demand bank guarantees from all such Subsidiary(ies) for an amount aggregating 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.**
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) **\*Bidder to strike out, whichever is not applicable.**

### Annexure-I

#### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 AND NOTE \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, \*THE QUALIFIED STEAM GENERATOR MANUFACTURER, THE INDIAN \*SUBSIDIARY/\*JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2 (a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ \*JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2 (a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAMGENERATOR ANDAUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "\*OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet have set up an Indian Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, shall associate with i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS and M/s .....is the Subsidiary Company of above manufacturing company as per note 8.0 of Clause 1 0.0 of Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (as per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, \*the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).



The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
  - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if

manufactured at Qualified Steam Generator Manufacturer's works and shall meet qualified Steam Generator Manufacturer's approval/ acceptance.

- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and \*the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Generator  
Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the  
Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....  
.....  
For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the  
Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....  
.....  
For M/s.....  
(Subsidiary Company of  
Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the  
Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....  
.....  
For  
M/s.....  
.....  
(PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the  
Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....  
.....

**Note: 1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**2. \* Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 AND NOTE 4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), \*THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), THE INDIAN \*SUBSIDIARY/\*JOINT VENTURE COMPANY, MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAMGENERATOR ANDAUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW



\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose \*other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS and M/s .....is the Subsidiary Company of above manufacturing company as per note 8.0 of Clause 1 0.0 of Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased

Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, \*the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we \*the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for **1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for

incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.

- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and \*the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

\*OTHER PROMOTER

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Generator  
Manufacturer i.e. HOLDINGCOMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Subsidiary Company of Indian  
Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

- Note: 1. The Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, the bidder shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**
- 2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- 3.\* Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding



- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 AND NOTE 4 & 8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (\*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 1.1.1(A) ITEM 4.0 OF BID DATA SHEETS, THE INDIAN \*SUBSIDIARY/\*JOINT VENTURE COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2(b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "the Qualified Steam Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (the Subsidiary(ies) of the bidder/\*the Qualified Steam Generator Manufacturer who are lending strength/ experience to the bidder/\*the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1 (A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company\*/ Indian Subsidiary Company\*/ Indian Manufacturing Company\* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing

Company", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (\*Bidder/\*Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS and M/s .....is the Subsidiary Company of above manufacturing company as per note 8.0 of Clause 1 0.0 of Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to steam generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND WHEREAS the Bidder, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal

performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company/

Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package

awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.\*OTHER PROMOTER

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) or Indian Subsidiary/ Joint Venture Company or Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Generator Manufacturer, Subsidiary(ies) the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Generator Manufacturer i.e.  
HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised



.....  
(Official Address)

Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

.....  
(Official Address)

For M/s.....  
(\*Subsidiary Company of  
Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

.....  
(Official Address)

For M/s.....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

- Note: 1. *The Holding Company shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiary(ies) lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the bidder shall arrange for separate on demand bank guarantees from all such Subsidiary(ies) for an amount aggregating 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.***
- 2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***
- 3. *\* Bidder to strike out, whichever is not applicable.***

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR  
AND AUXILIARIES AS PER CLAUSE \*1.1.3/\*1.3.2/\*1.4.2/\*1.5.2/\*1.6.3/\*1.7.2,  
ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR AND THE  
"INDIAN SUBSIDIARY COMPANY/ JOINT VENTURE COMPANY/ INDIAN MANUFACTURING  
COMPANY" AS SPECIFIED UNDER CLAUSE 1.7.1 OF ITEM NO. 4 OF BDS FOR SUCCESSFUL  
PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s  
..... a Company incorporated under..... having its  
Registered Office at.....(hereinafter called the "Bidder/Contractor", which  
expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its  
Registered Office at ..... created for manufacturing of supercritical Steam  
Generators in India (hereinafter called the "Indian Manufacturing Company / Associate", which expression  
shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot  
No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner"  
which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site,  
construction, installation, testing, commissioning and conductance of guarantee tests for the EPC  
Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power  
Plant, Yamuna Nagar (hereinafter referred to as "Plant") vide its Bidding Document No.:  
03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause \*1.1.3/\*1.3.2/\*1.4.2/\*1.5.2/\*1.6.3/\*1.7.2, Item 4.0 of Bid Data Sheets (BDS) of  
bidding documents stipulates that the bidder, shall furnish a Deed of Joint Undertaking executed by him  
and the Indian Manufacturing Company who meets the requirement of 1.7.1 & 3.0.0 of item no. 4 of BDS  
for Steam Generator sets and shall source the Steam Generator Sets from the qualified associate.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid  
by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu  
Chhotu Ram Thermal Power Plant, Yamuna Nagar against the Owner's Bidding Documents No.  
03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Indian Manufacturing Company are required to jointly execute and  
furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and  
bound unto the Owner for the successful performance of the contract for the scope related to steam generator  
and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal  
Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and  
Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted  
by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder and the Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor and the Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
  
2. In case of any breach of the Contract(s) committed by the Contractor, we "Indian Manufacturing Company", do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we "Indian Manufacturing Company" and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
  
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).  

The liability of the Indian Manufacturing Company hereunder shall, however, be limited to an amount calculated @ **UD \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor and the Indian Manufacturing Company hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Indian Manufacturing Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Indian Manufacturing Company for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Indian Manufacturing Company covered under this Deed of Joint Undertaking, nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Indian Manufacturing Company and Contractor.
  
3. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the "Indian Manufacturing Company" shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the "Indian Manufacturing Company" shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the EPC
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the "Indian Manufacturing Company" shall extend our quality surveillance/ supervision/ quality control during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the "Indian Manufacturing Company" for successful commissioning and performance of the Steam Generators and auxiliaries, the Indian Manufacturing Company shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the "Indian Manufacturing Company" will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the "Indian Manufacturing Company" will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries.
- e) The Contractor / Indian Manufacturing Company shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Indian Manufacturing Company's design and to the Indian Manufacturing Company's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Indian Manufacturing Company's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of the Indian Manufacturing Company before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the "Indian Manufacturing Company" shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts

directly to the Owner and the Contractor and the Indian Manufacturing Company shall promptly carry out all corrective measures and modifications (as suggested by the Indian Manufacturing Company and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Indian Manufacturing Company shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor and the Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
5. We the Contractor and the Indian Manufacturing Company do hereby declare, undertake and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the Contract(s).
6. We, the Contractor and the Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Company manufacturing super critical Steam Generators as per the Contract(s).
7. We, the Contractor and the Indian Manufacturing Company, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the "Indian Manufacturing Company" as part of the technology transfer agreement.
8. The Contractor and the Indian Manufacturing Company will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
9. We, the Contractor and the Indian Manufacturing Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor and "Indian Manufacturing Company" do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
10. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/



component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 11. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 12. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor and the Indian Manufacturing Company through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS :

1. ....

.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name .....  
Designation.....  
Common Seal of the Company.....

**Notes:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.2.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR  
(INDIAN STEAM GENERATOR AND STEAM TURBINE GENERATOR MANUFACTURER  
MEETING THE REQUIREMENT OF 1.2.1 OF ITEM 4.0 OF BID DATA SHEETS) AND THE  
QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF  
CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE  
OF STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns)

and M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor/ Indian Steam Generator and Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.2.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder (Indian Steam Generator and Steam Turbine Generator Manufacturing Company) who meets the requirements stipulated in clause 1.2.1, item 4.0 of Bid Data Sheet shall associate with the Qualified Steam Generator Manufacturer who satisfies the qualification requirements specified in Clause 1.1.1(A), Item 4.0 of BDS and furnish a Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS M/s .....(Bidder)..... meets the requirement of clause 1.2.1, item no. 4.0 of BDS, and desires to associate with M/s..... who is a manufacturer of Steam Generator (hereinafter referred to as Qualified Steam Generator Manufacturer) and satisfies the qualification requirements as specified in Clause 1.1.1(A), Item 4.0 of BDS.

WHEREAS M/s .....(Bidder)..... has a valid ongoing collaboration and technology transfer agreement including licence to manufacture and supply supercritical steam generator sets covering the type, size and rating specified in India with the Qualified Steam Generator Manufacturer who meets the requirements of Clause 1.1.1(A) of item 4.0 of BDS valid minimum up to the end of the defect liability period of the contract and desires to augment its existing manufacturing facility for manufacturing of supercritical steam generator sets meeting the requirements of Clause 1.2.1 and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the Steam Generator and auxiliaries covered under EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical steam generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Qualified Steam Generator Manufacturer and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance including satisfactory thermal performance of Steam Generator and its auxiliaries (Boiler Startup drain recirculation pumps, Air Pre- heater, Fans, Coal Pulveriser, Control interlock & protection, Fuel oil pumps) and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator and its auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not

apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Owner's project site. Without prejudice to the overall responsibilities

of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Associate/Collaborator shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor and the Qualified Steam Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor and the Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor and the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement between us and the Indian Manufacturing Company.
8. We, the Contractor and the Qualified Steam Generator Manufacturer do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package in respect of the 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor and the Qualified Steam Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the Contractor, the Qualified Steam Generator Manufacturer shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Owner as per provisions of the bidding documents for each of the projects awarded to the Bidder/ Contractor. The value of each such Bank Guarantee shall be equal to Zero point Six percent (0.6%) of the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, as awarded by the Owner to the Contractor (an equivalent absolute amount to be specified at the time of award of Contract) and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package in respect of the projects awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the



validity of this bank guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Generator Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

WITNESS :

1.....

.....

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company.....

**Note: Power of Attorney of the persons signing on behalf of Qualified Steam Generator Manufacturer & Bidder is to be furnished by bidder as part of his bid and to be attached along with the signed Deed of Joint Undertaking.**

**Annexure-I**  
**Scope for “Supercritical Steam Generator”**

Scope for supercritical Steam generator shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete including

- Complete Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Complete draft system
- Complete Fuel (Oil & Coal ) firing system
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers
- Integral piping, mounting and fittings
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company.

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of

Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.3.2 item 4 of BDS.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose \*other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s.....(hereinafter called " \*OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated in India under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*OTHER PROMOTER having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer,\*The Indian Subsidiary/ Joint Venture Company and the \*OTHER

PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and

suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).



9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

.....  
(Official Address)

Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0} and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding

Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries)} meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose other \*OTHER PROMOTER having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called "OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)..... as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*OTHER PROMOTER having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we

shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in



certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability

period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

WITNESS :  
1.....  
  
.....  
(Official Address)

(Bidder / Contractor)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....  
  
For M/s .....  
(Qualified Steam Generator Manufacturer / Holding Company)

WITNESS:  
1.....  
  
.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

WITNESS:  
1.....  
  
.....  
(Official Address)

\*For M/s.....  
(Indian \*Subsidiary / JV / Manufacturing Company Manufacturing Company)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s .....  
(\*OTHER PROMOTER)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

**Note:**

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank***

*guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.*

- (ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.
- (iii) \*Bidder to strike out, whichever is not applicable.

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0}, Subsidiary(ies) and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries)}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose \*Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking



and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER

PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators.
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant.
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company /which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the

Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the

Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:  
1.....  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS :  
1.....  
.....  
(Official Address)

For M/s .....  
(Qualified Steam Generator Manufacturer / Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS :  
1.....  
.....  
(Official Address)

For M/s .....  
(SUBSIDIARY 1 OF HOLDINGCOMPANY)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS :  
1.....  
.....  
(Official Address)

For M/s.....  
(SUBSIDIARY 2 OF HOLDINGCOMPANY)

WITNESS :  
1.....  
.....  
(Official Address)

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....

Designation.....

Common Seal of the

Company .....

For M/s .....

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....

(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the

Company .....

\*For M/s.....

(Indian Manufacturing Company)

WITNESS:

1.....

.....

(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the

Company.....

For M/s .....

(\*OTHER PROMOTER)

WITNESS:

1.....

.....

(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the

Company .....

**Note:**

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.***

- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) **\*Bidder to strike out, whichever is not applicable.  
Annexure-I**

### **Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.



**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 AND NOTE \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.3.1 (b), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.3.2 and note

\*8, item 4 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose \*Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose \*other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable

Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or

obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.
- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the

Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.

- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
- 4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  - 5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
  - 6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

1. WITNESS:

.....  
(Signature, Name & Address)

For M/s.....  
(Qualified Steam Generator Manufacturer)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS :

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the

Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**2. \*Bidder to strike out, whichever is not applicable.**



## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND  
AUXILIARIES AS PER CLAUSE 1.3.2 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \* OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the .....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW \*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0} and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries)}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable

Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from timeto

time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India

in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later.



The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....

.....  
(Signature of the Authorised Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**

2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.*
  
3. *\* Bidder to strike out, whichever is not applicable.*

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system

- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.3.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0} and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.3.1 (b) and note \*8 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).



- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators

- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the

Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....

Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....

Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

.....  
(Official Address)

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be**

furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.

2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.*
3. *\* Bidder to strike out, whichever is not applicable.*

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)



- Elevators for Steam generator
- Chemical LP Dozing system and oxygenated treatment system
- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding DocumentNo.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.4.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Indian Manufacturing Company.

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement

of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.4.2 item 4 of BDS.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1 (a) and 3.0.0, Item 4.0 of BDS whose \*Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and

auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and

demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract

Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished by the Contractor and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....

Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(OfficialAddress)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:**



- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator

- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the .....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.4.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0} and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding

Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries), meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1 (a) and 3.0.0, Item 4.0 of BDS whose other Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/ Joint

Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in

certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
  6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
  7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
  8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of 800MW under the Contract or completion of Phased Manufacturing



Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer  
/ Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of***

*requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.*

- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) **\*Bidder to strike out, whichever is not applicable.**

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system

- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW. \*AND WHEREAS Clause 1.4.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0}, Subsidiary(ies) and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries), meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1(a) and 3.0.0, Item 4.0 of BDS whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking

and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER



PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.

- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/ Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and

confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/ Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s .....  
(Qualified Steam Generator Manufacturer / Holding Company)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)  
  
.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding***

*Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.*

- (ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.
- (iii) \*Bidder to strike out, whichever is not applicable.

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.



**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 AND NOTE \*6 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF BID DATA SHEETS  
(ONNON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR ANDAUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.4.2 and note \*6 of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company and

\*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.4.1 (b) and note \*6, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause

1.4.2 and note \*8, item 4 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be

jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for each

Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall

responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased

Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the Company.....

1.WITNESS:

For M/s.....  
(Qualified Steam Generator Manufacturer)

.....  
(Signature, Name & Address)

.....  
(Signature of the Authorised Representative)  
.....

Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Parent Company of Indian Majority Stake  
Holder of the JV Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company



**Note:1. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***

**2. *\*Bidder to strike out, whichever is not applicable.***

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 AND NOTE \*4, \*6 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.4.2 and note \*6 of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0},\*Parent Company of Indian Majority Stake Holder of the JV Company and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.4.1 (b) and note \*6 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries), meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHERPROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the

requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s .....(hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators

- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the



Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

\*For M/s.....  
(Parent Company of Indian Majority Stake  
Holder of the JV Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**

**2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**3. \* Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 AND NOTE \*4, \*6 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor" / \*Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at ..... (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Subsidiary

Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.4.2 and note \*6 of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.4.1(a), item 4.0 of Bid Data Sheet as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 1.0.0}, \*Parent Company of Indian Majority Stake Holder of the JV Company and \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.4.1 (b) and note \*6 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries), meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.



\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.4.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Other Promoter having a stake of 25% or more in the Bidder/Contractor is M/s ..... (hereinafter called " OTHERPROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters,

of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies) hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries

and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company / Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests

that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at

the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or Subsidiary(ies) or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed

these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Parent Company of Indian Majority Stake  
Holder of the JV Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....  
For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Subsidiary Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**

**2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**3. \* Bidder to strike out, whichever is not applicable.**



## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN JOINT VENTURE COMPANY), THE INDIAN JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.5.1 (a), ITEM 4.0 OF BID DATA SHEETS AND QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A) (\*ALONG WITH REQUIREMENTS OF 1.1.2 (a)/1.1.2 (b) AND 3.0.0) ITEM 4.0 OF BID DATA SHEETS, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, the

Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 1.1.1(A) along with requirements of clause 1.1.2 (a)/1.1.2 (b) and Clause 3.0.0, Item 4.0 of BDS and \*the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a), item 4.0 of Bid Data Sheet.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Bidder) and the M/s .....(Qualified Steam Generator Manufacturer)..... as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (herein after called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/ Joint

Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries , including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
  6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
  7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
  8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and

shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....



.....  
(Official Address)

(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Qualified Steam Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
  
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY), THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 1.1.1(A) along with requirements of

clause 1.1.2 (a)/1.1.2 (b) and Clause 3.0.0, Item 4.0 of BDS and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR**

ii)\* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Bidder) and the M/s .....(Qualified Steam Generator Manufacturer)..... as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1 5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to

proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.
- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's

works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program



beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Qualified Steam Generator Manufacturer/  
Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) **However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) **\*Bidder to strike out, whichever is not applicable.**

**Annexure-I**  
**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY), THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS) AND SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1(A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.5.2, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 1.1.1(A) along with requirements of clause 1.1.2 (a)/1.1.2 (b) and Clause 3.0.0, Item 4.0 of BDS, Subsidiary(ies) and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical Steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR**

ii)\* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Bidder) and the M/s .....(Qualified Steam Generator Manufacturer)..... as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1 5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope

related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US \$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be



carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
  - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for

incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.

- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
  6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
  7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare

and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Qualified Steam Generator Manufacturer/  
Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the company

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i)** *However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.*
- (ii)** Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.
- (iii)** \*Bidder to strike out, whichever is not applicable.

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc



**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2, AND NOTE \*7 & \*8 OF CLAUSE 1.0.0  
OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 1.0.0), \*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 1.0.0 AND QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A) (\*ALONG WITH REQUIREMENTS OF 1.1.2 (a)/1.1.2 (b) AND 3.0.0) ITEM 4.0 OF BID DATA SHEETS AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2 and note no. \*7 of clause 1.0.0 Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, \*Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 1.1.1(A) and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.5.1 (b) and note no. \*7 of clause 1.0.0 item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Bidder), \*M/s.....(Wholly Owned Subsidiary Company of the Bidder)..... and M/s .....(Qualified Steam Generator Manufacturer).....as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets through M/s. ....(Indian JV Company/\*Subsidiary of JV Company/)....., meeting the requirements of Clause 1.5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
  - 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall,

however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall

responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the

defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or\* Wholly owned Subsidiary Company of Bidder/ Contractor or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company .....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY OF BIDDER/  
CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Qualified Steam Generator Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

WITNESS:  
1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:  
1.....

.....  
(Official Address)

For M/s.....  
(\*Subsidiary of Indian Subsidiary/Joint Venture  
Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:  
1.....

.....  
(Official Address)

\*For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

WITNESS:  
1.....

