

HARYANA POWER GENERATION CORPORATION LIMITED

**1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

EPC PACKAGE TENDER SPECIFICATION

**SECTION - VII
BOOK 1 OF 3 (PART-1)**

BIDDERS MAY TAKE NOTE OF THE FOLLOWING POINTS WHILE SUBMITTING ITS BID

- * BIDDERS ARE REQUIRED TO FURNISH REQUISITE DETAILS IN THE FORMATS SPECIFIED IN THE BIDDING DOCUMENTS FOR MEETING THE STIPULATED QUALIFYING REQUIREMENTS (QR) ALONG WITH ALL SUPPORTING DOCUMENTS LIKE COPIES OF CLIENT'S CERTIFICATES, WORK ORDER AND CONTRACT AGREEMENTS ETC.
- * IN CASE OF EXTENSION OF TECHNO-COMMERCIAL BID OPENING DATE, BIDDER TO FURNISH AUDITED ANNUAL REPORTS ALONG WITH ITS BID AS PER EXTENDED DATE OF TECHNO-COMMERCIAL BID OPENING TO MEET THE STIPULATED FINANCIAL QR CRITERIA.
- * POWER OF ATTORNEY DULY NOTARIZED BY A NOTARY PUBLIC INDICATING THAT THE PERSON(S) SIGNING THE BID HAS/HAVE THE AUTHORITY TO SIGN THE BID AND THE BID IS BINDING UPON THE BIDDER DURING THE FULL PERIOD OF ITS VALIDITY BACKED BY A COPY OF BOARD RESOLUTION/OTHER RELEVANT DOCUMENTS TO DEMONSTRATE THE AUTHORITY OF THE PERSON ISSUING THE POWER OF ATTORNEY TO BE FURNISHED ALONG WITH THE BID.
- * POWER OF ATTORNEY TO THE AUTHORISED SIGNATORY OF THE BIDDER FOR SIGNING OF BID AND DJU/JV AGREEMENT ETC., WHEREVER APPLICABLE, TO BE SUBMITTED ALONG WITH BID AND SHOULD BE DATED NOT LATER THAN THE DATE OF SIGNING THE BID.
- * BIDDER TO ENSURE THAT BID SECURITY/INTEGRITY PACT/DJU/JV AGREEMENT TO BE SUBMITTED IN ORIGINAL STRICTLY AS PER SPECIFIED FORMATS DULY SIGNED IN ORIGINAL BY AUTHORIZED SIGNATORY AND STAMPED ON EACH PAGE. SCANNED /PHOTOCOPY OF THESE ORIGINAL DOCUMENTS WITHOUT SIGNATURE IN ORIGINAL SHALL NOT BE ACCEPTABLE AND SHALL BE SUMMARILY REJECTED.
- * DATE OF PURCHASE OF STAMP PAPER OF INSTRUMENTS LIKE BID SECURITY, DEED OF JOINT UNDERTAKING ETC SHOULD BE ON OR BEFORE THE DATE OF EXECUTION OF SUCH INSTRUMENTS. IN CASE SUCH INSTRUMENTS HAVE BEEN EXECUTED OUTSIDE INDIA, THE SAME SHOULD BE PROPERLY ADJUDICATED AS PER SECTION 18 OF STAMP ACT.

BID FORM
PART-I
(TECHNO-COMMERCIAL BID)

BID FORM: Part-I (Techno-Commercial Bid)

Proposal Ref. No.

Date:

IFB No

Name of Package : **EPC Package for 1 X 800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana**

Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

To

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6,
Panchkula, Haryana 134109

Gentlemen and/or Ladies,

1.0 Having examined the Bidding Documents No. **03/HPGCL/DCRTPP/EPC/800MW** including subsequent amendments and clarifications....., if any (Insert Numbers), the receipt of which is hereby acknowledged, we the undersigned, offer to design, manufacture, test, deliver, construct, install and commission (including carrying out Guarantee Test) the facilities under the above-named Package in full conformity with the said Bidding Documents and hereby furnish our Techno-Commercial Bid.

1.1 We have read the ITB clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries. We certify that we/our Collaborator/JV Partner/Consortium member are/is not from such a country or, if from such a country, have/has been registered with the Competent Authority and we will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. We hereby certify that we fulfill all requirements in this regard and are eligible to be considered.

***We further confirm that evidence of valid registration by the Competent Authority for us/our Collaborator/JV Partner/Consortium member, as applicable, is enclosed as Annexure...**.... to Bid.**

* Bidder to strike-off, if not applicable.