.....  
(Official Address)



**Note: 1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**2. \* Strikeout whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 AND NOTE 4 AND NOTE \*7 & \*8 TO  
CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 1.0.0), \*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.5.1 (a), ITEM 4.0 OF BID DATA SHEETS, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 1.0.0, QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS) AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Subsidiary / Joint Venture Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2 and note no. \*7 of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, \*Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 1.1.1(A) along with requirements of clause 1.1.2 (a)/1.1.2 (b) and Clause 3.0.0, Item 4.0 of BDS and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.5.1 (b) and note no. \*7 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii)\* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Bidder), \*M/s.....(Wholly Owned Subsidiary Company of the Bidder)..... and M/s .....(Qualified Steam Generator Manufacturer).....as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets through M/s. ....(Indian JV Company/\*Subsidiary of JV Company/)....., meeting the requirements of Clause 1.5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

AND WHEREAS the Bidder, \*the Wholly owned subsidiary of the Bidder, the Qualified Steam Generator Manufacturer, the Joint Venture Company, \*the Subsidiary Company of the JV Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound unto the Owner for the successful performance of the Contract for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer,

\*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carryout



all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the\*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Wholly owned Subsidiary Company of Bidder/ Contractor or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

WITNESS :

1.....

.....  
(Official Address)

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY  
OF BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(\*Subsidiary of Joint Venture Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note: 1. *\*\*However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.***

**2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***

**3. *\* Bidder to strike out, whichever is not applicable.***

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 AND NOTE 4 AND NOTE \*7 & \*8 TO  
CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 1.0.0), \*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.5.1 (a), ITEM 4.0 OF BID DATA SHEETS, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 1.0.0, QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/EXPERIENCE TO THE HOLDING COMPANY, AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand.....by M/s ..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1(A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary

Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2 and note no. \*7 of clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall furnish a Deed of Joint Undertaking executed by him, \*Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 1.1.1(A) along with requirements of clause 1.1.2 (a)/1.1.2 (b) and Clause 3.0.0, Item 4.0 of BDS and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

\*AND WHEREAS clause 1.5.1 (b) and note no. \*7 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii)\* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.



\*WHEREAS M/s .....(Bidder), \*M/s.....(Wholly Owned Subsidiary Company of the Bidder)..... and M/s .....(Qualified Steam Generator Manufacturer).....as the promoters, have set up a Joint Venture Company (M/s..... Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, ..... for manufacturing of supercritical Steam Generator sets through M/s. ....(Indian JV Company/\*Subsidiary of JV Company/)....., meeting the requirements of Clause 1.5.1 (a) of the Qualifying Requirements, Item 4.0 of BDS.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to

carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), the \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies) hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and

auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/ supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure ER CLAUSE 1.6.3 & \*1.6.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID / procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and

demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of 800MW under

the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Wholly owned Subsidiary Company of Bidder/Contractor or Subsidiary(ies) or the \*Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....

Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*Subsidiary of Joint Venture  
Company/Indian Manufacturing company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....

Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

- Note: 1. ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.***
2. ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***
3. ***\* Bidder to strike out, whichever is not applicable.***



**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS clause 1.6.2 (i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, the Qualified Steam Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators

- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the

Contractor \*and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS : 1.....  ..... (Official Address)	For M/s ..... (BIDDER/ CONTRACTOR)  ..... (Signature of the Authorised Representative) Name..... Designation..... Common Seal of the Company .....	
WITNESS : 1.....  ..... (Official Address)	For M/s..... (the Qualified Steam Generator Manufacturer)  ..... (Signature of the Authorised Representative) Name..... Designation..... Common Seal of the Company.....	
WITNESS : 1.....  ..... (Official Address)	For M/s..... (Indian Manufacturing Company)  ..... (Signature of the Authorised Representative) Name..... Designation..... Common Seal of the Company.....	
WITNESS : 1.....  ..... (Official Address)	For M/s..... (OTHER PROMOTER)  ..... (Signature of the Authorised Representative) Name..... Designation..... Common Seal of the Company.....	



**Notes:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
  
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS clause 1.6.2(i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, the Qualified Steam Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant

- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.



IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(the Qualified Steam Generator  
Manufacturer i.e. Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s.....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Notes:**

- (i) **The Qualified Steam Generator Manufacturer shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Qualified Steam Generator Manufacturer shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**
  
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
  
- (iii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.

Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (the Subsidiary(ies) of the Qualified Steam Generator Manufacturer who are lending strength/ experience to the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1 (A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS clause 1.6.2(i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 1.1.1 (A), item 4.0 of Bid Data Sheet along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (as per Annexure I) fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.
6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance



of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer, Subsidiary(ies) shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7.0 We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

8.0 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9.0 Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10.0 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

.....  
(Official Address)

For M/s.....  
(the Qualified Steam Generator Manufacturer i.e. Holding Company)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

.....  
(Official Address)

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

.....  
(Official Address)

Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s.....  
(OTHER PROMOTER)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Notes:**

- (i) **The Holding Company shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiary(ies) lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1A, item 4.0 of Bid Data Sheet, the bidder shall arrange for separate on demand bank guarantees from all such Subsidiary(ies) for an amount aggregating 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.**
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 AND NOTE \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at.....and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS clause 1.6.2(i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer) ....., as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s.....Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER").....meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).



3. We, the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.
6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance

of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

7. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC PACKAGE awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.  
  
The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC PACKAGE awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1. ....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the Company .....

For M/s.....  
(the Qualified Steam Generator Manufacturer)

WITNESS :

1. ....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name .....  
Designation.....  
Common Seal of the Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Subsidiary Company of  
Indian Manufacturing Company)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....

**Notes:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.



AND WHEREAS clause 1.6.2(i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (as per Annexure I) fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. We the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.
6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators;

selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or Indian Subsidiary/ Joint Venture Company or \*Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the Company .....

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(the Qualified Steam Generator Manufacturer/Holding Company)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)

Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Subsidiary Company of  
Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)

Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)

Name.....  
Designation.....  
Common Seal of the  
Company.....

**Notes:**

1. **The Qualified Steam Generator Manufacturer shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, the Qualified Steam Generator Manufacturer shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1 (A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**
2. **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
3. **\* Bidder to strike out, whichever is not applicable**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.



**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY 1.6.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Qualified Steam Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under ..... having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at ..... (the Subsidiary(ies) of the bidder/\*the Qualified Steam Generator Manufacturer who are lending strength/ experience to the bidder/\*the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1 (A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS clause 1.6.2(i), item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer, who is a holding company collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

WHEREAS M/s ..... (Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary/ Joint Venture Company (M/s..... Name of the JV/ Subsidiary Company.....) (hereinafter called the "Indian Manufacturing Company") incorporated in India under the Companies Act, for manufacturing of supercritical Steam Generator sets whose other promoter having 25% or higher equity in the Indian Joint Venture Company / Indian Subsidiary Company is M/s ..... (hereinafter called "OTHER PROMOTER")..... meeting the requirements as specified in Clause 1.1.2 (a)/1.1.2 (b) and 3.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (as per Annexure I) fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
4. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company as part of the technology transfer agreement.
5. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 5.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

6. Without prejudice to the generality of the undertaking in paragraphs above, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.
- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian

Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor \*and the Qualified Steam Generator Manufacturer, Subsidiary(ies) shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
7. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
8. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

9. Any dispute that may arise between the Owner and the Contractor or the Qualified Steam Generator Manufacturer, Subsidiary(ies) or Indian Subsidiary/ Joint Venture Company or \*Subsidiary of Indian Manufacturing Company or \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) the Indian Manufacturing Company, \*Subsidiary of Indian Manufacturing Company and the \*OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS:

1.....

.....

(Official Address)

For M/s.....  
(the Qualified Steam Generator  
Manufacturer/Holding Company)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

WITNESS:

1.....

.....

(Official Address)

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company .....

WITNESS:

1.....

.....

(Official Address)

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company .....

WITNESS :

1.....

.....

(Official Address)

For M/s.....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company .....

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS :  
1.....  
  
.....  
(Official Address)

For M/s.....  
(\*Subsidiary Company of  
Indian Manufacturing Company)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS :  
1.....  
  
.....  
(Official Address)

\*For M/s.....  
(OTHER PROMOTER)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

- Note: 1. The Holding Company shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiary(ies) lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the bidder shall arrange for separate on demand bank guarantees from all such Subsidiary(ies) for an amount aggregating 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.**
- 2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- 3. \* Bidder to strike out, whichever is not applicable.**



## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the.....having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 (a) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.7.2 item 4 of BDS.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose \*other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s.....(hereinafter called " \*OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated in India under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*OTHER PROMOTER having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, The Indian Subsidiary/ Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality

surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and

confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....



Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) **\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND  
AUXILIARIES AS PER CLAUSE 1.7.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR,  
THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO  
ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A),  
ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE  
COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM  
GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/  
JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN  
\*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE  
STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by  
M/s ..... a Company incorporated under .....  
having its Registered Office at ..... (hereinafter called the "Bidder/  
Contractor", which expression shall include its successors, administrators, executors and  
permitted assigns) AND

M/s ..... a Company registered under the .....  
Having its Registered Office at ..... (hereinafter called the Qualified Steam  
Generator Manufacturer / Holding Company, which expression shall include its successors,  
administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of  
India having its Registered Office at ..... created for manufacturing of  
supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/  
Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its  
successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator  
Manufacturer, registered under ..... having its Registered Office at ..... and having an  
equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian  
Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression  
shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered  
Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called  
"HPGCL" or "Owner" which expression shall include its successors, administrators, executors and  
assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply,  
transportation to site, construction, installation, testing, commissioning and conductance of  
guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at  
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter  
referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 (a) item 4.0 of BDS of Bidding Documents, stipulate that the  
bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with  
**EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or  
collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of  
BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV  
Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or  
collectively (along with its subsidiaries)} meeting the requirements stipulated at 1.3.1 (a) /1.4.1

(a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for **1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,** , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose other \*OTHER PROMOTER having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*OTHER PROMOTER having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint venture Company and the \*OTHER PROMOTER do here by declare and under take that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
- (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in

certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
  6. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
  7. We, the Contractor, Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
  8. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability



period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....  
(Official Address)

WITNESS:

1.....

.....  
(Official Address)

WITNESS:

1.....

.....  
(Official Address)

WITNESS:

1.....

.....  
(Official Address)

**Note:**

For M/s.....

(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

For M/s .....

(Qualified Steam Generator Manufacturer / Holding Company)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company .....

\*For M/s.....

(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

For M/s .....

(\*OTHER PROMOTER)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company .....

(i) **However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for**

*signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank Guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.*

- (ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.
- (iii) \*Bidder to strike out, whichever is not applicable.

## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the .....having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under .....having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under .....having its Registered Office at.....(Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 (a) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries)}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s..... (Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS whose \*Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s .....(hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS whose \*other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking

and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, \*The Indian Subsidiary/Joint Venture Company, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the \*OTHER



PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
- b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
  - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
  - (ii) Selection of auxiliaries for all Steam Generators.
  - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant.
  - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company /which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the

Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company and\*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS:

1.....  
.....  
(Official Address)

(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer  
/ Holding Company)

WITNESS :

1.....  
.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDINGCOMPANY)

WITNESS :

1.....  
.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(SUBSIDIARY 2 OF HOLDINGCOMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....

Designation.....

Common Seal of the  
Company .....

For M/s .....

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the  
Company .....

\*For M/s.....

(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the  
Company.....

For M/s .....

(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....

Common Seal of the  
Company .....

**Note:**

- (i) **However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**

- (ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) \*Bidder to strike out, whichever is not applicable.**

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc



**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES AS PER CLAUSE 1.7.2 AND NOTE \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the ..... having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s .....a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.:03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 (a) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer meeting the requirements of Clause 1.1.1 (A) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from Such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.3.2 and note\*8, item 4 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s .....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s ..... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose \*Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (herein after called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose \*other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (herein after called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable

Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **USD 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or

obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.
- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the

Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.

- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
  5. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the saidContract(s).
  6. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing

Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1.....

.....

(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

1. WITNESS:

.....

(Signature, Name & Address)

For M/s.....  
(Qualified Steam Generator Manufacturer)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS :

1.....

.....

(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the

Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**2. \* Bidder to strike out, whichever is not applicable.**



## Annexure-I

### Scope for “Steam Generator & Auxiliaries”

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Steam Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (If applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding

- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
  - Equipment Cooling Water System
  - Plant Utilities including,
    - Compressed air system (Common system)
  - Handling system for all equipment indicated above
  - Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
    - Power & Control Cable
    - Earthing, Lightning protection
    - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \*OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand ..... by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the .....having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under .....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 (a) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries)}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s..... (Qualified Steam Generator Manufacturer)... , as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s..... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable

Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the\*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of \*the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the \*OTHER PROMOTER, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to

time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
  - e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India

in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later.



The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....

.....  
(Signature of the Authorised Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(\*OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.**

**2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***

**3. *\* Bidder to strike out, whichever is not applicable.***

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Stem Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draft fans.
- seal air, scanner air fans
- GR fans (if applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,
- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)

- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurization system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0  
OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 AND THE \*OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY FOR SUCCESSFUL PERFORMANCE OF THE STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand ..... by M/s ..... a Company incorporated under .....having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns)AND

M/s ..... a Company registered under the .....having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under .....having its Registered Office at ....., M/s ..... a Company registered under ..... having its Registered Office at ..... and M/s ..... a Company registered under ..... having its Registered Office at.....(Subsidiary(ies) of the Holding company who are lending strength/ experience to the holding company for meeting the requirements stipulated in clause 1.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered in India under the Companies Act ..... of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under .....registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Generator Manufacturer, registered under ..... having its Registered Office at..... and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 (a) and note \*8 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS shall associate, with **EITHER** i) \*Qualified Steam Generator Manufacturer who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Clause 1.1.1 (A) item 4 of BDS}, meeting the requirements stipulated at 1.3.1 (a) /1.4.1 (a) (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW.

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer) , as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor .....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, Item 4.0 of BDS, directly or through (\*M/s ..... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s ..... (hereinafter called " OTHER PROMOTER").

\*WHEREAS M/s .....(Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary/Joint Venture Company (M/s.....) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a)/1.4.1(a) and 3.0.0, Item 4.0 of BDS directly or through (\*M/s. .... Subsidiary Company of Indian Manufacturing Company .....) as per note 8 of clause 1.0.0 of Item 4.0 of BDS, whose other Promoter having a stake of 25% or more in the Indian Subsidiary/Joint Venture Company is M/s ..... (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).



- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and \*OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the \*Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the\*OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators

- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian Manufacturing Company which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/acceptance.
- e) The Indian Manufacturing Company /Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the

Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).
5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).
7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and the \*OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and \*OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the Subsidiary Company of Indian Manufacturing Company or the \*OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company, the \*OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....

Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

.....  
(Official Address)

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note: 1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be**

furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.

2. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.*
3. *\* Bidder to strike out, whichever is not applicable.*

**Annexure-I**

**Scope for “Steam Generator & Auxiliaries”**

Scope for Steam generator and Auxiliaries shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete with all associated auxiliaries and system including

- Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
- Air & flue gas system from fans suction to Chimney inlet
- Coal from Bunker outlet to Stem Generator
- Ash up to Bottom ash hopper outlet
- Complete pressure parts,
- All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
- Soot blowing system with piping, valves, controls etc.
- Coal feeders, Complete Fuel oil firing system, milling and complete coal firing system
- Coal combustion system including coal / oil burners & scanners.
- Air and flue gas ductwork and Dampers and complete draft plant
- Integral piping, mounting and fittings
- Primary air fans.
- Forced draft fans.
- Induced draftfans.
- seal air, scanner air fans
- GR fans (if applicable)
- Aux PRDS and auxiliary steam piping
- Start up & circulation system,



- Air heaters & SCAPH.
- Chemical dosing systems as applicable.
- Fuel oil pressurizing system (Common system)
- Elevators for Steam generator
- Chemical LP Dosing system and oxygenated treatment system
- Thermal Insulation and Cladding
- Other systems like tools & tackles etc. as specified.
- Piping including,
  - Power cycle piping
  - Low pressure piping
  - Equipment cooling water system
  - Boiler fill system
- Equipment Cooling Water System
- Plant Utilities including,
  - Compressed air system (Common system)
- Handling system for all equipment's indicated above
- Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
  - Power & Control Cable
  - Earthing, Lightning protection
  - Electrical systems as required.
- Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurization system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR STEAM GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR,  
\*INDIAN STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF 1.2.1  
OF ITEM 4.0 OF BID DATA SHEETS AND THE QUALIFIED STEAM GENERATOR  
MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID  
DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF STEAM GENERATOR AND  
AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by  
M/s ..... a Company incorporated under .....having  
its Registered Office at..... (hereinafter called the Bidder / Contractor,  
which expression shall include its successors, administrators, executors and permitted assigns)

\*and M/s.....a Company registered under the Companies Act of India  
having its Registered Office at ..... (hereinafter called the Indian Steam  
Generator Manufacturer, which expression shall include its successors, administrators,  
executors and permitted assigns)

and M/s ..... a Company incorporated under .....  
having its Registered Office at..... (hereinafter called the Qualified Steam  
Generator Manufacturer, which expression shall include its successors, administrators,  
executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered  
Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter  
called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors  
and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply,  
transportation to site, construction, installation, testing, commissioning and conductance of  
guarantee tests for the EPC Package for **1x800 MW Super Critical Expansion Unit At Deen  
Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar** (hereinafter referred to as "Plant")  
vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.7.2(a), Item 4.0 of Bid Data Sheets (BDS) of bidding documents  
stipulates that the bidder who meets the requirements of Steam Turbine Generator Sets  
stipulated in clause 1.7.1, item 4.0 of Bid Data Sheet shall associate with \*Indian Steam  
Generator Manufacturer who meets the requirements stipulated in clause 1.2.1, item 4.0 of Bid  
Data Sheet and the Qualified Steam Generator Manufacturer who satisfies the qualification  
requirements specified in Clause 1.1.1(A), Item 4.0 of BDS and furnish a Deed of Joint  
Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the Invitation for Bid  
by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu  
Ram Thermal Power Plant, Yamuna Nagar, against the Owner's Bidding Document No.  
03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS M/s.....(Bidder)..... meets the requirement of Steam Turbine  
Generator Sets of clause 1.7.1, item no. 4.0 of BDS and desires to associate with \*M/s

.....(Indian Steam Generator Manufacturer)..... who meets the requirement of clause 1.2.1, item no. 4.0 of BDS, and M/s.....who is a manufacturer of Steam Generator (hereinafter referred to as Qualified Steam Generator Manufacturer) and satisfies the qualification requirements as specified in Clause 1.1.1(A), Item 4.0 of BDS.

WHEREAS M/s .....(\*Bidder / \*Indian Steam Generator Manufacturer)... has a valid ongoing collaboration and technology transfer agreement including licence to manufacture and supply supercritical steam generator sets covering the type, size and rating specified in India with the Qualified Steam Generator Manufacturer who meets the requirements of Clause 1.1.1(A) of item 4.0 of BDS valid minimum up to the end of the defect liability period of the contract and desires to augment its existing manufacturing facility for manufacturing of supercritical steam generator sets meeting the requirements of Clause 1.2.1 and 3 0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking

AND WHEREAS the Bidder, \*Indian Steam Generator Manufacturer, and Qualified Steam Generator Manufacturer shall be jointly and severally liable and bound unto the Owner for the successful performance of the Steam Generator and auxiliaries covered under EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (As per Annexure-I), fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS the Bidder and \*Indian Steam Generator Manufacturer be \*jointly \*and \*severally liable and bound unto the Owner for the successful performance of the contract for the entire scope related to the Steam Generator and auxiliaries covered under EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical steam generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Qualified Steam Generator Manufacturer, \*Indian Steam Generator Manufacturer and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance including satisfactory thermal performance of Steam Generator and its auxiliaries (Boiler Startup drain recirculation pumps, Air Pre-heater, Fans, Coal Pulveriser, Control interlock & protection, Fuel oil pumps) and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner. Further, we, the Contractor \*and \*Indian Steam Generator Manufacturer shall be \*jointly \*and \*severally liable to the Owner for the execution

and successful performance of the contract for the entire scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer \*and \*Indian Steam Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator and its auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, \*Indian Steam Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Generator Manufacturer hereunder shall, however, be limited to an amount calculated @ **US\$ 85 Million** for Steam Generator set to be supplied by the Bidder/ Contractor.