** Bidder to mention the Annexure no.

2.0 **Attachments to the Bid Form Part-I (Techno-Commercial) Bid:**

In line with the requirement of the Bidding Documents, we enclose herewith the following Attachments to the **Bid Form Part-I (Techno-Commercial) Bid**.

(a) Attachment 1: Bid Security in the form of (Please fill in the alternative chosen) for a sum of (Name of currency and amounts in words & figures) valid for a period of 12 months from the date set for opening of techno-commercial bids. As required, the Attachment-1 (i.e. Bid Security) has been furnished in a separate sealed envelope as per provision of Bidding Documents.

(b) Attachment 2: A Power of Attorney duly notarized by a Notary Public indicating that the person(s) signing the bid has/have the authority to sign the bid and thus that the bid is binding upon us during the full period of its validity in accordance

with the Volume I, Section II - ITB Clause 13.0

- (c) Attachment 3: The documentary evidence establishing in terms of Section ITB 8.1.2 (a) and Item No. 4.0 of BDS that we are qualified to perform the Contract if our bid is accepted. The qualification data has been furnished as per your format enclosed with the Bidding Documents.

@ The **original required Deed(s) of Joint Undertaking** and other documents in compliance to the requirement of item no. 4.0 of BDS has also been furnished as per your format in physical form in separate sealed envelope along with bid security.

- (d) Attachment 4 : The documentary evidence establishing in accordance with ITB Clause 2 that the facilities offered by us are eligible facilities and conform to the Bidding Documents, has been furnished as Attachment 4.

Attachment-4A : A list of Special Tools & Tackles to be furnished by us, the cost of which is included in our Lump sum Bid Price quoted in Part-II (Price) Bid, is enclosed as per your format as Attachment 4A.

- (e) Attachment 5 : The details of all major items of services or supply which we propose subletting giving details of the name and nationality of the proposed sub-contractors/sub-vendors for each item.
- (f) Attachment 6 : No Deviation Certificate
- (g) Attachment 7: Deleted
- (h) Attachment 8: Declaration on Demonstration Parameters as per your format enclosed in the Bidding Documents.
- (i) Attachment 9: List of Construction and Erection Tools & plants and safety equipment & safety personal protective equipment which we propose to bring to site in case the Contract is awarded to us.
- (j) Attachment 10: Technical Data Sheets duly filled in as per your format given in separately bound book entitled "Technical Data Sheets" enclosed as Part of Technical Specification of the bidding documents.
- (k) Attachment 11: Declaration of Performance Guarantee
- (l) Attachment 12: Quality Assurance Program containing the overall quality management & procedures which we propose to follow during various phases of execution of the Contract.
- (m) Attachment 13: Additional Information provided by bidder.
- (n) Attachment 14: Milestone schedule along with master network showing the timing and sequence of all key activities necessary for successful Completion of contract.
- (o) Attachment 15: Deleted
- (p) Attachment 16: Authorization Form for release of payments through Electronic Fund Transfer system duly filled in as per your format enclosed in the Bidding Documents.
- (q) Attachment 17: Form of Acceptance of Fraud Prevention Policy.

- (q1) Attachment 17A: Declaration of Banning Policy.
- (r) Attachment 18: Undertakings towards Phased Manufacturing Program (PMP) for super critical Steam Generator Sets and Steam Turbine Generator Sets
- (s) Attachment 19: Milestone Schedule for completion of Phased Manufacturing Program for super critical Steam Generator Sets and Steam Turbine Generator Sets
- (t) Attachment 20: Price Adjustment Data-Details regarding price adjustment as per format.
- (u) Attachment 21: Certificate of Compliance on Qualifying Requirement
- (v) Attachment 21A: Declaration regarding capacity & capability of Associate/ Collaborator
- (w) Attachment 22: Declaration on Local Component
- (x) Attachment 23: Declaration on Exemption for meeting Local Content
- (y) Attachment 24: Declaration regarding Restrictions on procurement from country which share Border with India.
- (z) Attachment 25: Declaration regarding confirmation of site visit
- (aa) Attachment-26: Check List & Signing of other Documents

3.0 **CONSTRUCTION OF THE CONTRACT**

- 3.1 @ We (applicable to foreign bidders) declare that we have studied GCC Clause 3.6 relating to mode of contracting and we are making this proposal with a stipulation that you shall award us three separate Contracts viz., 'First Contract' for CIF (Indian port-of entry) supply of plant and equipment including type test and mandatory spares to be supplied from abroad, 'Second Contract' for Ex-works (India) supply of domestically manufactured plant and equipment including type test and mandatory spares and 'Third Contract' for providing all services i.e. port handling, port clearance and port charges for the imported goods, custom reconciliation, further loading, inland transportation for delivery at site, inland transit insurance, unloading, storage, handling at site, installation, insurance covers other than inland transit insurance, testing, commissioning and conducting Guarantee Tests in respect of all the equipment supplied under the First Contract & the Second contract and all other services as specified in the Contract Documents.

(@ Domestic Bidders to specify 'NOT APPLICABLE')

We declare that the award of three contracts will not, in any way, dilute our responsibility for successful operation of Plant and Equipment and fulfillment of all the obligations as per Bidding Documents and that all the three Contracts will have a cross fall breach clause i.e. a breach in one Contract will automatically be construed as breach of the other Contracts which will confer on you the right to terminate the other Contracts also at our risk and cost.

Further, we hereby propose M/s..... as our Assignee for the purpose of executing the *Second Contract / * Third Contract / *both Second and Third Contract (*Bidders to specify 'NOT APPLICABLE', in case it is not relevant) and written unequivocal consent of the above mentioned proposed Assignee to work as your independent Contractor on the same terms and conditions as offered by us to you in this bid proposal is also enclosed with the Bid Form. We declare that for the scope of work envisaged by us in our bid to be executed by our Assignee, the Assignee has relevant/required capacity and experience of executing similar job. Relevant/required documents are enclosed in the bid to establish capacity and experience of the Assignee. The Assignee shall directly enter into Contract(s) with you and all the three Contracts shall contain the aforesaid cross-fall breach clause, however, we shall have overall responsibility of performance under all the contracts awarded against the subject package.

If the Owner in its judgement does not find acceptance of Assignee proposed in the bid as its Contractor, then on the request of the Owner, we shall have option to propose alternate Assignee, in line with ITB Clause 30.4, on the same terms and conditions and cost as offered in our bid. However, if Assignee, despite his written consent, fails to enter into contract with the Owner or if the Owner in its judgement does not find acceptance of Assignee as its Contractor, then we undertake to enter into and execute all the three Contracts with the Owner covering the entire scope of work envisaged in the bidding documents on the same terms and conditions and cost as offered in our bid, inter alia, containing the aforesaid cross-fall breach clause. In such an event, the overall financial liability of the Owner under the Contracts shall, however, not exceed that envisaged in our Bid Proposal.

Further, we understand and agree that for the above purpose; only one Assignee shall be permitted.

- 3.2 @@ We (applicable to Domestic Bidders only) declare that we have studied GCC Clause 3.6 relating to mode of contracting and we are making this proposal with a stipulation that you shall award us three separate Contracts viz. 'First Contract' for CIF (Indian Port-of-Entry) Supply of Plant and Equipment (including Type Test Charges) and Mandatory Spares to be supplied from abroad, 'Second Contract' for Ex-Works (India) Supply of Plant and Equipment (including Type Test Charges) and Mandatory Spares to be supplied from within the Owner's country and 'Third Contract' for providing all the services i.e. Port Handling, Port Clearance and Port Charges for the Imported Goods, further Loading, Inland Transportation for Delivery at Site, Inland Transit Insurance, Unloading, Storage, Handling at Site, Installation, Insurance covers other than Inland Transit Insurance, Testing, Commissioning and conducting Guarantee Tests in respect of all the equipment supplied under the 'First Contract' and the 'Second Contract', and all other services as specified in the Contract Documents. We declare that the award of three separate Contracts will not in any way dilute our responsibility for successful operation of plant and equipment and fulfillment of all the obligations as per Bidding Documents and that all the three Contracts will have cross- fall breach clause i.e. a breach in one Contract will automatically be construed as breach of the other Contract(s) which will confer on you the right to terminate all the Contracts at our risk and cost.

(@@Foreign Bidders to strike off Clause 3.2 above.)

4.0 We further declare that we have not taken any deviation and we confirm the same in Attachment-6.

We have furnished our compliance on “Qualifying Requirements” of HPGCL.

We hereby confirm that the number of reference plants quoted by us in Attachment No.3A of the bid, for establishing compliance to the specified Qualifying Requirement (QR), are not more than three times the number of plants wherever specified in the QR. We also confirm that the reference plants declared more than three times the number of plants wherever specified in the QR shall not be considered for evaluation / establishing compliance to Qualifying Requirement (QR).