\*Further, the liability of the Indian Steam Generator Manufacturer hereunder shall, be limited to an amount calculated @ **US\$ 215 Million** for Steam Generator set to be supplied by the Bidder/ Contractor.

This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the \*Contractor / \*Indian Steam Generator Manufacturer may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Qualified Steam Generator Manufacturer \*or \*Indian Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer and/or \*Indian Steam Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer and / or \*Indian Steam Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall

prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, \*Indian Steam Generator Manufacturer and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:
- a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).
  - b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators as well as design of structural/supporting system including mill and bunker building, buck stay system etc.
    - (ii) Selection of auxiliaries for all Steam Generators
    - (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment of the Main Plant
    - (iv) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor / \*Indian Steam Generator Manufacturer during manufacture, erection, commissioning and performance testing, both at works and/ or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulation of the Contracts.

- c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the Contractor / \*Indian Steam Generator Manufacturer at his/or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor / \*Indian Steam Generator Manufacturer which would result in the same quality of equipment as if manufactured at Qualified Steam

Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

- e) The Contractor / \*Indian Steam Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the Contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer \*and \*Indian Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Owner and the Contractor, \*Indian Steam Generator Manufacturer and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer / \*Indian Steam Generator Manufacturer and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor, \*Indian Steam Generator Manufacturer, and Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.
4. We the Contractor, \*Indian Steam Generator Manufacturer, and the Qualified Steam Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
5. We, the Contractor, \*Indian Steam Generator Manufacturer, and the Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).
6. We, the Contractor, \*Indian Steam Generator Manufacturer, and the Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the \*Contractor / \*Indian Steam Generator Manufacturer as per the Contract(s).

7. We, the Contractor, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the \*Contractor / \*Indian Steam Generator Manufacturer as part of the technology transfer agreement.
8. We, the Contractor, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC Package in respect of the 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. We, the Contractor, \*Indian Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
9. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract or completion of Phased Manufacturing Program, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Owner and Contractor or \*Indian Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, \*Indian Steam Generator Manufacturer and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :  
1. ....  
  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)  
  
.....  
(Signature of the Authorised  
Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....

WITNESS :  
1. ....  
  
.....  
(Official Address)

For M/s .....  
(Qualified Steam Generator Manufacturer)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS :  
1. ....  
  
.....  
(Official Address)

\*For M/s.....  
(Indian Steam Generator  
Manufacturer)  
  
.....  
(Signature of the Authorised  
Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....



**Note: Power of Attorney of the persons signing on behalf of Qualified Steam Generator Manufacturer & Bidder is to be furnished by bidder as part of his bid and to be attached along with the signed Deed of Joint Undertaking.**

**\*Bidder to strike out, whichever is not applicable.**

## Annexure-I

### Scope for “Supercritical Steam Generator”

Scope for supercritical Steam generator shall cover the following but not limited for the purpose of Deed of Joint Undertaking (DJU):

Steam Generator(s) complete including

- Complete Steam & water circuit from inlet of NRV at inlet of economiser inlet to Main and Reheat steam pipes up to turbine inlet
  - Complete draft system
  - Complete Fuel (Oil & Coal ) firing system
  - Complete pressure parts,
  - All structural steel structures for SG and Auxiliaries, platforms, stairs, piping, valves, supports etc.
  - Soot blowing system with piping, valves, controls etc.
  - Coal combustion system including coal / oil burners & scanners.
  - Air and flue gas ductwork and Dampers
  - Integral piping, mounting and fittings
  - Aux PRDS and auxiliary steam piping
  - Start up & circulation system,
  - Chemical LP Dozing system and oxygenated treatment system
  - Thermal Insulation and Cladding
- Y Electrical systems including motors of all Auxiliaries indicated above and Electric Actuators
- Y Complete control and instrumentation Systems for the steam generator & its auxiliaries including boiler protection and burner management system, Auxiliary PRDS, Fuel oil pressurisation system, SADC and Soot blower MCC & control etc.

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER NOTE 5 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER (SUPERCRITICAL STEAM GENERATOR MANUFACTURER) MEETING THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS PARTIALLY AND INTENDING TO QUALIFY AS PER NOTE (5) TO CLAUSE NO.1.0.0, ITEM 4.0 OF BID DATA SHEETS AND THE VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR) MEETING THE REQUIREMENT OF NOTE (5) TO CLAUSE NO.1.0.0, ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the Technology Owner/ Licensor, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor"/ Supercritical Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Note (5) to Clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1(A), item 4.0 of Bid Data Sheet partially shall associate with the Licensor who satisfies the qualification requirements specified in Note (5) to Clause 1.0.0, Item 4.0 of BDS and furnish a Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS M/s ..... (Bidder) ..... meets the requirement of clause 1.1.1(A), item no. 4.0 of BDS except that the evaporator in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and desires to associate with M/s..... (Licensor)... who is the original technology owner and with whom the bidder has an ongoing license agreement (which covers technology transfer) for design, manufacture, sell, use, service of once through variable pressure supercritical steam generator technology (with evaporator suitable for variable pressure operation in sub-critical and supercritical pressure ranges) and who satisfies the qualification requirements as specified in Note (5) to Clause 1.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder and the Technology Owner are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and

bound unto the Owner for the successful performance of the Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, fully meeting the stipulated technical requirements, and Guaranteed parameters as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Technology Owner and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of complete Steam Generators, along with an extended warranty of atleast one (01) year over and above what is required as per bidding documents , including its satisfactory thermal performance of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Technology Owner do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator, including its satisfactory thermal performance and achievement of guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking.
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of Technology Owner hereunder shall, however, be limited to an amount calculated @ **US\$ 30 Million** for Steam Generator to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Technology Owner for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Technology Owner (with respect to obligations and responsibilities of the Technology Owner covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Technology Owner and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows :
  - a) We, the Technology Owner shall be fully responsible for design and engineering of once through thermodynamic and thermo-hydraulic design, furnace, boiler heating surface, start up system so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators.
  - b) We, the Technology Owner shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of Steam Generators.
  - (ii) Evaporator design including flow distribution, temperature
  - (iii) Metal temperatures and stresses, static stability and dynamic stability
  - (iv) Providing all design data required by the Contractor to carry out design of steam water separator for their proper interfacing and integration.
  - (v) Complete water wall system design, its supporting system and buck stay design
  - (vi) Complete design of start up drain and circulation system
- c) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators, the Technology Owner shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators under all the Contracts directly to the Owner and the Contractor and Technology Owner shall promptly carry out all corrective measures and modifications (as suggested by the Technology Owner and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Technology Owner shall demonstrate the successful performance of the Steam Generators meeting the guaranteed parameters and demonstration parameters.
4. We, the Contractor and the Technology Owner do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till one (1) year beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor. In case of delay in completion of the defect liability period under the Contract(s) beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 36 months from the scheduled end of defect liability period of the 800MW unit under the Contract. We, the Contractor and the Technology Owner do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
5. In case of award, in addition to the Contract Performance Securities to be furnished by the Contractor, the Technology Owner shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Owner as per provisions of the bidding documents. The value of each such Bank Guarantee shall be equal to **US\$ 150,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till one (1) year beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 39 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

6. Any dispute that may arise between the Owner and Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

7. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Bidder and the Licensor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....

.....  
(Official Address)

For M/s .....  
(Bidder/ Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

WITNESS :

1. ....

.....  
(Official Address)

For M/s.....  
(Technology Owner/ Licensor)

.....  
(Signature of the Authorised  
Representative)  
Name .....

Designation.....  
Common Seal of the  
Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**FORM OF DEED OF JOINT UNDERTAKING FOR PROJECT MANAGEMENT WORK  
AS PER CLAUSE 4.1.0 (b), ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE  
[PROJECT MANAGEMENT ORGANIZATION WHO MEETS THE REQUIREMENT OF  
CLAUSE 4.1.0 (b), ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE  
OF PROJECT MANAGEMENT/PROJECT EXECUTION ACTIVITIES IN THE SCOPE OF  
WORK FOR EPC PACKAGE FOR 1X800 MW SUPER CRITICAL EXPANSION UNIT AT  
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand .....  
by M/s ..... a Company registered under the  
..... having its Registered Office at .....  
(hereinafter called the "Bidder/Contractor", which expression shall include its successors,  
administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under .....  
having its Registered Office at.....(hereinafter called the "Associate",  
which expression shall include its successors, administrators, executors and permitted  
assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its  
Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India)  
(hereinafter called "HPGCL" or "Owner" which expression shall include its successors,  
administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply,  
transportation to site, construction, installation, testing, commissioning and conductance of  
guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION  
UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,  
(hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/  
EPC/800MW.

AND WHEREAS Clause 4.1.0(b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents  
stipulates that the bidder who does not meet the requirement of execution of Project  
Management activities stipulated under clause 4.1.0 (b), shall associate with a Project  
Management Organisation who meets the requirements indicated at clause 4 1.0(b), item 4.0  
of BDS, to carry-out Project Management activities of the EPC PACKAGE and furnish a Deed  
of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid  
Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL  
EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,  
YAMUNA NAGAR, against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/  
EPC/800MW.

AND WHEREAS the Bidder and the Associate are required to jointly execute and furnish  
along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable  
and bound unto the Owner to perform successfully all the Project Management/Project  
Execution activities included in the scope of work for EPC PACKAGE for 1X800 MW SUPER  
CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER  
PLANT, YAMUNA NAGAR, specified in the Owner's Bidding Documents No. 03/HPGCL/  
DCRTPP/EPC/800MW., in the event the Bid is accepted by the Owner resulting into a  
Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all Project Management/Execution activities included in the scope of work of the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all Project Execution activities included in the scope of the Contract and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to project management/project execution activities included in the scope of the Contract, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire project management/project execution activities covered under the scope of work of the package including Engineering Management, Procurement Management, Construction Management and Commissioning / Supervision of commissioning, as specified in the Contract to the satisfaction of the Owner.

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the package as stipulated in the Contract.

- b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to Project Management/Project Execution activities at their own expense and shall promptly provide corrected design to the Owner.
    - c. Entire Project Management/Project Execution activities pertaining to the scope of work covered under the package shall be the joint and several responsibility of the Contractor and Associate.



4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor and Associate will be fully responsible for the quality of entire Project Management / Project Execution activities covered under the package specification, as specified in the Contract to the satisfaction of the Owner.
6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be **US\$ 250,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....  
  
.....  
(Official Address)

For M/s. ....  
(Associate)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

WITNESS :

1. ....  
  
.....  
(Official Address)

For M/s .....  
(Bidder/Contractor)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "the Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company\*/JV Company\* (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) \*and

\*M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),  
in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS should have formed a Subsidiary Company / Joint Venture Company in India for Manufacturing of

Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate.

AND WHEREAS clause 1.1.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary

Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*the technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (**defined at Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).
6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of contract for the scope related to the Steam Turbine Generator Sets & auxiliary including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor.

\*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for

incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to

proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.



- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the

Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14. We, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the Company .....

For M/s.....  
(\*the Qualified Steam Turbine Generator  
Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*Qualified Generator  
Manufacturer)

WITNESS :

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- 1 *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.*
- 2 *\*Bidder to strike out, whichever is not applicable.*

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), AND THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS AND OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAMTURBINE GENERATORANDAUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)\*and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS should have formed a Subsidiary Company / Joint Venture Company in India for Manufacturing of Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.1.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*the technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally liable for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (**defined at Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to



the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).

6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of **contract for the scope related to** the Steam Turbine Generator Sets & auxiliary equipment including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for **1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR**, , we, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor.

\*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam

Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
9. \*Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.  
  
Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.
  - c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at

his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and\*Qualified Generator Manufacturer do further undertake and confirm that this Deed of

Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the Contractor, on demand Bank Guarantee(s) in favour of the Owner as specified in Qualifying Requirements stipulated at item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....

(BIDDER/CONTRACTOR/HOLDING  
COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Turbine Generator  
Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

.....

.....

.....  
(Official Address)

(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*Qualified Generator  
Manufacturer)

WITNESS :

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- (i) \* ***Bidder to strike out, whichever is not applicable.***
  
- (ii) ***Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the bidder shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.***
  
- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

## ANNEXURE-I

### (Indicative list of equipment / systems)

#### A. Turbine

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ONNON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (\*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY AND OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2 (a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ..... M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the bidder who are lending strength/ experience to the bidder for meeting the requirements stipulated in clause 1.1.1(B) item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)\*and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS should have set up a Subsidiary Company / Joint Venture Company in India for Manufacturing of Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.1.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator) , Subsidiary(ies), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish

along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to Steam Turbine Generator and Auxiliaries** including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*the technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally liable for the successful performance of all the contractual obligations under the said Contracts.

- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of **contract for the scope related to** Steam Turbine Generator sets and their internal auxiliaries **including** turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (**defined at Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).
6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully liable for the successful performance of contract for the scope related to Steam Turbine Generator sets and their internal auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor.

\*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings

for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract,

including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as

mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/component covered under the Contract(s)for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of

Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.



For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(\*the Qualified Steam Turbine Generator  
Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Joint Venture/ Indian Subsidiary  
Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) ***The Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the bidder shall arrange for separate on demand bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS for an amount aggregating to 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.***
- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4 AND NOTE NO. 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER, THE INDIAN \*SUBSIDIARY/\*JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND OTHER PROMOTORS HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE \*SUBSIDIARY COMPANY/\*JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.4 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian \*Subsidiary Company/\*JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)\*and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to

site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS shall set up a Subsidiary Company / Joint Venture Company in India for Manufacturing of Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary /JV Company.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) ) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.1.3 and note 8 of clause 1.0.0 of item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company , \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally liable for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian

Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator sets and their internal auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure-I).

5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution and successful performance of Generator and its auxiliary equipment (defined at Annexure-I).
6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully liable for the successful performance of the **contract for the scope related to** Steam Turbine Generator Sets & auxiliary equipment including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
  - a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.



- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters,

deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam

Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Manufacturing Company, the OTHER

PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents. This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

13. We, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

14. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1. WITNESS:

For M/s.....( BIDDER /CONTRACTOR)

..... (Signature, Name & Address)

..... (Signature of the Authorised Representative) ..... Name..... Designation..... Common Seal of the Company

1. WITNESS:

For M/s..... (Indian \*Subsidiary Company / \*JV Company)

..... (Signature, Name & Address)

..... (Signature of the Authorised Representative) ..... Name..... Designation..... Common Seal of the Company

1. WITNESS:

\*For M/s..... (Subsidiary Company of Indian Manufacturing Company)

..... (Signature, Name& Address)

..... (Signature of the Authorised Representative) ..... Name.....

Designation.....  
Common Seal of the Company

1. WITNESS:

.....  
(Signature, Name &  
Address)

For M/s.....  
..... (PROMOTER)  
.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company

5. WITNESS:

.....  
(Signature, Name &  
Address)

For M/s.....  
(\*Qualified Generator Manufacturer)  
.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\*Bidder to strike out, whichever is not applicable.***

## ANNEXURE-I

**Indicative list of equipment / systems****A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0,  
ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), THE INDIAN \*SUBSIDIARY/\*JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2(b), ITEM 4.0 OF BID DATA SHEETS, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL TURBINE GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND \*OTHER PROMOTORS HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE \*SUBSIDIARY COMPANY/\*JV COMPANY \*AND \*THE QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.4 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAMTURBINE GENERATOR ANDAUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)\*and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour of HARYANA POWER GENERATION CORPORATION LIMITED, incorporated under the Companies Act,



in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS shall set up a Subsidiary Company / Joint Venture Company in India for Manufacturing of Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary/ JV Company.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.1.3 and note 8 of clause 1.0.0 of item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company , \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally liable for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance the contract for the scope related to Steam Turbine Generator sets including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure-I).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution and successful performance of Generator and its auxiliary equipment (defined at Annexure-I).
6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully liable for the successful performance of contract for the scope related to the Steam Turbine Generator Sets & auxiliary turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the

design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the

equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.

11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company , the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

INWITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s.....  
(\*the Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....



For M/s.....  
(\*Subsidiary Company of Indian  
Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the bidder shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.1.3 & \*1.1.4 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (\*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS, THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL TURBINE GENERATOR IN INDIA AS PER NOTE NO. 7 FOR CL 1.0.0 AND OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2 (a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer /Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at .....and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the bidder who are lending strength/ experience to the bidder for meeting the requirements stipulated in clause 1.1.1(B) item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian \*Subsidiary Company/\*JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.1.1 (B), item 4.0 of BDS should have set up a Subsidiary Company / Joint Venture Company in India for Manufacturing of Supercritical Steam Turbine Generator sets meeting the requirements specified in Clause 1.1.2

(a)/1.1.2 (b), Item 4.0 of BDS and furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.1.2 (c) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.1.1 (A) and 1.1.2 (a)/1.1.2 (b) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1(B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.1.3 and note 8 of item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

AND WHEREAS clause 1.1.4 item 4.0 of BDS of Bidding Documents, stipulate that \*the bidder/\*the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator) , Subsidiary(ies), the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.4 of item 4.0 of BDS and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company , \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.1.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for supercritical Steam Turbine Generator in the form of complete transfer of

design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

3. We, the Contractor,\*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally liable for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator sets and auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure-I).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution and successful performance of Generator and its auxiliary equipment (defined at Annexure-I).
6. In case of any breach of the Contract committed by the Contractor, we \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully liable for the successful performance of the contract for the scope related to Steam Turbine Generator Sets & auxiliary including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract (s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any

obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator

Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.



9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their

auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

10. The Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company , the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever

occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company .....

For M/s.....  
(\*the Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

Common Seal of the  
Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the

Company.....