We further confirm that no change or substitution in respect of reference plant, as specified in our bid, by new/ additional plant for meeting the specified Qualifying Requirement (QR) shall be offered by us.

5.0 We undertake, if our bid is accepted, to commence work on the Facilities immediately upon your Notification of Award to us and to achieve Completion of Facilities and conduct Guarantee Tests within the time specified in the Bidding Documents.

6.0 We undertake, if our bid is accepted, to first, commence work on establishing base in India for manufacturing of Supercritical Steam Generator Set and Supercritical Steam Turbine Generator Set and second, to transfer technology for manufacturing Supercritical Steam Generator Set and Supercritical Steam Turbine Generator Set from Technology provider(s) to Indian Manufacturing Company (ies) in line with Clause No. 3.0.0 under BDS Item 4.0. An undertaking in this regard supported by Board Resolution of our and/or our Associate's (as applicable) company for manufacturing of Supercritical Steam Generator Sets and Super Critical Steam Turbine Generator Sets is enclosed at Attachment-18 of this Bid Form.

7.0 If our bid is accepted, we undertake to provide Advance Payment Security, Contract Performance Security, Performance Security for Phased Manufacturing Plan and Securities for Deed(s) of Joint Undertaking (as applicable) in the forms and amounts and within the time specified in the Bidding Documents.

8.0 We agree to abide by our this Part-I (Techno-Commercial) Bid during its original validity of 180 days from the date of opening of Price bids and any validity extension subsequently granted pursuant to ITB sub-clause 13.0 and it shall remain binding upon us during the aforesaid period. We further confirm that the prices of the recommended spares as quoted in our price bid shall be valid for a period of eighteen (18) months from the date of issue of Letter of Intent.

9.0 Until a formal Contract is prepared and executed between us, this bid, together with your written acceptance thereof in the form of your Letter of Intent shall constitute a binding contract between us.

10.0 We understand that you are not bound to accept the lowest or any other bid you may receive.

11.0 We, hereby, declare that only the persons or firms interested in this proposal as principals are named here and that no other persons or firms other than those mentioned herein have any interest in this proposal or in the Contract to be entered into, if the award is made on us, that this proposal is made without any connection with any other person, firm or party likewise submitting a proposal, is in all respects for and in good faith, without collusion or fraud.

Dated this.....day of.....20.....

Thanking you, we remain,

Yours faithfully,
Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

Business Address:

Country of Incorporation (Province also to be indicated):

Fax No.:

Phone No.:

Email ID:

Note: 1. Bidders may note that no prescribed proforma has been enclosed for:

- (a) Attachment 2 (Power of Attorney)
- (b) Attachment 4, (For documentary evidence establishing that the facilities offered are eligible facility and conform to bidding documents.)

For Attachments 2 and 4, Bidders may use their own proforma for furnishing the required information with the Bid.

**EPC PACKAGE FOR
1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

BID SECURITY

**BIDDER TO FURNISH BID SECURITY IN LINE WITH
ITB CLAUSE 12.0 AND AS PER FORMAT GIVEN AT
VOLUME I, SECTION IV - GCC, ANNEXURE-J**

(BID SECURITY IN SEPARATE SEALED ENVELOPE)

**EPC PACKAGE FOR
1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

POWER OF ATTORNEY

{TO BE ENCLOSED AS PER CLAUSE 2.0 (b) OF BID FORM PART-I (TECHNO-COMMERCIAL BID)}

BIDDER TO ATTACH THE POWER OF ATTORNEY INDICATING THAT THE PERSON(S) SIGNING THE BID HAS/HAVE THE AUTHORITY TO SIGN BOTH THE BID [TECHNO-COMMERCIAL BID AND PRICE BID] AND THAT THE BID IS BINDING UPON THE BIDDER DURING THE FULL PERIOD OF ITS VALIDITY IN ACCORDANCE WITH ITB CLAUSE 13.0

**EPC PACKAGE FOR
1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

QUALIFICATION DATA

Bidder's Name and Address:

To,
Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6,
Panchkula, Haryana 134109.