For M/s.....  
(\*Subsidiary Company of  
Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) *The Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the bidder shall arrange for separate on demand bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS for an amount aggregating to 0.6% of the total contract price of the EPC Package divided equally among them before the change in management control actually occurs.*
- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM TURBINE  
GENERATOR AND AUXILIARIES AS PER CLAUSE  
\*1.1.3/\*1.3.2/\*1.4.2/\*1.5.2/\*1.6.3/\*1.7.2, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR  
AND THE "INDIAN SUBSIDIARY COMPANY/ JOINT VENTURE COMPANY/ INDIAN  
MANUFACTURING COMPANY" AS SPECIFIED UNDER CLAUSE 1.7.1 OF ITEM NO. 4 OF  
BDS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND  
AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand ....  
by M/s ..... a Company incorporated under  
..... having its Registered Office at.....(hereinafter  
called the "Bidder/Contractor", which expression shall include its successors, administrators,  
executors and permitted assigns) and

M/s.....a Company registered in India under the Companies Act of  
India having its Registered Office at ..... created for manufacturing of  
supercritical Steam Turbine Generator in India (hereinafter called the "Indian Manufacturing  
Company / Associate", which expression shall include its successors, administrators,  
executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its  
Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India)  
(hereinafter called "HPGCL" or "Owner" which expression shall include its successors,  
administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply,  
transportation to site, construction, installation, testing, commissioning and conductance of  
guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen  
Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (hereinafter referred to as "Plant")  
vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause \*1.1.3/\*1.3.2/\*1.4.2/\*1.5.2/\*1.6.3/\*1.7.2, Item 4.0 of Bid Data Sheets (BDS) of  
bidding documents stipulates that the bidder, shall furnish a Deed of Joint Undertaking executed by him  
and the Indian Manufacturing Company who meets the requirement of 1.7.1 & 3.0.0 of item no. 4 of BDS  
for Steam Turbine Generator sets and shall source the Steam Turbine Generator sets from the qualified  
associate.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid  
Invitation for Bid by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At  
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, against the Owner's Bidding  
Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Indian Manufacturing Company are required to jointly  
execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly

and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder and the Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor and the Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor and the Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor and the Indian Manufacturing Company do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we the Indian Manufacturing Company and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure- I).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the Indian Manufacturing Company and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the execution



and successful performance of Generator and its auxiliary equipment (defined at Annexure-I).

6. In case of any breach of the Contract committed by the Contractor, we the Indian Manufacturing Company, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of contract for the scope related to the Steam Turbine Generator Sets & auxiliary including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Indian Manufacturing Company and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract (s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Indian Manufacturing Company shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows :
- a) We, the the Indian Manufacturing Company, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries .
  - b) We, the Indian Manufacturing Company, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Indian Manufacturing Company, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Indian Manufacturing Company, shall extend our quality surveillance/ supervision/quality control to the contractor during manufacture, erection, commissioning and performance testing, both at works and/or at

Owner's project site. Without prejudice to the overall responsibilities of the Indian Manufacturing Company as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Indian Manufacturing Company shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Indian Manufacturing Company, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Indian Manufacturing Company, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system.
  - f) The Contractor / Indian Manufacturing Company shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Indian Manufacturing Company's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Indian Manufacturing Company's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of the Indian Manufacturing Company before proceeding further.
  - g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Indian Manufacturing Company shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Indian Manufacturing Company shall promptly carry out all corrective measures and modifications (as suggested by the Indian Manufacturing Company and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Indian Manufacturing Company shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor and the Indian Manufacturing Company hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Indian Manufacturing Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Indian Manufacturing Company for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the

Indian Manufacturing Company covered under this Deed of Joint Undertaking, nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Indian Manufacturing Company and Contractor.

9. The Contractor and the Indian Manufacturing Company will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
10. We, the Contractor and the Indian Manufacturing Company, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor and the Indian Manufacturing Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
11. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

12. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

13. We, the Indian Manufacturing Company and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
14. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor and the Indian Manufacturing Company through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:  
1. ....  
  
.....  
(Official Address)

For M/s .....  
(BIDDER/CONTRACTOR)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS :  
1. ....  
  
.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)  
  
.....  
(Signature of the Authorised Representative)  
Name .....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\* Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A ) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
AS PER CLAUSE 1.2.2 & \*1.2.3 OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR (INDIAN STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF 1.2.1 OF ITEM 4.0 OF BID DATA SHEETS) AND THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1 (B) OF ITEM 4.0 OF BID DATA SHEETS AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 1.2.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE SUPERCRITICAL STEAM TURBINE GENERATOR AND AUXILIARIES.**

This DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two Thousand ..... by M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer (Associate/Collaborator)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Generator Manufacturer(Associate/Collaborator)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a company incorporated under the Indian Companies Act, having its Registered Office at ..... (hereinafter called the "Bidder/Contractor/Indian Steam Turbine Generator Manufacturer" which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS clause 1.2.1 of item 4.0 of Bid Data Sheet of Bidding Documents (BDS), stipulate that the bidder (Indian Steam Turbine Generator Manufacturing Company) should have a valid ongoing collaboration and technology transfer agreement including license to manufacture and supply supercritical steam turbine generator sets covering the type, size and rating specified, in India with a Qualified Steam Turbine Generator

Manufacturer meeting requirements of clause 1.1.1 (B) of item 4.0 of BDS, valid minimum up to the end of the defect liability period of the contract.

AND WHEREAS clause 1.2.2 and \*1.2.3 of item 4.0 of BDS, stipulate that the bidder, as Indian Steam Turbine Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him and the \*Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.2.3 of item 4.0 of BDS.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner bearing No. .... dated ..... for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Documents.

AND WHEREAS M/s..... (Bidder) as Indian Steam Turbine Generator Manufacturer and M/s..... ("Qualified Steam Turbine Generator Manufacturer") are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable to the Owner for successful performance of the Supercritical Steam turbine generator and auxiliaries (as per Annexure-I) including turbine cycle fully meeting the guaranteed parameters & characteristics as per Bidding Documents in the event the Bid is accepted by the Owner resulting into a Contract/ contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no 1.2.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator and its auxiliaries (Annexure-I).

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*the technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian

Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement between us and the Indian Manufacturing Company.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of all the Steam turbine generator sets and their auxiliaries (as per Annexure-I) as well as thermal performance and guaranteed parameters of turbine cycles as specified in the said contract(s) to the satisfaction of the Owner.
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the generator and its auxiliaries (Annexure-I).
- 6 In case of any breach of the Contracts committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Steam Turbine and Generator and their auxiliaries (as defined in Annexure-I), as well as thermal performance and guaranteed parameters of the turbine cycle and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contracts related to any of the steam turbine generator sets and their auxiliaries (as defined in Annexure-I), we the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses / damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability, *i.e. clause 38.0 of GCC* of the said contract(s).

The liability of the Qualified Steam Turbine Generator Manufacturer shall be limited to an amount equivalent to **US\$ 40 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is



without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Turbine Generator Manufacturer, the \*Qualified Generator Manufacturer and Contractor.

7 Without prejudice to the generality of the undertaking in paragraphs above the manner of achieving the objectives set forth in paragraphs above shall be as follows:

a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & auxiliaries\*(as defined in **Annexure-I**) and interfacing & integrating the complete turbine cycle including condenser, Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries(as defined in Annexure-I), Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

\* However for auxiliaries (as defined at **Annexure-I**) which are bought out by us, we, the Qualified Steam Turbine Generator Manufacturer, shall only be responsible for engineering, preparation of sizing and selection criteria.

b) We, the Qualified Steam Turbine Generator Manufacturer, shall provide all additional necessary technical assistance to the Contractor for the portion of work to be performed by the Contractor. This shall include:

(i) Thermal design of turbine cycle including heat balances

(ii) All design data required by the Contractor to carry out design of balance equipment/system in turbine cycle and for proper integration.

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I), the Qualified Steam

Turbine Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works including repair or replacement, if necessary as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I). For the items to be manufactured by the Contractor at his or his vendor's works as per the Associate's/Collaborator's design, the Associate/Collaborator shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Associate's/Collaborator's works and shall meet Associate's/Collaborator's approval/ acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Associate's/Collaborator's design and to the Associate's/Collaborator's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries(as defined in Annexure-I) as per the Contract in accordance with the Collaborator's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of The Qualified Steam Turbine Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries(as defined in Annexure-I) meet the guaranteed parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/ systems of all the Steam Turbine Generator Sets & their auxiliaries(as defined in Annexure-I)directly to the Owner and the Contractor & The Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 \* Without prejudice to the generality of the Undertaking in above paragraphs, the manner of achieving the objective shall be as follows:
- a. We, the \*Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries so as to

ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b. We, the \*Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the \*Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the \*Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c. We, the \*Qualified Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works including repair or replacement, if necessary as per requirements/ schedule specified in the Contracts.
- d. We, the \*Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the \*Qualified Generator Manufacturer's design, the \*Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at \*Qualified Generator Manufacturer's works and shall meet \*Qualified Generator Manufacturer's approval/ acceptance.
- e. The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the \*Qualified Generator Manufacturer's design and to the \*Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the \*Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of \*Qualified Generator Manufacturer before proceeding further.

- f. In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the \*Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the \*Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the \*Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the \*Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 9 The Contractor and Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant.
- 10 We, the Contractor, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the steam Turbine Generator and auxiliaries (**Annexure-I**) or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 11 In case of award, in addition to Contract Performance Security furnished by Bidder, the Qualified Steam Turbine Generator Manufacturer shall furnish 'as security' an on demand performance Bank Guarantee in favour of the Owner as per provisions of the Bidding Documents. The value of such Bank Guarantee to be submitted by the Qualified Steam Turbine Manufacturer shall be 0.6% of the Total Contract Price of all the Contract(s) as awarded by the Owner to the Contractor and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

Further in case of a separate Generator Manufacturer, in addition to Contract Performance Security furnished by Bidder, both the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer shall furnish 'as security' an on demand performance Bank Guarantee in favour of the Owner as per provisions of the Bidding Documents. The value of each such Bank Guarantee to be submitted by the Qualified Steam Turbine Manufacturer and the Qualified Generator Manufacturer shall be 0.5% and 0.1 % respectively of the Total Contract Price of all the Contract(s) as awarded by the Owner to the Contractor and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for steam Turbine Generator Package or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 12 Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in Clause No.26, Section IV GCC of the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 13 We, the Contractor, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer agree that this Deed of Joint Undertaking shall

form an integral part of the Contracts for this package. We further agree that this Undertaking shall continue to be enforceable till its validity.

14 That this Deed of Joint Undertaking shall be operative from the effective date of the Contracts.

IN WITNESS WHEREOF, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1. WITNESS: For M/s.....  
(Qualified Steam Turbine Generator  
Manufacturer)  
.....  
(Signature, Name &  
Address) (Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

2. WITNESS: \*For M/s.....  
(Qualified Generator Manufacturer)  
.....  
(Signature, Name &  
Address) (Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

3. WITNESS: For M/s.....  
(BIDDER / CONTRACTOR)  
.....  
(Signature, Name &  
Address) (Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

**1 Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**2 \* Bidder to strike out, whichever is not applicable.**

## ANNEXURE-I

### **A) Indicative List of Auxiliaries of Steam Turbine Generator Set**

1. Control fluid system
2. Gland steam sealing system
3. Governing system
4. Lube oil system
5. Exhaust hood spray system
6. Stop/ Control valves
7. Turbine drain system
8. Generator Seal oil system
9. Generator water cooling system
10. Hydrogen, Carbon dioxide & Nitrogen system
11. Generator excitation system
12. Turbine protection system
13. Turbine control system (Analog and sequence)
14. Turbine supervisory instruments
15. Any other integral auxiliary of steam turbine generator set not covered above.

### **B) Indicative list of Auxiliaries of Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 & \*1.3.3 OF ITEM 4.0 OF BID DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEET, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*OTHER PROMOTERS (IF ANY) HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE INDIAN SUBSIDIARY COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 1.3.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian Subsidiary Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW



\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS.

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure-I).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or

damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company/Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the

works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
  - g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary

Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1.WITNESS:

For M/s.....  
..... (BIDDER /CONTRACTOR)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1.WITNESS:

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS:

1.....

For M/s.....  
(Indian Manufacturing Company)

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

1. WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....



1. WITNESS:

For M/s.....  
..... (\*OTHERPROMOTER)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\* Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 & \*1.3.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR (INDIAN SUBSIDIARY COMPANY), THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEETS ALONG WITH ITS SUBSIDIARIES) \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/ JV Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder who meets the requirements stipulated in clause 1.3.1(a), item 4.0 of Bid Data Sheet as Indian Subsidiary Company of Qualified Steam Turbine Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company/ JV Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 \*That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 \*We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 \*We, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam

Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **USD 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their

own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.



- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this

deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/ Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Indian \*Subsidiary / JV / Manufacturing Company Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:  
1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) *In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.*
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 & \*1.3.3 AND NOTE 4 TO CLAUSE 1.0.0,  
ITEM 4.0 OF BID DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN SUBSIDIARY COMPANY), THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian \*Subsidiary Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, Subsidiary(ies) shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.



- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we,the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company/Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be

finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine

Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures

and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint

Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer / Holding Company)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s.....

(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.



## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2, \*1.3.3 AND NOTES NO. \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF BID  
DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s ..... a company registered under the Indian Companies Act, having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at.....and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for successful performance of the **contract for the scope related to** Steam Turbine Generator and

Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally

liable to the Owner for successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any

need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.
- Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.
- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied



by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the

OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

1.WITNESS:

.....  
(Signature, Name & Address)

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer)  
.....  
(Signature of the Authorised Representative)  
.....  
Name.....  
Designation.....

Common Seal of the Company  
.....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

1. WITNESS:

.....  
(Signature, Name &  
Address)

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

- 1 *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.*
  
- 2 *\*Bidder to strike out, whichever is not applicable.*

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2,\*1.3.3 AND NOTE NO. \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATASHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under .....registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and Having 25% or higher equity participation in the Indian Subsidiary Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors

and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company, shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for

successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian



Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of the **contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system**, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any

need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.
- Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.
- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied

by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the

OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14 We, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/ JV Company, OTHER PROMOTER,\*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
  
- (ii) *In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Generator Package for the awarded projects.*
  
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.



**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.3.2 & \*1.3.3 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing

Company”, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and Having 25% or higher equity participation in the Indian Subsidiary Company (herein after jointly called the "OTHERPROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the “Qualified Generator Manufacturer”, which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.3.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.3.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary /JV Company.

\*AND WHEREAS clause 1.3.2 and \*1.3.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.3.3 of item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.3.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company, shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.3.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies),

\*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It

shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies),\*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified



Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions

specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the

Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Subsidiary Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....

Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 & \*1.4.3 OF ITEM 4.0 OF BID DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEET, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*OTHER PROMOTERS (IF ANY) HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE INDIAN SUBSIDIARY COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 1.4.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand . . . . . by M/s ..... a Company incorporated under .....having its Registered Office at .....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at .....and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, the bidder shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.4.3 of item 4.0 of BDS.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.



**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner.
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carry out all the obligations and responsibilities

under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters,

deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER

PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in

every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be

with out any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1.WITNESS:

For M/s.....  
..... (BIDDER /CONTRACTOR)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1.WITNESS:

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS:

1.....

For M/s.....  
(Indian Manufacturing Company)

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

1. WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....

Common Seal of the Company

.....

1. WITNESS:

For M/s.....  
..... (\*OTHERPROMOTER)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....

.....  
Designation.....

.....  
Common Seal of the Company

.....

**Note:**

- 1 Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**
- 2 \* Bidder to strike out, whichever is not applicable.**



**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 & \*1.4.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEETS ALONG WITH ITS SUBSIDIARIES) \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.4.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian Subsidiary/Joint Venture Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1(a) of item 4.0 of BDS, the bidder shall associate with **EITHER** i )

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company / Joint venture company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.4.3 of item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner.
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam

Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their

own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end



of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer / Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

.....

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) *In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.*
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 & \*1.4.3 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.4.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s..... a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s .....a Company registered in India under the Companies Act of India having its Registered Office at ..... created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian Subsidiary/Joint Venture Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),  
in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.4.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1(a) of item 4.0 of BDS, the bidder shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.4.3 of item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of

the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and

undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner.

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies),
- 6 \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.



- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.

- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....

(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer / Holding Company)

WITNESS:

1.....

.....

(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....

.....  
(Official Address)

(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:  
1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2, \*1.4.3 AND NOTES NO. \*6 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF  
BID DATASHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.4.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly

called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.4.1 (b) and note \*6 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 and note \*6 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company, \*Parent Company of Indian Majority Stake Holder of the JV Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.4.3 of item 4.0 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the

Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement between us and the Indian Manufacturing Company.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner.
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents. (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in

every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of

Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there

is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the



project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

1.WITNESS:

.....  
(Signature, Name &  
Address)

For M/s.....  
(Qualified Steam Turbine Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s.....  
(Parent Company of Indian Majority Stake  
Holder of the JV Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian  
Manufacturing Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

1. WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

**1 Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**2 \*Bidder to strike out, whichever is not applicable.**

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2,\*1.4.3 AND NOTE NO. \*4, \*6 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATASHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.4.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under .....registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at.....and having 25% or higher equity participation in the Indian Subsidiary/ Joint Venture Company

(hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under.....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*\*AND WHEREAS clause 1.4.1 (b) and note \*6 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 and note \*6 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company, \*Parent Company of Indian Majority Stake Holder of the JV Company and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.4.3 of item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology

transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect

liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement between us and the Indian Manufacturing Company.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).



The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company,

\*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract

Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER

and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

\*For M/s.....  
(Parent Company of Indian Majority Stake Holder of the JV Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian  
Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

**Note:**

(i) \* Bidder to strike out, whichever is not applicable.

(ii) ***In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Generator Package for the awarded projects.***

- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**



**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.4.2 & \*1.4.3 AND NOTE \*4, \*6 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.4.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this.... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Joint Venture Company /Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s..... a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Parent Company of Indian Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian Subsidiary/Joint Venture Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.4.1 (b) and note \*6 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Joint Venture of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.4.1 (a) of item 4.0 of BDS, the bidder shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.4.2 and \*1.4.3 and note \*6 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company and \*Qualified Generator Manufacturer who meets the requirement of

Clause 1.4.3 of item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.4.2 and note 8 of clause 1.0.0 of item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by the bidder/contractor, \*the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.4.3 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system , as specified under the said contract to the satisfaction of Owner . (Defined at Annexure-I)
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.

- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies),\*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal

performance of turbine cycle as per guaranteed parameters specified in the Contract.

- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly

provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.



Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.

- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....  
(Bidder / Contractor)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

.....  
(Official Address)

Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....

Common Seal of the  
Company.....

\*For M/s.....  
(Parent Company of Indian Majority Stake  
Holder of the JV Company)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Subsidiary Company)

WITNESS :  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....

Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 & \*1.5.3 OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (B) (\*ALONG WITH REQUIREMENTS OF 1.1.2 (a)/1.1.2 (b) AND 3.0.0) ITEM 4.0 OF BID DATA SHEETS, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING 25% OR MORE EQUITY PARTICIPATION IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.5.3, ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s ..... a company registered under the ..... having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply,



transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.5.2 and \*1.5.3 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements specified in Clause 1.1.1(B) and the Indian Joint Venture Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.5.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of

Joint Undertaking and be jointly and severally responsible and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system , as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the\*Qualified Generator Manufacturer, do hereby undertake, declare

and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and

performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \*Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint

Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1. WITNESS:

.....  
(Signature, Name & Address)

For M/s.....  
..... (BIDDER /CONTRACTOR)

.....  
(Signature of the Authorised Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1.WITNESS:

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1.WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....



\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\*Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 & \*1.5.3 AND NOTE 4 FOR CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING 25% OR MORE EQUITY PARTICIPATION IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.5.3, ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s ..... a company registered under the ..... having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer" / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at.....and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2 and \*1.5.3, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer and the Indian Manufacturing Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with EITHER i) \*Qualified Steam Turbine Generator Manufacturer, meeting the requirements of Clause 1.1.1 (B) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii)\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.5.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint

Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, \*the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner. Defined at Annexure-I)
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally

responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.

- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine

Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.



- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of

the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER,\*Qualified Generator Manufacturer and the Contractor,

agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1.WITNESS:

.....  
(Signature, Name & Address)

For M/s.....  
..... (BIDDER /CONTRACTOR)  
.....  
(Signature of the Authorised Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/  
Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) ***In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.***
- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2 & \*1.5.3 AND NOTE 4 FOR CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS) AND SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING 25% OR MORE EQUITY PARTICIPATION IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.5.3, ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s ..... a company registered under the ..... having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer" / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the bidder who are lending strength/ experience to the bidder for meeting the requirements stipulated in clause 1.1.1(B) of item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS Clause 1.5.2 and \*1.5.3, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Turbine Generator in India shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer and the Indian Manufacturing Company who meets the requirements stipulated in clause 1.5.1 (a) , item 4.0 of Bid Data Sheet. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.1 (b) item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with EITHER i) \*Qualified Steam Turbine Generator Manufacturer, meeting the requirements of Clause 1.1.1 (B) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii)\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator set and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking as per clause 1.5.2 item 4 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.4.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian



Manufacturing Company as part of the technology transfer agreement.

- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner. (Defined at Annexure-I)
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine

Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHERPROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to

Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified

Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the

Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer/  
Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS:

1.....

.....  
(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* ***Bidder to strike out, whichever is not applicable.***
- (ii) ***In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.***
- (iii) ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***



**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
AS PER CLAUSE 1.5.2, \*1.5.3 AND NOTES NO. \*7 & \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF  
BID DATASHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR,  
\*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0,  
\*SUBSIDIARY COMPANY OF INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING  
SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE  
1.0.0 AND QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE  
REQUIREMENT OF CLAUSE 1.1.1 (A) (\*ALONG WITH REQUIREMENTS OF 1.1.2 (a)/1.1.2  
(b) AND 3.0.0) ITEM 4.0 OF BID DATA SHEETS, \*THE INDIAN SUBSIDIARY/ JOINT  
VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM  
GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/  
JOINT VENTURE COMPANY HAVING 25% OR MORE EQUITY PARTICIPATION IN THE  
INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR  
MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.5.3, ITEM 4.0 OF  
BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE  
GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of..... Two  
Thousand ..... by M/s ..... a company registered under the  
..... having its Registered Office at.....  
(hereinafter called the "Bidder/Contractor" which expression shall include its successors,  
administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....having  
its Registered Office at ..... (hereinafter called the "Wholly owned  
Subsidiary Company of Bidder/Contractor", which expression shall include its successors,  
administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... registered  
For manufacturing of Supercritical Turbine Generator in India, having its Registered Office at  
..... (hereinafter called the "Subsidiary Company of Indian JV Company", which  
expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under..... having  
its Registered Office at..... (hereinafter called the "Qualified  
Steam Turbine Generator Manufacturer", which expression shall include its successors,  
administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India  
having its Registered Office at ..... for manufacturing of supercritical Steam  
Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian  
Subsidiary Company/ Indian Manufacturing Company", which expression shall include its  
successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator  
Manufacturer, registered under ..... having its Registered Office at ..... and  
having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly  
called the "OTHER PROMOTER", which expression shall include its successors, administrators,  
executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.5.2 and \*1.5.3 and note \*7 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company, \*Wholly owned Subsidiary Company of Bidder/Contractor and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.5.3 of item 4.0 of BDS. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.1 (b) and note \*7 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.5.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner.
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian

Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator

Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to

proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the



Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s.....  
(\*Subsidiary of Joint Venture Company)  
  
.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company .....

WITNESS:  
1.....

\*For M/s .....  
(Qualified Generator Manufacturer)

.....

.....  
(Official Address)

(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture Company)

WITNESS:  
1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

.....  
(Official Address)

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:  
1.....

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

.....  
(Official Address)

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\* Bidder to strike out, whichever is not applicable.***

ANNEXURE-I

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2, \*1.5.3 AND NOTE NO. \*4, \*7 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR,  
\*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0,  
\*SUBSIDIARY COMPANY OF INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING  
SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE  
1.0.0 AND QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING  
COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF  
CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT  
VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM  
TURBINE GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN  
\*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING 25% OR MORE EQUITY  
PARTICIPATION IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE  
\*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER  
CLAUSES 1.5.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF  
THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of ..... Two Thousand  
..... by M/s ..... a company registered under the .....  
having its Registered Office at..... (hereinafter called the  
"Bidder/Contractor" which expression shall include its successors, administrators, executors and  
permitted assigns) and

\*M/s....., a Company incorporated under ..... having  
its Registered Office at ..... (hereinafter called the "Wholly owned  
Subsidiary Company of Bidder/Contractor", which expression shall include its successors,  
administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under .....  
registered for manufacturing of Supercritical Turbine Generator in India, having its Registered  
Office at ..... (hereinafter called the "Subsidiary Company of Indian JV  
Company", which expression shall include its successors, administrators, executors and permitted  
assigns) and

M/s..... a Company incorporated under ..... having  
its Registered Office at..... (hereinafter called the "Qualified  
Steam Turbine Generator Manufacturer" / Holding Company, which expression shall include its  
successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India  
having its Registered Office at ..... for manufacturing of supercritical Steam  
Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian  
Subsidiary Company/ Indian Manufacturing Company", which expression shall include its  
successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator  
Manufacturer, registered under ..... having its Registered Office at..... and

having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.5.2 and \*1.5.3 and note \*7 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company, \*Wholly owned Subsidiary Company of Bidder/Contractor and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.5.3 of item 4.0 of BDS. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.1 (b) and note \*7 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall

associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.5.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating



of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner. (Defined at Annexure-I)
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority

Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of

equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and

shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....  
  
Designation.....  
Common Seal of the Company .....

WITNESS:  
1.....  
  
.....  
(Official Address)

For M/s.....  
(\*Subsidiary of Joint Venture Company)  
  
.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:  
1.....  
  
.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer//Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Subsidiary/Joint Venture  
Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) ***In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(A), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(A), item 4.0 of BDS, shall be***



*equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.*

- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

ANNEXURE-I

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.5.2, \*1.5.3 AND NOTE NO. \*4, \*7 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEETS**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, \*WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 1.0.0, \*SUBSIDIARY COMPANY OF INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 1.0.0 AND QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS), THE SUBSIDIARY(IES) OF THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND \*THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY 25% OR MORE EQUITY PARTICIPATION IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.5.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s ..... a company registered under the ..... having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer" / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the bidder who are lending strength/ experience to the bidder for meeting the requirements stipulated in clause 1.1.1(B) of item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT AT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.5.2 and \*1.5.3 and note \*7 of clause 1.0.0 of item 4.0 of Bid Data Sheet of Bidding Documents(BDS), stipulate that the bidder, shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer, \*Indian Subsidiary Company / Indian Joint Venture Company created for manufacturing of supercritical Steam Turbine Generator sets in India, \*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company, \*Wholly owned Subsidiary Company of Bidder/Contractor and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.5.3 of item 4.0 of BDS. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.1 (b) and note \*7 of clause 1.0.0, item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirements stipulated in clause 1.5.1(a), item 4.0 of Bid Data Sheet as an \*Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint

Undertaking. . Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

\*AND WHEREAS clause 1.5.3 item 4.0 of BDS of Bidding Documents, stipulate that if Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.5.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner. (Defined at **Annexure-I**)
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies),\*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in

order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and

performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine



Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to

Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the

OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Parent Company of Indian Majority Stake Holder of the JV Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(\*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s.....  
(Joint Venture Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s.....  
(\*Subsidiary of Joint Venture Company/Indian Manufacturing company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....

.....  
(Signature of the Authorised Representative)  
Name.....

(Official Address)

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian      Subsidiary/Joint      Venture  
Company)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company.....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Signature of the Authorised  
Representative)

.....  
(Official Address)

Name.....  
Designation.....

Common Seal of the  
Company .....

**Note:**

- (i) ***\* Bidder to strike out, whichever is not applicable.***
  
- (ii) ***\*\* In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.***
  
- (iii) ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate

with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment (defined at Annexure-I).
6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for** the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to

promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/ components for

incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to

proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank

Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14. We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....



WITNESS :

1.....

.....

(Official Address)

For M/s.....  
(the Qualified Steam Turbine Generator  
Manufacturer)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

WITNESS :

1.....

.....

(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

WITNESS :

.....

.....

(Official Address)

For M/s.....  
(OTHER PROMOTER)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

WITNESS :

.....

.....

(Official Address)

For M/s.....  
(\*Qualified Generator  
Manufacturer)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

**Note:**

- 1** *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.*
- 2** *\*Bidder to strike out, whichever is not applicable.*

**ANNEXURE-I****Indicative list of equipment / systems****A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), AND THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS AND OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer/Holding Company ", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do

hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).
6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for

1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , we, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the

\*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor.

\*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and



responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify

the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the

equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14. We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS:

1.....

.....  
(Signature of the Authorised Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....  
For M/s.....  
(the Qualified Steam Turbine Generator  
Manufacturer/Holding Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(OTHER PROMOTER)

WITNESS:

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*Qualified Generator  
Manufacturer)

WITNESS:

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\*Bidder to strike out, whichever is not applicable.***

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARY(IES)), AND THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 1.1.2(a)/1.1.2 (b), ITEM 4.0 OF BID DATA SHEETS AND OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ..... M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Qualified Steam Turbine Generator Manufacturer who are lending strength/ experience to the Qualified Steam Turbine Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1(B) item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to

site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), Subsidiary(ies), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and

furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).



6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company/

Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9. \*Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor

which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/ acceptance.

- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as

other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(BIDDER/CONTRACTOR)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company .....

For M/s.....  
(the Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS :  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

For M/s.....  
(Indian Manufacturing Company)

WITNESS :  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company.....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)

Name.....

Designation.....

Common Seal of the

Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(OTHER PROMOTER)

WITNESS:

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s.....  
(\*Qualified Generator  
Manufacturer)

WITNESS:

.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

**Note:**

**1 Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**2 \*Bidder to strike out, whichever is not applicable.**

**ANNEXURE-I****Indicative list of equipment / systems****A ) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4 AND NOTE NO. 8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER, THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND THE OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding DocumentNo.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of

Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any), the Indian Manufacturing Company and \*Subsidiary Company of Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company,\*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer and

the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment.

6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by

the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and Contractor.
9. \*Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.
- Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.
- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JVCompany,\*SubsidiaryCompanyofIndianManufacturingCompanyandthe \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the

contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.



IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company .....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(the Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company.....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company.....

3. WITNESS:

.....  
(Signature, Name &

\*For M/s.....  
(Subsidiary Company of Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)

Address)

.....  
Name.....  
Designation.....  
Common Seal of the Company

WITNESS:

.....  
  
.....  
(Official Address)

For M/s.....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

.....  
  
.....  
(Official Address)

For M/s.....  
(\*Qualified Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\*Bidder to strike out, whichever is not applicable.***

## Indicative list of equipment / systems

### A ) Turbine

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4 AND NOTE NO. \*4 & 8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND THE OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the

EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, the \*technology provider (if any), the Indian Manufacturing Company and \*Subsidiary Company of Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.
- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating &

pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).

5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).

6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory,

reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/ acceptance.

- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/ modifications to the



equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and Contractor.
9. \*Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
  - d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
  - e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company,\*Subsidiary Company of Indian Manufacturing Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety(90) days beyond the completion of the Phased Manufacturing Program under the

Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/ Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER,

\*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company .....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(the Qualified Steam Turbine Generator Manufacturer/ Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company.....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the Company.....

3. WITNESS:

\*ForM/s.....

(Subsidiary Company of Indian Manufacturing Company)

.....  
(Signature, Name & Address)

.....  
(Signature of the Authorised Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company

WITNESS:

.....

.....  
(Official Address)

For M/s.....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

.....

.....  
(Official Address)

For M/s.....  
(\*Qualified Generator Manufacturer)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\* Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I****Indicative list of equipment / systems****A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.6.3 & \*1.6.4 AND NOTE NO. \*4 & 8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER / CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ \*JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE NO. 8 FOR CL 1.0.0 AND THE OTHER PROMOTOR HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE SUBSIDIARY COMPANY/JV COMPANY AND \*THE QUALIFIED GENERATOR MANUFACTURER FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "the Qualified Steam Turbine Generator Manufacturer/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at .....and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Qualified Steam Turbine Generator Manufacturer who are lending strength/ experience to the Qualified Steam Turbine Generator Manufacturer for meeting the requirements stipulated in clause 1.1.1(B) item 4.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Indian Companies Act having its Registered Office at ..... created for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the Indian Joint Venture Company or Indian Subsidiary Company or Indian Manufacturing Company, which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (hereinafter called the

"OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS Clause 1.6.2 (ii), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who meets the requirements stipulated in clause 1.6.1, item 4.0 of BDS shall associate with **EITHER** \*i) the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** \*ii) Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.6.3 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, shall furnish a deed of joint undertaking executed by him, the Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable), Subsidiary(ies), the Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 1.1.2 (a)/1.1.2 (b), Item 4.0 of BDS, \*Subsidiary Company of Indian Manufacturing Company as per note 8 of clause 1.0.0 and OTHER PROMOTER having a 25% or higher equity participation in the Subsidiary company/ Joint Venture company.

\*AND WHEREAS clause 1.6.4 item 4.0 of BDS of Bidding Documents, stipulate that the Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable



Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.6.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
2. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer, the \*technology provider (if any), the Indian Manufacturing Company and \*Subsidiary Company of Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
3. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the \*Qualified Generator Manufacturer, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company as part of the technology transfer agreement.
4. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor, the Subsidiary Company/JV Company, \*Subsidiary Company of Indian

Manufacturing Company, and OTHER PROMOTER do hereby further declare and undertake that we shall be jointly and severally responsible for the successful performance of all the contractual obligations under the said Contracts.

- 4.1 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
5. That in consideration of the award of the Contract by the Owner to the Contractor, we the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of Generator and its auxiliary equipment (**defined at Annexure-I**).
6. In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7. Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the

design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
8. Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and Contractor.
9. \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators

and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

10. The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, \*Subsidiary Company of Indian Manufacturing Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
11. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
12. In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/ Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.  
  
The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
13. Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14. We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, OTHER

PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, \*Subsidiary Company of Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(BIDDER/CONTRACTOR)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS :

1.....

.....  
(Official Address)

For M/s.....  
(the Qualified Steam Turbine Generator Manufacturer/ Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

3. WITNESS:

.....

\*For M/s.....  
(Subsidiary Company of Indian Manufacturing  
Company)

.....  
(Signature of the Authorised



(Signature, Name &  
Address)

Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company

WITNESS:

.....

.....  
(Official Address)

For M/s.....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

WITNESS:

.....

.....  
(Official Address)

For M/s.....  
(\*Qualified Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\*Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and its auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 & \*1.7.4 OF ITEM 4.0 OF BID DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEET, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*OTHER PROMOTERS (IF ANY) HAVING 25% OR HIGHER EQUITY PARTICIPATION IN THE INDIAN SUBSIDIARY COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 1.7.4 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two thousand ..... by M/s ..... a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and Having 25% or higher equity participation in the Indian Subsidiary Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii)

\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s .....(Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (defined at Annexure-I).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per Annexure-I.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or

damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the

works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
  - g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer,\*the Indian Subsidiary

Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.



- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1.WITNESS:

For  
M/s .....(BI  
DDER /CONTRACTOR)

.....  
(Signature, Name&  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1.WITNESS:

ForM/s.....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature, Name&  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

WITNESS:

1.....

For M/s.....  
(Indian Manufacturing Company)

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

1.WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

1. WITNESS:

For M/s.....  
..... (\*OTHERPROMOTER)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

- 1 Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**
- 2 \* Bidder to strike out, whichever is not applicable.**

## **Indicative list of equipment / systems**

### **A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser, condenser air evacuation system and COLTCS.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

### **B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 & \*1.7.4 AND NOTE 4 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA  
SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR (INDIAN SUBSIDIARY COMPANY), THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1(B) OF ITEM 4.0 OF BID DATA SHEETS ALONG WITH ITS SUBSIDIARIES)**

**\*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.7.4 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under.....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and having 25% or higher equity participation in the Indian Subsidiary Company/ JV Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under .....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, (herein after referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii)

\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC PACKAGE for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam



Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company /Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their

own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this

deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:  
1.....  
.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:  
1.....  
.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer / Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

WITNESS:  
1.....  
.....  
(Official Address)

For M/s.....  
(Indian Manufacturing Company)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:  
1.....

For M/s .....  
(OTHER PROMOTER)

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:  
1.....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) ***In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC PACKAGE for the awarded projects.***
- (iii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.**

**Indicative list of equipment / systems****A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 & \*1.7.4 AND NOTE 4 TO CLAUSE 1.0.0,  
ITEM 4.0 OF BID DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN SUBSIDIARY COMPANY), THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.3.3 OF ITEM 4.0 OF BID DATA SHEET FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand.....by M/s ..... a Company incorporated under..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s .....a Company registered in India under the Companies Act of India having its Registered Office at.....created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at.....and having 25% or higher equity participation in the Indian \*Subsidiary Company (hereinafter called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under .....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii)

\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, Subsidiary(ies) shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:
- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
  - b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
  - c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:  
  
Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
  - d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
  - e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
  - f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be

finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHERPROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine

Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures

and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint



Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer / Holding Company)

WITNESS :

1.....

.....  
(Signature of the Authorised Representative)

.....  
(Official Address)

Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....

(Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC PACKAGE for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

## ANNEXURE-I

### Indicative list of equipment / systems

#### A) Turbine

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

#### B) Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2, \*1.7.4 AND NOTES NO. \*8 OF CLAUSE 1.0.0 OF ITEM 4.0 OF BID  
DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1 (A), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.7.4 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

This DEED OF JOINT UNDERTAKING executed on this..... day of..... Two Thousand ..... by M/s..... a company registered under the Indian Companies Act, having its Registered Office at..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered under the..... having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... registered for manufacturing of Supercritical Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns)

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at..... and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW.

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for successful performance of the **contract for the scope related to** Steam Turbine Generator and

Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally

liable to the Owner for successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:



- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any

need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.
- 9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:
- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied

by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 13 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the

OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

14 We, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

15 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

1.WITNESS:

.....  
(Signature, Name & Address)

For M/s.....  
(Qualified Steam Turbine Generator Manufacturer)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....

Common Seal of the Company

.....

WITNESS:

1.....

.....

(Official Address)

\*For M/s.....  
(Indian Manufacturing Company)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company.....

WITNESS:

1.....

.....

(Official Address)

For M/s .....  
(OTHER PROMOTER)

.....

(Signature of the Authorised  
Representative)

Name.....

Designation.....

Common Seal of the

Company .....

WITNESS:

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

1. ....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

1. WITNESS:

\*For M/s.....  
(Qualified Generator Manufacturer)

.....  
(Signature, Name &  
Address)

.....  
(Signature of the Authorised  
Representative)  
.....  
Name.....  
Designation.....  
Common Seal of the Company  
.....