Dear Sirs,

We seek qualification under Clause 8.1.2 (a) of Section ITB and Item No. 4.0 of Bid Data Sheets and our qualification data in support thereof is enclosed vide following Attachments:

1. Attachment 3A : Experience Details of Bidder as per Note 13 for clause 1.0 of Item 4 of BDS
2. Attachment 3A1 to 3A13: Experience Details of Bidder, and Certificate of Compliance on Qualifying Requirements
3. Attachment 3B : Details of Financial Capacity Status
4. Attachment 3C : Details of Design, Engineering, Manufacturing and Testing Capabilities
5. Attachment 3D : Details of Manufacturing Capacities & Plant Loading
6. Attachment 3E : Present Order Book Position
7. Attachment 3F : Past Performance Data
8. Attachment 3G : Data regarding Key Construction Personnel
9. Attachment 3H : Manpower Loading Data
10. Attachment 3I : Deed(s) of Joint Undertaking (if applicable)
11. Attachment 3J : Details regarding Project Management Organization
12. Attachment 3K : Details regarding Provenness Criteria
[Book 1 of 3, (Part-2)]

We further understand and agree that any misleading or false information furnished by us may result in summary rejection of our bid.

Date : (Signature).....
Place : (Printed name).....
(Designation).....
(Common Seal).....

Note: i) The Bidder shall enclose relevant documents like copies of authentic purchase orders, completion certificates, agreements, etc. supporting the details/data provided in Attachment-3A to 3K.

ii) Strike out whichever is not applicable.

**EPC PACKAGE
FOR
1 x 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT, YAMUNA NAGAR,
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

[Experience details of Bidder as per Note No. 13 for clause no. 01.0.0 of Item No. 4 of BDS]

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
C7, Urja Bhava, Sector 6,
Panchkula, Haryana

1.0.0 We, M/s. (Name of Bidder) are seeking qualification through Route*1.1.0/*1.2.0/*1.3.0/*1.4.0/*1.5.0. The details are as follows:

1.1.0 We confirm that we /our Indian *Subsidiary Company/*JV Company/*Indian Manufacturing Company have manufactured / supplied in India Eight (8) Nos. supercritical Steam Generators and/or supercritical Steam Turbine Generators (as the case may be), which are in commercial operation (achieved COD) out of which four (4) such Steam Generators and/or Steam Turbine Generators (as the case may be), are in commercial operation for at least one year and Performance Guarantee Test have been successfully completed in any two (2) such Steam Generators and/or Steam Turbine Generators(as the case may be) prior to the date of techno-commercial bid opening, as per clause 1.7.1 of Item no. 4 of BDS.

1.2.0 We confirm that in case any problem related to supercritical Steam Generators and/or supercritical Steam Turbine Generators (as the case may be) & Auxiliaries is encountered during execution of the contract, we shall resolve the same within a reasonable time (in the opinion of the owner) by our self/through the collaborator/through firm having competency to resolve such issues. If the problem is not resolved within a reasonable period of time in the opinion of the owner, Owner shall have the option to approach directly to the collaborator/licensor/technology Provider or any other firm to resolve the issue. In such a case the financial expenditure(s) incurred by Owner for resolution of such issues will be to our account. Accordingly, we are submitting a letter at Annexure of the techno commercial bid valid up to the end of defect liability period of the contract, as per the format enclosed in the bidding documents.

The details are furnished as below: -

***Supercritical Steam Generators details:**

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
1.00.00	Name and location of the reference Station in which the unit is located								
1.1.0	Name, address, email, Tel. no. and Fax of owner of the station								
1.1.1	Name and Designation of the responsible person in owner's organisation								
1.1.2	Capacity of Steam Generator Unit in MW								
1.1.3	Contract No. &Date								
1.1.4	Starting date of project								
1.1.5	Scheduled date of Commissioning								
1.1.6	Actual date of Commissioning								
1.1.7	Date of commencement of successful operation								
1.1.8	Date of commencement of Commercial operation(COD)								
1.1.9	Whether the Steam Generator is supercritical	Yes*/No	*Yes*/No	*Yes*/No*	Yes*/No*	Yes*/No	*Yes*/No*	*Yes*/No*	**Yes*/No*

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
	(b) IP								
	(c) Combined HP-IP								
	(d) LP								
	(ii) Whether HP and IP cylinders are combined or separate								
2.5.0	Module Number								
	(a) HP Turbine								
	(b) IP Turbine								
	(c) Combined HP-IP turbine (if applicable)								
	(d) LP Turbine								
2.06.00	Main steam pressure (gauge)								
2.07.00	Main steam temperature (deg.C)								
2.08.00	Reheat Steam temperature (deg.C)								
2.09.00	Condensing type	Yes*/No	*Yes*/No	*Yes*/No*	Yes*/No*	Yes*/No*	Yes*/No**	Yes*/No**	Yes*/No*

**EPC PACKAGE FOR
1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**(Experience details for Qualified Steam Generator
Manufacturer (QSGM) and / or Qualified Steam Turbine Generator
Manufacturer (QSTGM) as Bidder, as per Clause 1.1.0, Item No. 4.0 of BDS)**

Bidder's Name & Address:

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6,
Panchkula, Haryana 134109

1.0.0 *We, M/s....., **(Qualified Steam Generator Manufacturer)**, are seeking Qualification as per clause 1.1.0 **[As Qualified Steam Generator Manufacturer as per clause 1.1.1(A)]**, Item No. 4 of BDS.