**Note:**

- 1 ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.***
- 2 ***\* Bidder to strike out, whichever is not applicable.***

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above



**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2,\*1.7.4 AND NOTE NO. \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.7.4 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered under the .....having its Registered Office at ..... (hereinafter called the Qualified Steam Turbine Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under.....registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at .....and having 25% or higher equity participation in the Indian Subsidiary Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under .....having its Registered Office at..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors

and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, who meets the requirement of Clause 1.7.1 of item 4.0 of BDS, shall associate with **EITHER** i)

\*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), **OR** ii)

\* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company, as a Qualified Steam Turbine Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary / JV Company.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company, shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s .....(Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Document No.03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for

successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian

Manufacturing Company, \*the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of the **contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system**, as specified under the said contract to the satisfaction of Owner (Defined at **Annexure-I**).

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of the **contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR** and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

- 7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:
- Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.
- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any

need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.

- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

- 8 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (defined at Annexure-I) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.

- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.
- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied

by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 9 The Contractor, the Qualified Steam Turbine Generator Manufacturer, the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.
- 10 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 11 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.
- The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 12 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the



OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 13 We, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
- 14 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised Representative)  
Name.....  
Designation.....  
Common Seal of the Company.....

WITNESS:

1.....

.....  
(Official Address)

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

.....  
(Signature of the Authorised Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:  
1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
  
- (ii) *In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of Bid Data Sheet, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC Package for the awarded projects.*
  
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.

**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
FOR STEAM TURBINE GENERATOR AND AUXILIARIES  
AS PER CLAUSE 1.7.2 & \*1.7.4 AND NOTE \*4 & \*8 OF CLAUSE 1.0.0, ITEM 4.0 OF BID  
DATA SHEET**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 1.1.1(B), ITEM 4.0 OF BID DATA SHEETS), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, \*THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM TURBINE GENERATOR IN INDIA, \*SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM TURBINE GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 1.0.0 ITEM 4.0 OF BID DATA SHEETS AND THE OTHER PROMOTER OF THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN \*SUBSIDIARY/ JOINT VENTURE COMPANY AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.7.4 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE STEAM TURBINE GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/ Contractor/ \*Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer"/"Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s ..... a Company incorporated under ..... having its Registered Office at ....., M/s ..... a Company incorporated under ..... having its Registered Office at ..... and M/s ..... a Company incorporated under ..... having its Registered Office at ..... (Subsidiary(ies) of the Holding Company who are lending strength/ experience to the Holding Company for meeting the requirements stipulated in clause 1.1.1(B) of item no. 4.0 of Bid Data Sheet and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s ..... a Company registered in India under the Companies Act of India having its Registered Office at ..... for manufacturing of supercritical Steam Turbine Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under..... registered for manufacturing of Supercritical Steam Turbine Generator in India, having its Registered Office at ..... (hereinafter called the "Subsidiary Company of Indian Manufacturing

Company”, which expression shall include its successors, administrators, executors and permitted assigns) AND

\*M/s ..... a Company, other than the Qualified Steam Turbine Generator Manufacturer, registered under ..... having its Registered Office at ..... and Having 25% or higher equity participation in the Indian Subsidiary Company (herein after jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)and

\*M/s....., a Company incorporated under .....having its Registered Office at..... (hereinafter called the “Qualified Generator Manufacturer”, which expression shall include its successors, administrators, executors and permitted assigns),

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No. :03/HPGCL/DCRTPP/EPC/800MW

\*AND WHEREAS clause 1.7.2 item 4.0 of BDS of Bidding Documents, stipulate that the bidder, as Indian Subsidiary of Qualified Steam Generator Manufacturer who meets the requirement of Clause 1.7.4 of item 4.0 of BDS, shall associate with **EITHER** i) \*Qualified Steam Turbine Generator Manufacturer meeting the requirements of Clause 1.1.1 (B) in conjunction with 1.1.4 (as applicable) along with requirements of clause 1.1.2 (a)/1.1.2 (b), OR ii) \* Indian Subsidiary/JV Company of Qualified Steam Turbine Generator Manufacturer, meeting the requirements stipulated at 1.3.1 (a) in conjunction with 1.3.3/1.4.1 (a) in conjunction with 1.4.3 (as the case may be), along with requirements stipulated at clause 3.0.0 and shall source the Steam Turbine Generator and auxiliaries from such qualified associate and shall furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 1.0.0, Item 4.0 of BDS, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 1.0.0, Item 4.0 of BDS, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical turbine generator in India of the above Indian subsidiary /JV Company.

AND WHEREAS clause 1.7.4 item 4.0 of BDS of Bidding Documents, stipulate that if the Qualified Steam Turbine Generator Manufacturer meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS (except for Generator), then the Subsidiary Company / Joint Venture Company, \*Subsidiary Company of Indian Manufacturing Company, shall associate and have a technology transfer agreement with a Qualified Generator Manufacturer who meets the requirement of Clause 1.1.1(B) item 4.0 of BDS fully in respect of Generator and Qualified Generator Manufacturer shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no. 1.7.4 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator & its auxiliaries.

AND WHEREAS the Bidder, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary/Joint Venture Company and OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Turbine Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/Contracts.

#### **NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer and the OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies),

\*Subsidiary Company of Indian Manufacturing Company, The Indian Subsidiary/Joint Venture Company, \*Qualified Generator Manufacturer, the \*technology provider (if any) and the Indian Manufacturing Company covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator sets in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Further technology transfer agreement have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.

- 3 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies) and the Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for the successful performance of the contract for the scope related to Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system, as specified under the said contract to the satisfaction of Owner (Defined at Annexure-I).
- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*The Indian Subsidiary/Joint Venture Company, OTHER PROMOTERS, the \*Qualified Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the Generator and its auxiliary equipment as per **Annexure-I**.
- 6 In case of any breach of the Contract committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the \*Qualified Generator Manufacturer, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the successful performance of the **contract for the scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contracts. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to any of the Steam Turbine Generator Sets & their auxiliaries including turbine cycle, regenerative feed heating & pumping system HP/LP bypass system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, we, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, and the\*Qualified Generator Manufacturer and the Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said contract(s).



The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, Indian Subsidiary Company/ JV Company and OTHER PROMOTER shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

7 Without prejudice to the generally of the undertaking in above paragraphs, the manner of achieving the objectives set forth above shall be as follows:

- a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for design, engineering, supply, erection, performance including all guarantees for all the supercritical steam turbine generator sets & their auxiliaries.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets & their auxiliaries and Condensers including Interfacing and integrating the complete turbine cycle including Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generators Sets and their Auxiliaries, Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.
- c) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for calculation of Heat Balance Diagrams, integration of all turbine cycle equipment, regenerative feed heating & pumping system:

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Indian Manufacturing Company / Contractor during manufacture, erection, commissioning and performance testing, both at works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system, the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time in the works/Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the Contracts.

- d) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works as per requirements/schedule specified in the Contracts.

- e) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system. For the items to be manufactured as per the Qualified Steam Turbine Generator Manufacturer's design, the Qualified Steam Turbine Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Indian subsidiary/Joint Venture Company, which would result in the same quality of equipment as if manufactured at the Qualified Steam Turbine Generator Manufacturer's works and shall meet Qualified Steam Turbine Generator Manufacturer's approval/acceptance.
- f) The Qualified Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its Indian subsidiary's/Joint Venture Company's works as per the Qualified Steam Turbine Generator Manufacturer's design and quality acceptance level (to be finalized during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries and Condensers heaters, deaerators, BFP, CEP, HP/LP bypass system as per the Contract in accordance with the Qualified Steam Turbine Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/drawings/procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Turbine Generator Manufacturer before proceeding further.
- g) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system meet the guarantee parameters and demonstration parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/modifications to the equipment/systems of all the Steam Turbine Generator Sets & their auxiliaries and Condensers, heaters, deaerators, BFP, CEP, HP/LP bypass system directly to the Owner and the Contractor & the Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 8 Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer for any such analysis/ investigation. It

shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*Qualified Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/ JV Company, OTHER PROMOTER and Contractor.

9 \* Without prejudice to the generality of the undertaking in above paragraphs, the responsibilities of Qualified Generator Manufacturer shall be as follows:

- a) We, the Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries (**defined at Annexure-I**) so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
- b) We, the Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor for the portion of work pertaining to Generators and their auxiliaries. This shall also include providing all design data required by the Contractor for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Subsidiary Company/JV Company and \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor at his or his vendor's works as per the Qualified Generator Manufacturer's design, the Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Generator Manufacturer's works and shall meet Qualified Generator Manufacturer's approval/acceptance.
- e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified

Generator Manufacturer's design and to the Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Generator Manufacturer before proceeding further.

- f) In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor & the Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

10 The Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*the Indian Subsidiary Company/ JV Company and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant and timely delivery thereof to meet the Completion Schedule under the Contracts.

11 We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Indian Manufacturing Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer, do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled end of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, \*the Indian Subsidiary Company/JV Company, OTHER PROMOTER and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).

1 In case of award, in addition to the Contract Performance Securities to be furnished by

the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC PACKAGE in respect of the project awarded to the Bidder/ Contractor or ninety (90) days beyond the scheduled completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 12 Any dispute that may arise between the Owner and the Contractor or the Indian Manufacturing Company or \*Subsidiary Company of Indian Manufacturing Company or the OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 13 We, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, OTHER PROMOTER, \*Qualified Generator Manufacturer and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

- 14 That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, the Qualified Steam Turbine Generator Manufacturer, Subsidiary(ies), \*Subsidiary Company of Indian Manufacturing Company, the Subsidiary Company/JV Company, the OTHER PROMOTER and the \*Qualified Generator Manufacturer through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS:

1.....

.....  
(Official Address)

For M/s.....  
(Bidder / Contractor)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(Qualified Steam Turbine Generator Manufacturer/Holding Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....  
  
Designation.....  
Common Seal of the

Company .....

For M/s .....  
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s.....  
(Indian Manufacturing Company)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company.....

For M/s .....  
(OTHER PROMOTER)

WITNESS:

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

\*For M/s .....  
(Subsidiary Company of Indian Subsidiary Company)

WITNESS :

1.....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....

Common Seal of the  
Company .....

\*For M/s .....  
(Qualified Generator Manufacturer)

WITNESS :

1. ....

.....  
(Signature of the Authorised  
Representative)  
Name.....

.....  
(Official Address)

Designation.....  
Common Seal of the  
Company .....

**Note:**

- (i) \* Bidder to strike out, whichever is not applicable.
- (ii) In case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 1.1.1(B), item 4.0 of BDS, shall be equally divided among them and shall aggregate to 0.6% of the total contract price of the EPC PACKAGE for the awarded projects.
- (iii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.



**ANNEXURE-I**

**Indicative list of equipment / systems**

**A) Turbine**

1. Turbine and auxiliaries i.e. control fluid system, gland steam sealing system, governing system, lube oil system, exhaust hood spray system, stop /control valves, turbine drain system, turbine protection system, turbine control system (Analog & sequence) and turbine supervisory instruments.
2. Generator and auxiliaries i.e. generator seal oil system, generator water cooling system, hydrogen, carbon dioxide & nitrogen system, generator excitation system.
3. Condensate, feed water and extraction system.
4. Control and instrumentation.
5. Condenser and condenser air evacuation system.
6. CEPs & BFPs.
7. LPHs, HPHs and Deaerator.
8. HPLP bypass system.
9. Integration of turbine cycle equipment.
10. Any other auxiliary of steam turbine generator set not covered above.

**B) Generator**

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING  
AS PER CLAUSE 1.7.2 & \*1.2.3 OF ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/CONTRACTOR, \*INDIAN STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF 1.2.1 OF ITEM 4.0 OF BID DATA SHEETS, THE QUALIFIED STEAM TURBINE GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSES 1.1.1 (B) OF ITEM 4.0 OF BID DATA SHEETS AND THE \*QUALIFIED GENERATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 1.2.3 OF ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF THE SUPERCRITICAL STEAM TURBINE GENERATOR AND AUXILIARIES.**

This DEED OF JOINT UNDERTAKING executed on this ..... day of ..... Two Thousand ..... by M/s..... a Company incorporated under ..... having its Registered Office at..... (hereinafter called the "Qualified Steam Turbine Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

\*M/s....., a Company incorporated under ..... having its Registered Office at ..... (hereinafter called the "Qualified Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns),

\*M/s ..... a company incorporated under the Indian Companies Act, having its Registered Office at ..... (hereinafter called the "Indian Steam Turbine Generator Manufacturer" which expression shall include its successors, administrators, executors and permitted assigns), and

M/s..... a company incorporated under the Indian Companies Act, having its Registered Office at ..... (hereinafter called the "Bidder/Contractor" which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS M/s.....(Bidder)..... meets the requirement of Steam Generator Sets of clause 1.7.1, item no. 4.0 of BDS and desires to associate with \*M/s .....(Indian Steam Turbine Generator Manufacturer)..... who meets the requirement of clause 1.2.1, item no. 4.0 of BDS, and M/s..... who is a manufacturer of Steam Turbine Generator (hereinafter referred to as Qualified Steam Turbine Generator Manufacturer) and satisfies the qualification requirements as specified in Clause 1.1.1(B), Item 4.0 of BDS, \*and M/s..... (hereinafter referred to as Qualified Generator Manufacturer) who satisfies the qualification requirements as specified in Clause 1.2.3, Item 4.0 of BDS.

AND WHEREAS clause 1.2.1 of item 4.0 of Bid Data Sheet of Bidding Documents (BDS), stipulate that the \*Contractor / \*Indian Steam Turbine Generator Manufacturer should have a valid ongoing collaboration and technology transfer agreement including license to manufacture and supply supercritical steam turbine generator sets covering the type, size and rating specified, in India with a Qualified Steam Turbine Generator Manufacturer meeting requirements of clause 1.1.1 (B) of item 4.0 of BDS, valid minimum up to the end of the defect liability period of the contract.

AND WHEREAS clause 1.7.2 of item 4.0 of BDS, stipulate that the bidder shall furnish a Deed of Joint Undertaking executed by him, \*Indian Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.2.1 of item 4.0 of BDS and the \*Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 1.1.1 (B) of item 4.0 of BDS and \*Qualified Generator Manufacturer who meets the requirement of Clause 1.2.3 of item 4.0 of BDS.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the Invitation for Bid by the Owner bearing No. .... dated ..... for EPC Package for 1x800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar against the Owner's Bidding Documents.

AND WHEREAS M/s..... (Bidder), \*M/s ..... ("Indian Steam Turbine Generator Manufacturer") and M/s..... ("Qualified Steam Turbine Generator Manufacturer") are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking.

AND WHEREAS M/s..... (Bidder) and \*M/s ..... ( Indian Steam Turbine Generator Manufacturer) be \*jointly \*and \*severally liable and bound unto the Owner for the successful performance of the **contract for the entire scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

AND WHEREAS M/s ..... (Qualified Steam Turbine Generator Manufacturer) be liable to the Owner for successful performance of the Supercritical Steam turbine generator and auxiliaries (as per **Annexure-I**) including turbine cycle fully

meeting the guaranteed parameters & characteristics as per Bidding Documents in the event the Bid is accepted by the Owner resulting into a Contract/ contracts.

\*AND WHEREAS the Qualified Generator Manufacturer who meets the requirement of item no 1.2.3 of item 4.0 BDS shall also be required to be one of the executants of the above Deed of Joint Undertaking and be liable to the Owner for successful performance of the Generator and its auxiliaries (**Annexure-I**).

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

- 1 That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, \*Indian Steam Turbine Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
- 2 We, the Contractor, \*Indian Steam Turbine Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring a valid technology transfer agreement including license to manufacture and supply in India between the \*Qualified Steam Turbine Generator Manufacturer, \*Qualified Generator Manufacturer, \*the technology provider (if any) and the \*Indian Steam Turbine Generator Manufacturer / \* Contractor covering the type, size and rating of the Steam Turbine Generator sets specified, valid minimum up to the end of the defect liability period of the contract. The technology transfer agreement necessarily covers transfer of technological know-how for super critical Steam Turbine Generator in the form of complete transfer of design dossier, design software's, drawings and documentation, quality system manuals and imparting relevant personnel training to the \*Contractor / \*Indian Steam Turbine Generator Manufacturer. Further technology transfer agreement have provision that the transfer of technology to the \*Contractor / \*Indian Steam Turbine Generator Manufacturer shall be complete by the time last 800 MW supercritical unit is supplied by the Contractor under this Tender.
- 3 We, the Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the \*Contractor / \*Indian Steam Turbine Generator Manufacturer as part of the technology transfer agreement between us and \*Contractor / \*Indian Steam Turbine Generator Manufacturer.
- 4 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Qualified Steam Turbine Generator Manufacturer, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of all the Steam turbine generator sets and their auxiliaries (as per Annexure-I) as well as thermal performance and guaranteed parameters of turbine cycles as specified in the said contract(s) to the satisfaction of the Owner.

- 5 That in consideration of the award of the Contract by the Owner to the Contractor, we, the Contractor \*and \*Indian Steam Turbine Generator Manufacturer, do hereby declare and undertake that we shall be \*jointly \*and \*severally responsible to the Owner for the successful performance of the **contract for the entire scope related to** Steam Turbine Generator and Auxiliaries including turbine cycle, regenerative feed heating & pumping system for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, fully meeting the stipulated technical requirements, and guaranteed parameters and characteristics as specified in the said contract(s) to the satisfaction of the Owner.
- 6 That in consideration of the award of the Contract by the Owner to the Contractor, we, the \*Qualified Generator Manufacturer, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Steam Turbine Generator Manufacturer and the Contractor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the generator and its auxiliaries (**Annexure-I**).
- 7 In case of any breach of the Contracts committed by the Contractor, we the Qualified Steam Turbine Generator Manufacturer, \*the Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Steam Turbine and Generator and their auxiliaries (as defined in Annexure-I), as well as thermal performance and guaranteed parameters of the turbine cycle and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contracts related to any of the steam turbine generator sets and their auxiliaries (as defined in Annexure-I), we the Qualified Steam Turbine Generator Manufacturer, \*Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses / damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability, *i.e. clause 38 of GCC* of the said contract (s).

\*Further, in case of any breach of the Contracts committed by the Contractor, we the Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the **contract for the entire scope related to** Steam Turbine and Generator and their auxiliaries, as well including turbine cycle, regenerative feed heating & pumping system for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations and responsibilities stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contracts related to any of the entire scope related to the steam turbine generator sets and their auxiliaries, we the Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer and the Contractor jointly

and severally undertake to promptly indemnify and pay such losses / damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability, i.e. clause 38 of GCC of the said contract (s).

The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Qualified Steam Turbine Generator Manufacturer shall be limited to an amount equivalent to **US\$ 40 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. \*The liability of the Qualified Generator Manufacturer, hereunder shall, however be limited to an amount equivalent to **US\$ 10 Million** for each Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

\*Further, the liability of the Indian Steam Turbine Generator Manufacturer shall be limited to an amount equivalent to **US\$ 65 Million** for each Turbine Generator Set to be supplied by the Bidder / Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the Qualified Steam Turbine Generator Manufacturer, \*the Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment may initially be carried out by the Contractor, within a period of 15 days from the date of reference of the problem by the Owner before the Owner approaches Qualified Steam Turbine Generator Manufacturer / \*Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Qualified Steam Turbine Generator Manufacturer, \*Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer, nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Qualified Steam Turbine Generator Manufacturer, \*the Indian Steam Turbine Generator Manufacturer \*the Qualified Generator Manufacturer and Contractor.