*We, M/s..... (QSTGM as Bidder), are associating with M/s (Qualified Steam Generator Manufacturer / Indian Subsidiary of Qualified Steam Generator Manufacturer / JV Company of Qualified Steam Generator Manufacturer) and shall source the Steam Generator Set from M/s(Associate) as per clause 1.1.2(c) item no. 4 of BDS. The details are as follows:

(1) We confirm that the QSGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of at least one (1) number of pulverised coal fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above. Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and have been in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

*Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that we have offered the steam generator of the same type (i.e. Single Pass or Two Pass) and having same type of water wall tubing for which reference of Steam Generator has been furnished below. The details are as follows:-

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSGM			
1.01.00	Name and Designation of the responsible person in QSGM			
1.01.01	Name of the reference station and its location			
1.01.02	Name, address, e-mail, Fax No. and Tel. No. of Owner of reference station			
1.01.03	Name and Designation of the responsible person in Owner's organization			
1.02.00	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by QSGM from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by us for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is pulverised coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by us for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**Acted as an Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
	e) *Commissioned/*Supervised commissioning/**Acted as an advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to the date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the QSGM has acted as advisor for erection / commissioning of reference Steam Generator & auxiliaries, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for clause no. 1.0.0 of Item 4.0 of BDS)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.00.00	Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			
2.01.00	Main Steam Temperature at SH outlet (°C)			
2.02.00	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not			
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (Sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
	(In case the answer to above clause (iii) is "No", in such a case, the Bidder / Associate shall furnish additional data in support of requirements indicated at Note(5) to Clause 1.0.0, Item No. 4 of BDS & detailed in Clause 1.4.0 of this Attachment.			
2.07.00	Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled]			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.08.00	Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.09.00	Type of coal used			
	i) Max. HHV (Kcal/Kg)			
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting b) If yes, number of such operations it has been designed for c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved i) Hot start (after shut down period less than 10 hours) ii) Warm start (after shut down period between 10 hours & 72 hours) iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Bidder (QSGM) / Associate (QSGM / Indian Subsidiary / JV Company of QSGM) from *Owner of plant or any *other intermediary organization			
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by Bidder (QSGM) / Bidder on behalf of its Associate in support of the claim of meeting requirement of Note (3) of clause 1.0.0 item 4 of BDS as the case may be, enclosed at Annexure.....to this Attachment			
	(ii) Certificate from Owner of the plant to be furnished by Bidder (QSGM) / Bidder on behalf of its Associate for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Notes :

1. Wherever the term Pulverised coal fired is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

1.2.0*(a) We confirm that * we / *our Associate (QSGM) have registered an Indian Subsidiary Company M/s..... / our Associate is an Indian Subsidiary Company of M/s..... (QSGM) registered in India, as per Companies Act of India, for manufacturing **supercritical Steam Generator sets** covering the type, size and rating specified.

*Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSGM in the subsidiary company (In percentage of the total equity)
1.02.00	Bidder to furnish documentary evidence regarding maintaining the subsidiary status as declared above, a Letter of Undertaking from the promotor supported by Board Resolution as per format enclosed as Attachment 3A10
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in Indian Subsidiary Company

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description
2.01.00	*Lock in period for above equity participation from the date of incorporation.
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____ of this Attachment

1.2.0*(b) We confirm that *we / *our Associate (QSGM) have registered a Joint Venture (JV) Company M/s.....in India / our Associate is a Joint Venture Company of QSGM registered in India, as per Companies Act of India for manufacturing supercritical steam generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a QSGM, who meets the requirement of clause 1.1.0 of item 4 of BDS and above details are furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

Further, M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

The details of the Joint Venture (JV) company are as follows:

S.No. Item Description

1.00.00 Date of Incorporation of JV
 Company

1.01.00 Equity participation of **QSGM** in the
 JV Company (In percentage of
 the total equity)

1.02.00 Lock in period for above equity
 participation from the date of
 incorporation

(Bidder to furnish letter of under-
taking as per format enclosed at
Attachment 3A10 as per Note 9 of
clause 1.0.0 of Item 4 of BDS for
QSGM's equity participation in the JV
Company along with lock in period of
such equity in compliance to clause
1.1.2(b)/1.4.1(a) of item 4 of BDS
supported by Board Resolution of the
QSGM)

2.00.00 Equity participation of the Majority
 Stake Holder having Equity more
 than 51% in JV Company

2.01.00 Lock in period for above equity
 participation from the date of
 incorporation

(Bidder to furnish letter of undertaking as
per format enclosed at Attachment 3A10
as per note 9 of clause 1.0.0 of Item 4 of
BDS for Majority Stake Holder's equity
participation in the JV Company along
with lock in period of such equity in
compliance to clause 1.1.2(b)/1.4.1(a)
of item 4 of BDS supported by Board
Resolution of the Majority Stake Holder)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

1.2.0**(b) (i) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), is an entity other than the QSGM and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows:

S. No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No. Tel. No. and e-mail			
1.02	Name & designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			

*Bidder to furnish 1.2.0**(b)(i) & (ii) only when his Associate is a JV Company of QSGM, as per clause no. 1.4.1(a), Item no. 4 of BDS.*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			

1.2.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSGM, are an Indian Company. Our Associate's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil

1.2.0**(b)(ii) is to be filled in only in **pursuance of Note 6** for clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

& gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or upto the end of defect liability period of the contract whichever is later.

The qualification details of the Parent Company are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No. Tel. No. and e-mail			
1.02	Name & designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of Parent Company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

1.2.0*(c) We confirm that M/s....., *Our / *Our Associate's Indian *Subsidiary Company/Our Associate (an Indian *Subsidiary / *JV Company), whose details are indicated at *1.2.0(a) / *1.2.0(b) above have registered another **Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the Indian manufacturing subsidiary company shall remain a subsidiary of the Indian Subsidiary / JV Company with equity for a minimum period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian manufacturing Subsidiary Company are as follows:

S. No. Item Description

1.00.00 Date of Incorporation of Indian manufacturing Subsidiary Company

1.01.00 Equity participation of the *Indian subsidiary / *JV company in the Indian manufacturing subsidiary company (in percentage of the total equity)

1.02.00 Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or upto the end of defect liability period of the contract whichever is later ? *Yes/*No
(Bidder to furnish letter of undertaking as per Attachment-3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company)

1.2.0*(c) is to be filled in only in pursuance of Note 8 for clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No. Item Description

2.00.00 Certificate for commencement of
Business in India (if applicable)
is enclosed at Annexure _____
of this Attachment

2.01.00 Copy of Certificate of Incorporation
and Article of Association and
Memorandum of Association of
Indian manufacturing subsidiary
company is enclosed at
Annexure _____ of this Attachment

1.3.0 *We confirm that M/s....., (*Bidder / *Associate, a QSGM)
is / are seeking qualification as holding company (singularly or collectively) with its
subsidiaries (held directly or indirectly) as per note No. 4 for clause no. 1.0.0,
Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are
as follows :

1.3.1 Bidder/Associate and their subsidiary's(ies') (To be filled at page to _
Experience Details in respect of meeting of this Attachment)
requirement for QSGM
(as per clause **1.1.1(A)**), item 4 of BDS

1.3.2 Details of Subsidiary Company/Joint (To be filled at page to of
Venture Company registered by Bidder / this Attachment)
Associate in India meeting requirement of
Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS

1.3.3 *Name, Address, email, Fax, Tel. No. of
the Subsidiary(ies) meeting the QR for
QSGM as per clause 1.1.0 of BDS

1.3.4 *Name, address & Telephone No., Fax and e-
mail of subsidiary company owning the
technology for supercritical steam generators

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between us / our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

TO BE FILLED IN BY THE BIDDER WHO / WHOSE ASSOCIATE IS SEEKING QUALIFICATION AS PER CLAUSE 1.1.1(A), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E., IF THE ANSWER TO SUB-CLAUSE 2.06.00 (iii) TO CLAUSE 1.1.0 ABOVE IS "NO")

1.4.0 We, confirm that M/s _____ (supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A), Item 4 of BDS **except that the evaporator** indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and is seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening.