- 8 Without prejudice to the generality of the undertaking in paragraphs above the manner of achieving the objectives set forth in paragraphs above shall be as follows:
  - a) We, the Qualified Steam Turbine Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Steam Turbine Generator Sets &

auxiliaries\* (as defined in **Annexure-I**) and interfacing & integrating the complete turbine cycle including condenser, Boiler Feed Pump, Condensate Extraction Pump, Heaters, Deaerators, etc. so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries (as defined in Annexure-I), Condensers as well as thermal performance of turbine cycle as per guaranteed parameters specified in the Contract.

- \* However for auxiliaries (as defined at **Annexure-I**) which are bought out by us, we, the Qualified Steam Turbine Generator Manufacturer, shall only be responsible for engineering, preparation of sizing and selection criteria.
- b) We, the Qualified Steam Turbine Generator Manufacturer, shall provide all additional necessary technical assistance to the Contractor /\*Indian Steam Turbine Generator Manufacturer for the portion of work to be performed by the Contractor /\*Indian Steam Turbine Generator Manufacturer. This shall include:
- (i) Thermal design of turbine cycle including heat balances
  - (ii) All design data required by the Contractor to carry out design of balance equipment/system in turbine cycle and for proper integration.

Further, we, the Qualified Steam Turbine Generator Manufacturer, shall extend our quality surveillance/ supervision/quality control to the Contractor /\*Indian Steam Turbine Generator Manufacturer during manufacture, erection, commissioning and performance testing, both at Contractor's /\*Indian Steam Turbine Generator Manufacturer's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the Qualified Steam Turbine Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I), the Qualified Steam Turbine Generator Manufacturer shall depute its technical experts from time to time to the Contractor's /\*Indian Steam Turbine Generator Manufacturer's works/ Owner's project site, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c) We, the Qualified Steam Turbine Generator Manufacturer, will supply equipment/components manufactured at our works or at our vendor's works including repair or replacement, if necessary as per requirements/ schedule specified in the Contracts.
- d) We, the Qualified Steam Turbine Generator Manufacturer, will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I). For the items to be manufactured by the Contractor / \*Indian Steam Turbine Generator Manufacturer at his or his vendor's works as per the Associate's/Collaborator's design, the Associate/ Collaborator shall ensure completeness and correctness of the design, data, document and

information in every detail provided to the Contractor / \*Indian Steam Turbine Generator Manufacturer which would result in the same quality of equipment as if manufactured at Associate's/Collaborator's works and shall meet Associate's/Collaborator's approval/ acceptance.

- e) The Contractor/ \*Indian Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Associate's/Collaborator's design and to the Associate's/Collaborator's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect, commission and carry out the performance tests of all the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I) as per the Contract in accordance with the Collaborator's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of The Qualified Steam Turbine Generator Manufacturer before proceeding further.
  - f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the Guarantee tests that Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I) meet the guaranteed parameters and demonstration parameters as specified in the Contract, including the thermal performance of turbine cycle, the Qualified Steam Turbine Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Turbine Generator Sets & their auxiliaries (as defined in Annexure-I) directly to the Owner and the Contractor, \*Indian Steam Turbine Generator Manufacturer & The Qualified Steam Turbine Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Turbine Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Turbine Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.
- 9 \* Without prejudice to the generality of the Undertaking in above paragraphs, the manner of achieving the objective shall be as follows:
- a. We, the \*Qualified Generator Manufacturer, shall be fully responsible for engineering, preparation of all design, design calculations and manufacturing drawings for all the Generators and their auxiliaries so as to ensure satisfactory, reliable and trouble free performance of Steam Turbine Generator Sets and their auxiliaries as per guaranteed parameters specified in the Contract.
  - b. We, the \*Qualified Generator Manufacturer shall provide all additional necessary technical assistance to the Contractor / \*Indian Steam Turbine Generator Manufacturer for the portion of work pertaining to Generators and



their auxiliaries. This shall also include providing all design data required by the Contractor / \*Indian Steam Turbine Generator Manufacturer for proper integration and interfacing of Steam Turbine and Generator.

Further, we, the \*Qualified Generator Manufacturer shall extend our quality surveillance/ supervision/quality control to the Contractor / \*Indian Steam Turbine Generator Manufacturer during manufacture, erection, commissioning and performance testing of all Generators and their auxiliaries, both at Contractor's/ \*Indian Steam Turbine Generator Manufacturer's works and/or at Owner's project site. Without prejudice to the overall responsibilities of the \*Qualified Generator Manufacturer as to the successful commissioning and the performance of the Steam Turbine Generator Sets and their auxiliaries, the \*Qualified Generator Manufacturer shall depute its technical experts from time to time to the Contractor's/ \*Indian Steam Turbine Generator Manufacturer's works/ Owner's project site for jobs pertaining to Generators and their auxiliaries, as mutually agreed upon between the Owner and the Contractor in accordance with the stipulations of the Contracts.

- c. We, the \*Qualified Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works including repair or replacement, if necessary as per requirements/ schedule specified in the Contracts.
- d. We, the \*Qualified Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment/main assembly/components for incorporation in all the Generators & their auxiliaries. For the items to be manufactured by the Contractor/ \*Indian Steam Turbine Generator Manufacturer at his or his vendor's works as per the \*Qualified Generator Manufacturer's design, the \*Qualified Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at \*Qualified Generator Manufacturer's works and shall meet \*Qualified Generator Manufacturer's approval/ acceptance.
- e. The Contractor / \*Indian Steam Turbine Generator Manufacturer shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the \*Qualified Generator Manufacturer's design and to the \*Qualified Generator Manufacturer's quality acceptance level (to be finalised during award of Contract). Further, the Contractor shall erect commission and carry out the performance tests of all the Generators and their auxiliaries as per the Contract in accordance with the \*Qualified Generator Manufacturer's advice, procedure and guidance. In case there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of \*Qualified Generator Manufacturer before proceeding further.
- f. In the event any problem is encountered during design, manufacture, shop testing, erection, testing and commissioning of Generators and their

auxiliaries or if the Contractor fails to demonstrate during the performance tests that the Generators and its auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, the \*Qualified Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Generators & their auxiliaries directly to the Owner and the Contractor, \*Indian Steam Turbine Generator Manufacturer & the \*Qualified Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the \*Qualified Generator Manufacturer and agreed by the Owner) for each of their respective equipment/systems supplied by them at their own expense. Thereafter, the Contractor, \*Indian Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer shall demonstrate the successful performance meeting the guaranteed parameters and demonstration parameters.

- 10 The Contractor and \*Indian Steam Turbine Generator Manufacturer and Qualified Steam Turbine Generator Manufacturer and the \*Qualified Generator Manufacturer will be fully responsible for the quality of all the equipment/ main assemblies/ components manufactured at their works or at their Vendors works or constructed at site, and their repair or replacement, if necessary, for incorporation in the plant.
- 11 We, the Contractor, \*Indian Steam Turbine Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the steam Turbine Generator and auxiliaries or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit of the project under the contract or completion of Phased Manufacturing Programme, whichever occurs later. We, the Contractor, \*Indian Steam Turbine Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer and \*Qualified Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
- 12 In case of award, in addition to the Contract Performance Securities to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Owner as specified in Qualifying Requirements stipulated at Item 4.0 of BDS shall be furnished.

The aforesaid Bank Guarantees shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the

terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of completion of defect liability period of all the equipment/ component covered under the Contract(s) for EPC Package or ninety (90) days beyond the completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the defect liability period under the Contract(s) or delay in completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the contract or completion of Phased Manufacturing Programme, whichever occurs later. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

- 13 Any dispute that may arise between the Owner and the Contractor / Indian Steam Turbine Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in Clause No.26, Section GCC of the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

- 14 We, the Contractor, Qualified Steam Turbine Generator Manufacturer, \*Indian Steam Turbine Generator Manufacturer, and \*Qualified Generator Manufacturer agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Undertaking shall continue to be enforceable till its validity.
- 15 That this Deed of Joint Undertaking shall be operative from the effective date of the Contracts.

IN WITNESS WHEREOF, the Qualified Steam Turbine Generator Manufacturer, the \*Indian Steam Turbine Generator Manufacturer, the \*Qualified Generator Manufacturer and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

1. WITNESS:  
M/s.....

.....  
(Signature, Name &  
Address)

For

(Qualified Steam Turbine Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company

2. WITNESS:  
M/s.....

.....  
(Signature, Name &  
Address)

\*For

(Qualified Generator Manufacturer)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company

3. WITNESS:  
M/s.....

.....  
(Signature, Name &  
Address)

\*For

(Indian Steam Turbine Generator  
Manufacturer)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....  
Designation.....  
Common Seal of the Company

4. WITNESS:  
M/s.....

.....  
(Signature, Name &  
Address)

For

(BIDDER / CONTRACTOR)

.....  
(Signature of the Authorised  
Representative)

.....  
Name.....

Designation.....  
Common Seal of the Company  
.....

**Note:**

- 1** *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by bidder and to be attached along with the signed Deed of Joint Undertaking.*
  
- 2** *\* Bidder to strike out, whichever is not applicable.*

## ANNEXURE-I

### A) Indicative List of Auxiliaries of Steam Turbine Generator Set

1. Control fluid system
2. Gland steam sealing system
3. Governing system
4. Lube oil system
5. Exhaust hood spray system
6. Stop/ Control valves
7. Turbine drain system
8. Generator Seal oil system
9. Generator water cooling system
10. Hydrogen, Carbon dioxide & Nitrogen system
11. Generator excitation system
12. Turbine protection system
13. Turbine control system (Analog and sequence)
14. Turbine supervisory instruments
15. Any other integral auxiliary of steam turbine generator set not covered above.

### B) Indicative list of Auxiliaries of Generator

1. Generator Seal oil system
2. Generator water cooling system
3. Hydrogen, carbon dioxide & Nitrogen system
4. Generator Excitation system
5. Any other auxiliary of Generator not covered above

**FORM OF DEED OF JOINT UNDERTAKING FOR THE STEAM GENERATOR AND AUXILIARIES  
AS PER NOTE 5 TO CLAUSE 1.0.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER, SUPERCRITICAL STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 1.1.1(A), ITEM 4.0 OF BID DATA SHEETS PARTIALLY AND INTENDING TO QUALIFY AS PER NOTE (5) TO CLAUSE NO.1.0.0, ITEM 4.0 OF BID DATA SHEETS AND THE VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR) MEETING THE REQUIREMENT OF NOTE (5) TO CLAUSE NO.1.0.0, ITEM 4.0 OF BID DATA SHEETS FOR SUCCESSFUL PERFORMANCE OF STEAM GENERATOR AND AUXILIARIES**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the Bidder/ Contractor, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the Supercritical Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s ..... a Company incorporated under .....having its Registered Office at..... (hereinafter called the "Technology Owner"/ "Licensor", which expression shall include its successors, administrators, executors and permitted assigns

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Note (5) to Clause 1.0.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the Bidder and the Supercritical Steam Generator Manufacturer who meets the requirements stipulated in clause 1.1.1(A), item 4.0 of Bid Data Sheet partially shall associate with the Licensor who satisfies the qualification requirements specified in Note (5) to Clause 1.0.0, Item 4.0 of BDS and furnish a Deed of Joint Undertaking.

WHEREAS M/s.....(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS M/s .....(Supercritical Steam Generator Manufacturer) ..... meets the requirement of clause 1.1.1(A), item no. 4.0 of BDS except that the evaporator in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and desires to associate with M/s..... (Licensor)..... who is the original technology owner and with whom the Supercritical Steam Generator Manufacturer has an ongoing license agreement (which covers technology transfer) for design, manufacture, sell, use, service of once through variable pressure supercritical steam generator technology (with evaporator

suitable for variable pressure operation in sub-critical and supercritical pressure ranges) and who satisfies the qualification requirements as specified in Note (5) to Clause 1.0.0, Item 4.0 of BDS.

AND WHEREAS the Bidder, the Supercritical Steam Generator Manufacturer and the Technology Owner are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner for the successful performance of the Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, fully meeting the stipulated technical requirements, and Guaranteed parameters as per bidding documents, in the event, the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Owner to the Contractor, we the Contractor, Technology Owner and the Supercritical Steam Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of complete Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, including its satisfactory thermal performance of all the units, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract(s) committed by the Contractor and the Supercritical Steam Generator Manufacturer, we the Technology Owner do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator, including its satisfactory thermal performance and achievement of guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking.
- 2.1 The aggregate liability of the Bidder/Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Owner with respect to patent infringement as per provisions of bidding documents (Clause 32 of GCC and relevant clause of SCC).

The liability of the Technology Owner hereunder shall, however, be limited to an amount calculated @ **US\$ 30 Million** for Steam Generator to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Owner against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, Supercritical Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Supercritical Steam Generator Manufacturer within a period of 15 days from the date of reference of the problem by the Owner, before the Owner approaches the Technology Owner for any such analysis/ investigation. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor or the Supercritical Steam Generator Manufacturer before proceeding against the Technology Owner (with respect to obligations and responsibilities of the Technology Owner covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Owner to the contractor shall prejudice any right of Owner under this Deed of Joint Undertaking to proceed against the Technology Owner, Supercritical Steam Generator Manufacturer and the Contractor.



3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows :
  - a) We, the Technology Owner shall be fully responsible for design and engineering of once through thermodynamic and thermos-hydraulic design, furnace, boiler heating surface, start up system so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators.
  - b) We, the Technology Owner shall be specifically responsible for the following:
    - (i) Thermal and hydraulic design of Steam Generators.
    - (ii) Evaporator design including flow distribution, temperature
    - (iii) Metal temperatures and stresses, static stability and dynamic stability
    - (iv) Providing all design data required by the Contractor to carry out design of steam water separator for their proper interfacing and integration.
    - (v) Complete water wall system design, its supporting system and buck stay design
    - (vi) Complete design of start up drain and circulation system
  - c) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor and the Supercritical Steam Generator Manufacturer fails to demonstrate during the guarantee tests that the Steam Generators meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators, the Technology Owner shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment/ systems of all the Steam Generators under all the Contracts directly to the Owner, the Supercritical Steam Generator Manufacturer and the Contractor, and Technology Owner shall promptly carry out all corrective measures and modifications (as suggested by the Technology Owner and agreed by the Owner) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor, Supercritical Steam Generator Manufacturer and the Technology Owner shall demonstrate the successful performance of the Steam Generators meeting the guaranteed parameters and demonstration parameters.
4. We, the Contractor, the Supercritical Steam Generator Manufacturer and the Technology Owner do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till one (1) year beyond the scheduled date of completion of the defect liability period of the all the equipment/ component covered under the Contract(s) for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor. In case of delay in completion of the defect liability period under the Contract(s) beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 36 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor, the Supercritical Steam Generator Manufacturer and the Technology Owner do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract(s).
5. In case of award, in addition to the Contract Performance Securities to be furnished by the Contractor, the Technology Owner shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Owner as per provisions of the bidding documents. The value of each such Bank Guarantee shall be equal to **US\$ 150,000** and it shall be guarantee towards the faithful performance/ compliance of this

Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till one (1) year beyond the scheduled date of Completion of defect liability period of all the equipment/ component under the Contract(s) for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, awarded to the Bidder/ Contractor. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 39 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

6. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

7. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Bidder/ Contractor, the Supercritical Steam Generator Manufacturer and the Licensor / Technology Owner through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s .....  
(Bidder/ Contractor)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s .....  
(Supercritical Steam Generator Manufacturer)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name.....

Designation.....  
Common Seal of the  
Company .....

For M/s.....  
(Licensor/ Technology Owner)

WITNESS :

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)  
Name .....

Designation.....  
Common Seal of the  
Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**FORM OF DEED OF JOINT UNDERTAKING FOR ENGINEERING WORK**  
**AS PER CLAUSE 5.1.0 (b), ITEM 4.0 OF BID DATA SHEETS**  
**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE [ARCHITECT ENGINEERING FIRM WHO MEETS THE REQUIREMENT OF CLAUSE 5.1.0 (a) (i) , ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE OF ALL THE ENGINEERING ACTIVITIES IN THE SCOPE OF WORK OF ARCHITECT ENGINEERING FIRM FOR EPC PACKAGE FOR 1X800 MW SUPER CRITICAL EXPANSION UNIT AT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand ..... by M/s ..... a Company registered under the .....having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under .....having its Registered Office at .....(hereinafter called the "Associate", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Clause 5.1.0 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who does not meet the requirements indicated at Clause 5.1.0 (a) (i) but meets the requirement indicated at 5.1.0 (a)(ii), Item 4.0 of Bid Data Sheets (BDS), shall associate with a Architect Engineering Firm and the Bidder shall get the Engineering documents related to Thermal cycle, Power Cycle piping and Flash Tanks/Flash Boxes, steam Generator start up system, Sizing of EPC Equipment, interface between SG and TG, Unit Start up and Control philosophy vetted by an Architect Engineering Firm who meets the requirements stipulated at Clause 5.1.0 (a) (i) , Item 4.0 of Bid Data Sheets (BDS)., and furnish a Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Associate (who is an Architect Engineering firm meeting the requirements specified in Clause No. 5.1.0 (a) (i) of Item 4.0 of Bid Data Sheet), are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner to perform successfully all the engineering activities included in the scope of Architect Engineering Firm (viz. vetting of Engineering documents related to Thermal cycle, Power Cycle piping and Flash Tanks/Flash Boxes, steam Generator start up system, Sizing of EPC Equipment, interface between SG and TG, Unit Start up and Control philosophy) of EPC package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, specified in the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW, in the event the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all the engineering activities included in the scope of Architect Engineering Firm (viz. vetting of Engineering documents related to Thermal cycle, Power Cycle piping and Flash Tanks/Flash Boxes, steam Generator start up system, Sizing of EPC Equipment, interface between SG and TG, Unit Start up and Control philosophy) of the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all the engineering activities included in the scope of Architect Engineering Firm (viz. vetting of Engineering documents related to Thermal cycle, Power Cycle piping and Flash Tanks/Flash Boxes, steam Generator start up system, Sizing of EPC Equipment, interface between SG and TG, Unit Start up and Control philosophy) and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to engineering activities included in the scope of the Associate, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire engineering activities covered under the scope of Associate from basic engineering till successful demonstration of performance guarantees, as specified in the Contract to the satisfaction of the Owner..

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the scope as stipulated in the Contract.
  - b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to engineering activities at their own expense and shall promptly provide corrected design to the Owner.

- c. Entire engineering activities pertaining to implementation of the corrected design and necessary repairs, replacements, rectification or modifications to the equipment covered under the scope shall be the joint and several responsibility of the Contractor and Associate.
4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor and Associate will be fully responsible for the quality of entire engineering activities covered under the package specification, from basic engineering till successful demonstration of performance guarantees of all equipment covered under the contract.
6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be **US\$ 25,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.

9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....

.....  
(Official Address)

For M/s. ....  
(Associate)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

WITNESS :

1. ....

.....  
(Official Address)

For M/s .....  
(Bidder/Contractor)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**FORM OF DEED OF JOINT UNDERTAKING FOR ENGINEERING WORK**  
**AS PER CLAUSE 5.3.0 (a), ITEM 4.0 OF BID DATA SHEETS**  
**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE [ARCHITECT ENGINEERING FIRM WHO MEETS THE REQUIREMENT OF CLAUSE 5.1.0 (a) (i) & (ii), ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE OF ALL THE ENGINEERING ACTIVITIES IN THE SCOPE OF WORK OF ARCHITECT ENGINEERING FIRM FOR EPC PACKAGE FOR 1X800 MW SUPER CRITICAL EXPANSION UNIT AT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand ..... by M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Associate", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Clause 5.3.0 (a), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who does not meet the requirements indicated at Clause 5.1.0 (a) (i) & (ii) or Clause 5.2.0 (a) (i) & (ii), Item 4.0 of Bid Data Sheets (BDS), shall associate with a Architect Engineering Firm who meets the requirements stipulated at Clause 5.1.0 (a) (i) & (ii), Item 4.0 of Bid Data Sheets (BDS) to carry-out complete engineering of the EPC Package and furnish a Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Associate (who is an Architect Engineering firm) meeting the requirements specified in Clause No. 5.1.0 (a) (i) and (ii) of Item 4.0 of Bid Data Sheet, are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner to perform successfully all the engineering activities included in the scope of work for EPC package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (specified in the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW, in the event the Bid is accepted by the Owner resulting into a Contract/Contracts.



**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all the engineering activities included in the scope of work of the EPC Package for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar (as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all the engineering activities included in the scope of the Contract and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to engineering activities included in the scope of the Contract, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire engineering activities covered under the package from basic engineering till successful demonstration of performance guarantees, as specified in the Contract to the satisfaction of the Owner. This shall also include (a) Basic engineering for integration and interface between SG & TG. (b) Pre award engineering for system associated with BTG & BOP, (c) Post Award engineering covering review of thermal cycle of power plant, review and interface Engineering for over all integration of various power plant equipment / packages including review of major design documentation such as design / sizing calculations, layout, plant start-up & control philosophy, schematic drawings and other documentation related to Mechanical, Civil, Electrical and C&I design.

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the package as stipulated in the Contract.

- b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to engineering activities at their own expense and shall promptly provide corrected design to the Owner.

- c. Entire engineering activities pertaining to implementation of the corrected design and necessary repairs, replacements, rectification or modifications to the equipment covered under the package shall be the joint and several responsibility of the Contractor and Associate.
4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor and Associate will be fully responsible for the quality of entire engineering activities covered under the package specification, from basic engineering till successful demonstration of performance guarantees of all equipment covered under the contract.
6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be **US\$ 25,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....  
.....  
(Official Address)

For M/s. ....  
(Associate)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

WITNESS :

1. ....  
.....  
(Official Address)

For M/s .....  
(Bidder/Contractor)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

**FORM OF DEED OF JOINT UNDERTAKING FOR ENGINEERING WORK**  
**AS PER CLAUSE 5.3.0 (b), ITEM 4.0 OF BID DATA SHEETS**  
**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE [ARCHITECT ENGINEERING FIRM WHO MEETS THE REQUIREMENT OF CLAUSE 5.1.0 (a) (i) , ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE OF ALL THE ENGINEERING ACTIVITIES IN THE SCOPE OF WORK OF ARCHITECT ENGINEERING FIRM FOR EPC PACKAGE FOR 1X800 MW SUPER CRITICAL EXPANSION UNIT AT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Associate", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Clause 5.3.0 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who does not meet the requirements indicated at Clause 5.1.0 (a) (i) & (ii) or Clause 5.2.0 (a) (i) & (ii), Item 4.0 of Bid Data Sheets (BDS), shall associate with a Architect Engineering Firm who meets the requirements stipulated at Clause 5.1.0 (a) (i) , Item 4.0 of Bid Data Sheets (BDS) to carry-out engineering Activities of Main Plant equipment / systems i.e. steam generator and steam turbine generator sets along with their auxiliaries including mills, fans, Air pre-heaters, steam Generator start up system, regenerative heating and pumping system, Power cycle piping and flash tanks/ flash boxes and interface between Boiler and Turbine of the EPC PACKAGE and furnish a Deed of Joint Undertaking.

WHEREAS M/s..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Associate (who is an Architect Engineering firm) meeting the requirements specified in Clause No. 5.1.0 (a) (i) of Item 4.0 of Bid Data Sheet, are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner to perform successfully all the engineering activities of Main Plant equipment / systems i.e. steam generator and steam turbine generator sets along with their auxiliaries including mills, fans, Air pre-heaters,

steam Generator start up system, regenerative heating and pumping system, Power cycle piping and flash tanks/ flash boxes and interface between Boiler and Turbine of EPC PACKAGE for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, specified in the Owner's Bidding Documents No.03/HPGCL/DCRTPP/EPC/800MW, in the event the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all the engineering activities of Main Plant equipment / systems i.e. steam generator and steam turbine generator sets along with their auxiliaries including mills, fans, Air pre-heaters, steam Generator start up system, regenerative heating and pumping system, Power cycle piping and flash tanks/ flash boxes and interface between Boiler and Turbine of the EPC PACKAGE for 1x800 MW Super Critical Expansion Unit At Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all the engineering activities of Main Plant equipment / systems i.e. steam generator and steam turbine generator sets along with their auxiliaries including mills, fans, Air pre-heaters, steam Generator start up system, regenerative heating and pumping system, Power cycle piping and flash tanks/ flash boxes and interface between Boiler and Turbine and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to engineering activities included in the scope of the Associate, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire engineering activities covered under the scope of Associate from basic engineering till successful demonstration of performance guarantees, as specified in the Contract to the satisfaction of the Owner. This shall also include (a) Basic engineering for integration and interface between SG & TG. (b) Pre award engineering for system associated with BTG, (c) Post Award engineering covering review of thermal cycle of power plant, review and interface Engineering for over all integration of various power plant equipment / packages including review of major design documentation such as design / sizing calculations, layout, plant start-up & control philosophy, schematic drawings and other documentation related to Mechanical, Civil, Electrical and C&I design.

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the scope as stipulated in the Contract.

- b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to engineering activities at their own expense and shall promptly provide corrected design to the Owner.
  - c. Entire engineering activities pertaining to implementation of the corrected design and necessary repairs, replacements, rectification or modifications to the equipment covered under the scope shall be the joint and several responsibility of the Contractor and Associate.
4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
  5. The Contractor and Associate will be fully responsible for the quality of entire engineering activities covered under the package specification, from basic engineering till successful demonstration of performance guarantees of all equipment for Main Plant Equipment/Systems covered under the contract including interface engineering between Boiler and Turbine.
  6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be **US\$ 25,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
  7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS : 1. ....  ..... (Official Address)	For M/s. .... (Associate)  ..... (Signature of the Authorised Representative)  Name .....  Designation .....  Common Seal of the Company.....
WITNESS :	For M/s ..... (Bidder/Contractor)

1. ....

.....  
(Official Address)

.....  
(Signature of the Authorised  
Representative)

Name .....

Designation .....

Common Seal of the  
Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**



**FORM OF DEED OF JOINT UNDERTAKING FOR ENGINEERING WORK**

**AS PER CLAUSE 5.3.0 (b), ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE [ARCHITECT ENGINEERING FIRM WHO MEETS THE REQUIREMENT OF CLAUSE 5.1.0 (a) (ii), ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE OF ALL THE ENGINEERING ACTIVITIES IN THE SCOPE OF WORK OF ARCHITECT ENGINEERING FIRM FOR EPC PACKAGE FOR 1X800 MW SUPER CRITICAL EXPANSION UNIT AT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,**

The DEED OF JOINT UNDERTAKING executed on this ..... day of .....Two thousand by M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under .....having its Registered Office at.....(hereinafter called the "Associate", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of HARYANA POWER GENERATION CORPORATION LIMITED, having its Registered Office at Plot No. C-7, Urja Bhawan, Sector 6, Panchkula, Haryana - 134109 (India) (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, (hereinafter referred to as "Plant") vide its Bidding Document No.: 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Clause 5.3.0 (b), Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder, who does not meet the requirements indicated at Clause 5.1.0 (a) (i) & (ii) or Clause 5.2.0 (a) (i) & (ii), Item 4.0 of Bid Data Sheets (BDS), shall associate with a Architect Engineering Firm who meets the requirements stipulated at Clause 5.1.0 (a) (ii), Item 4.0 of Bid Data Sheets (BDS) to carry-out engineering of Balance of Plant including interface between Main plant and Balance of Plant under the EPC PACKAGE and furnish a Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS the Bidder and the Associate (who is an Architect Engineering firm) meeting the requirements specified in Clause No. 5.1.0 (a) (ii) of Item 4.0 of Bid Data Sheet, are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner to perform successfully all the engineering activities Balance of Plant including interface between Main plant and Balance of Plant of EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, , specified in the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW, in the event the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all the engineering activities of Balance of Plant including interface between Main plant and Balance of Plant under the EPC PACKAGE for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all the engineering activities of Balance of Plant including interface between Main plant and Balance of Plant and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to engineering activities included in the scope of the Associate, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire engineering activities covered under the scope of Associate from basic engineering till successful demonstration of performance guarantees, as specified in the Contract to the satisfaction of the Owner. This shall also include (a) Basic engineering, (b) Pre award engineering for system associated with BOP, (c) Post Award engineering covering review and interface Engineering for over all integration of various power plant equipment / packages including review of major design documentation such as design / sizing calculations, layout, plant start-up & control philosophy, schematic drawings and other documentation related to Mechanical, Civil, Electrical and C&I design.

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the scope as stipulated in the Contract.

- b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to engineering activities at their own expense and shall promptly provide corrected design to the Owner.
  - c. Entire engineering activities pertaining to implementation of the corrected design and necessary repairs, replacements, rectification or modifications to the equipment covered

under the scope shall be the joint and several responsibility of the Contractor and Associate.

4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor and Associate will be fully responsible for the quality of entire engineering activities covered under the package specification, from basic engineering till successful demonstration of performance guarantees of all equipment for Balance of Plant covered under the contract including interface engineering between Main Plant and Balance of Plant.
6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be **US\$ 25,000** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of defect liability period of the 800 MW equipment covered under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of defect liability period of the 800 MW unit under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

WITNESS :

1. ....

.....  
(Official Address)

For M/s. ....  
(Associate)

.....  
(Signature of the Authorised Representative)

Name .....

Designation .....

Common Seal of the  
Company.....

WITNESS :

1. ....

.....  
(Official Address)

For M/s .....  
(Bidder/Contractor)

.....  
(Signature of the Authorised  
Representative)

Name .....

Designation .....

Common Seal of the  
Company.....

**Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

[On Company Letter Head of the Bidder]

TO:

[OWNERS NAME & ADDRESS]

**Sub: Letter to ensure satisfactory performance of \*Steam generator and/or \*Steam Turbine Generator & Auxiliaries for EPC Package for 1X800 MW SUPER CRITICAL EXPANSION UNIT at DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR: Bidding Document No. : 03/HPGCL/ DCRTPP/EPC/800MW.**

Dear Sirs,

This has reference to your IFB reference no. \_\_\_\_\_ for the captioned package.

We \_\_\_\_\_ (Name of Bidder) confirm that \*We / our Indian \*Subsidiary/\*JV Company/ \*Indian Manufacturing Company under valid technology transfer agreements for \*Steam generator with M/s \_\_\_\_\_ (Name of Collaborator\*/ Licensor\*/Technology Provider) and for \*Steam turbine generator with M/s \_\_\_\_\_ (Name of Collaborator\*/ Licensor\*/Technology Provider) have acquired technology for supercritical \*Steam generator and/or \*Steam turbine generator. We further confirm that we / our Indian \*Subsidiary/ \*JV Company/ \*Indian Manufacturing Company have fully absorbed the technology regarding design, manufacturing, erection, testing and commissioning for above equipment(s). As per \*our/Our Indian \*Subsidiary's/ \*JV Company's / \*Indian manufacturing company's technology transfer agreement with the \*Collaborator/\*Licensor/\*Technology Provider, \*we / our Indian \*Subsidiary/\*JV Company / \*Indian Manufacturing Company have right to continue the design, manufacturing and supply of these equipment(s) even after expiry of technology transfer agreement.

We confirm that in case of the award of the 'Contract' for the subject package to us, we shall be fully responsible for the satisfactory performance of the \*Steam generator sets & auxiliaries and/or \*Steam Turbine Generator Sets & Auxiliaries covered under the contract. However, in the event any problem is encountered on \*Steam generator sets & auxiliaries and/or \*Steam Turbine Generator Sets & Auxiliaries during execution of the contract, we shall resolve the same within reasonable time (in the opinion of the owner) by ourselves. In case we are not able to resolve the issue ourselves, we agree to first engage our collaborator and (if required) then engage any technical expert / firm having competency to resolve such issues. If still the problem does not get resolved within reasonable period of time (in the opinion of the owner), OWNER has the option to approach directly to collaborator\*/licensor\*/technology Provider\* or any other party. In such a case the financial expenditure(s) incurred by OWNER for resolution of such issues will be to our account. We further confirm that we have no objection in owner approaching to the \*Collaborator/ \*Licensor/ \*Technology Provider or any other party directly to resolve the problem.

We \_\_\_\_\_ (Name of Bidder) further confirm that there is no binding arrangement between \*us / our Indian \*Subsidiary/ \*JV Company / \*Indian manufacturing company and the "\*Collaborator\*/Licensor\*/Technology Provider" in this regard.

In case owner exercises the option to approach directly to \*Collaborator/\*Licensor/\*Technology Provider or any other party directly to resolve the problem, the same shall not relieve us of our obligations to complete the execution of the facilities including guarantee tests in accordance with the contract nor of our obligations during the defect liability period.

We, hereby undertake and confirm that this Letter shall be irrevocable and valid up to the end of the defect liability period of the contract.

Signature of Bidder's Authorised signatory: \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Date \_\_\_\_\_

Common Seal of the Company

Note: Collaborator/Licensor/Technology Provider mean the party from which the 'Bidder' has absorbed the technology under Technology transfer agreement.

\* Strike off whichever is not applicable.

**FORM OF DEED OF JOINT UNDERTAKING FOR BALANCE OF PLANT PACKAGE  
AS PER CLAUSE 1.8.0, ITEM 4.0 OF BID DATA SHEETS**

**(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER AND ASSOCIATE [PROJECT MANAGEMENT ORGANIZATION WHO MEETS THE REQUIREMENT OF CLAUSE 1.8.0, ITEM 4.0 OF BID DATA SHEETS] FOR SUCCESSFUL PERFORMANCE OF PROJECT MANAGEMENT/PROJECT EXECUTION ACTIVITIES IN THE SCOPE OF WORK FOR EPC PACKAGE FOR 1 x 800 MW SUPER CRITICAL EXPANSION UNIT DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR, HARYANA**

The DEED OF JOINT UNDER TAKING executed on this.....day of.....Two thousand..... by M/s ..... a Company registered under the ..... having its Registered Office at ..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Associate", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of Haryana Power Generation Corporation Limited having its registered office C-7, Urja Bhawan, Sector-6, Panchkula, Haryana (hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW.

AND WHEREAS Clause 1.8.0, Item 4.0 of Bid Data Sheets (BDS) of bidding documents stipulates that the bidder who does not meet the requirement of Criteria for Balance of Plant portion of works stipulated under clause 1.8.1, shall associate with an Indian Company who has executed the work of Balance of Plant stipulated under Cl.1.8.1 as a standalone EPC Package who meets the requirements indicated at clause 1.8.1, item 4.0 of BDS, to carry-out Balance of Plant portion of works of the EPC Package and furnish a Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner for EPC Package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana, against the Owner's Bidding Document No

AND WHEREAS the Bidder and the Associate are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Owner to perform successfully all the Balance of Plant work included in the scope of work for EPC package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana, specified in the Owner's Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW, in the event the Bid is accepted by the Owner resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER**

1. That in consideration of the award of the Contract by the Owner to the Contractor, we, the Associate and the Contractor, do hereby declare and undertake that we shall be jointly and severally liable to the Owner for successful performance of all Balance of Plant Work included in the scope of work of the EPC Package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana as specified under the said Contract(s) to the satisfaction of the Owner.
2. In case of any breach of the Contract committed by the Contractor, we, the Associate, do hereby undertake, declare and confirm that we shall be fully responsible for successful performance of all Balance of Plant Work included in the scope of the Contract and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Owner sustains any loss or damage on account of any breach of the Contract related to Balance of Plant Work included in the scope of the Contract, we, the Associate and Contractor, jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/damages shall be in line with provision on Limitation of Liability of the said contract. However, the financial liability of the Associate shall be limited to the value of sub-contract between the Contractor and the Associate. This is without prejudice to any rights of the Owner against the Contractor under the Contract and all guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate (with respect to obligations and responsibilities covered under this Deed of joint undertaking), nor any extension of time or any relaxation given by the Owner to the Contractor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set-forth in paragraph 1 above shall be as follows:
  - a. The Associate will be fully responsible for entire Balance of Plant Work covered under the scope of work of the package including Engineering Management, Procurement Management, Construction Management and Commissioning / Supervision of commissioning, as specified in the Contract to the satisfaction of the Owner.

Further, the Associate shall depute their technical experts from time to time to the Contractor's works/ Owner's office/project site as required by the Owner and agreed to by the Contractor and Associate to facilitate the successful performance of all equipment covered under the package as stipulated in the Contract.

- b. In the event the Associate and the Contractor fail to demonstrate that the equipment covered under the Contract meets the guaranteed parameters and demonstration parameters as specified in the Contract, the Associate and the Contractor shall promptly carry out all the corrective measures related to Balance of Plant Work at their own expense and shall promptly provide corrected design to the Owner.

- c. Entire Balance of Plant Work pertaining to the scope of work covered under the package shall be the joint and several responsibility of the Contractor and Associate.
4. We, the Contractor and the Associate do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days after the scheduled end of warranty period of the last equipment covered under the Contract. In case of delay in completion of the warranty period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the 800 MW unit under the Contract. We, the Contractor and the Associate, do further undertake and confirm that this Deed of joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor and Associate will be fully responsible for the quality of entire Balance of Plant Work covered under the package specification, as specified in the Contract to the satisfaction of the Owner.
6. In case of award, in addition to the Contract Performance Security furnished by the Contractor, the Associate shall furnish as security an on demand Performance Bank Guarantee in favour of the Owner as per provisions of the bidding documents. The value of such Bank Guarantee shall be INR 20 Million (Indian Rupees Twenty Million) and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled end of warranty period of the last equipment covered under the Contract. In case of delay in completion of the warranty period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this Bank Guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the unit of 800 MW under the Contract. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise between the Owner and the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

Any dispute that may arise between the Owner and the Associate in connection with this Deed of Joint Undertaking shall be finally settled by reference to Arbitration in accordance with the Indian Arbitration and Reconciliation Act 1996. The Arbitral Tribunal shall consist of a Sole Arbitrator and shall be appointed in accordance with the mutual consent of both the Parties from a Panel of Arbitrator suggested by HPGCL. The language to be used in arbitral proceedings shall be English. The place of arbitration shall be Panchkula, Haryana, India. The award made in such arbitration shall be final and binding and shall be enforceable in any court of competent jurisdiction.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.



8. We, the Associate and the Contractor, agree that this Deed of Joint Undertaking shall form an integral part of the Contracts for this package. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate and the Contractor through their authorized representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s. -----  
(Associate)

WITNESS:

1. -----

-----  
(Signature of the Authorized Representative)

-----  
(Official Address)

Name -----

Designation -----

Common Seal of the Company  
-----

For M/s. -----  
(Bidder/ Contractor)

WITNESS:

1. -----

-----  
(Signature of the Authorized Representative)

-----  
(Official Address)

Name -----

Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.