We further confirm that we have offered only the type of steam generator i.e. single pass (tower type) or two pass type for which we are qualified and have offered only the type or water wall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) for which our licensor is qualified. The details of Licensor and his experience details are as follows:-

I. Details of Technology Owner (Licensor)

1.01.00 Name of the original technology owner (Licensor)

1.02.00 Address, E-mail ID & Tel No. & Fax

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

- 1.03.00 Name and Designation of the Responsible person in the Organization
- 1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)
- 1.05.00 Date of Start of Licensing agreement
- 1.06.00 Date of End of Licensing agreement
- 1.07.00 Whether Scope of licensing agreement covers 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). *Yes / *No
- 1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

II. Details of experience of Technology Owner (Licensor)

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel. No., email ID			
1.03.00	i) Actual date of Completion			
	ii) Date of Commencement of Successful operation			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.04.00	Whether the Plant is in Successful operation	Yes*/No*	Yes*/No*	Yes*/No*
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following:			
	i) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound(inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Pulverised Coal)	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
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1.10.00 Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure

1.11.00 Deed of Joint Undertaking (DJU) as per Performa enclosed in Section-VII (Forms & Procedures) is furnished along with the bid at Annexure

1.5.0 Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, our / our Associate's Indian Subsidiary Company / JV Company (as the case may be), our Associate's QSGM, Other Promoter having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (as the case may be), *subsidiaries of Holding Company (the Bidder/ the Associate) and *the manufacturing subsidiary Company, *Technology Owner (Licensor) of supercritical steam generator as per clause 1.1.3 and/or Note No. 4 and/or Note No. 5 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure to this Attachment.

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common seal).....

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

2.0.0 We, M/s.....[**Qualified Steam Turbine Generator Manufacturer (QSTGM)**], are seeking Qualification as per clause 1.1.0 [**As Qualified Steam Turbine Generator Manufacturer as per clause 1.1.1(B)**], Item No. 4 of BDS.

*We, M/s..... (QSGM as Bidder), are associating with M/s (Qualified Steam Turbine Generator Manufacturer / Indian Subsidiary of QSTGM / JV Company of QSTGM) and shall source the Steam Turbine Generator Set from M/s..... (Associate) as per clause 1.1.2(c) item no. 4 of BDS. The details are as follows:

2.1.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number supercritical steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm2 (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows:

S No.	Item Description	For Steam Turbine	For Generator (if separate station)
		Station-1, 2, 3	Station-1, 2, 3

1.00.00 Name, address, e-mail, Tel. No. and Fax No. of the QSTGM

1.01.00 Name and Designation of the responsible person in QSTGM

1.01.01 Name of the reference station and its location

1.01.02 Name, address, Fax No., e-mail and Tel. No. of Owner of the reference station

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.01.03	Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by QSTGM from intermediary organization		
1.02.00	Name and Designation of the responsible person in Owner's organization		
1.02.01	Name and Designation of the responsible person in intermediary organization.		
1.03.00	No. of Steam Turbine Generator Sets supplied by us for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by us for the aforesaid Steam Turbine Generator Set includes the following :		
	(a) Designed	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	For Steam Turbine	For Generator
		Station-1, 2, 3	(if separate station) Station-1, 2, 3
(b)	Engineered	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening		Yes*/No*

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

S. No.	Item Description	Installation	Installation	Installation
		No. 1	No. 2	No. 3

2.00.00 Details of Turbine

2.01.00 Steam Turbine make

2.02.00 Tandem compound *Yes/*No *Yes/*No *Yes/*No

2.03.00 No. of Reheat

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.04.00	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg. C)			
2.08.00	Reheat Steam temperature (deg. C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00 Generator Details				
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	*Horizontally /*Vertically	*Horizontally /*Vertically	*Horizontally /*Vertically
3.09.00	Installation	* Indoor/ *Outdoor	* Indoor/ *Outdoor	* Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	* Yes/*No	*Yes/*No	*Yes/*No
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Turbine *Generator Set (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening and caused no serious problem in past, furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam turbine generator set) has been received by Bidder (QSTGM) / Associate (QSTGM / Indian Subsidiary / JV Company of QSTGM) from *Owner of plant or any *other intermediary organization			
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by Bidder (QSTGM) / Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure.... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation		
		No. 1	No. 2	No. 3

- (ii) Certificate from Owner of the plant to be furnished by Bidder (QSTGM)/Bidder on behalf of its Associate for the successful operation of the Steam Turbine *Generator Set (as applicable) as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment

2.2.0*(a) We confirm that we / our Associate*, a QSTGM, have registered an Indian Subsidiary Company M/s..... / our Associate is an Indian Subsidiary Company of M/s(QSTGM) registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator sets** covering the type, size and rating specified.

Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*We confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS **except for Generator** and accordingly, the Indian Subsidiary Company have associated and have a technology transfer agreement with M/s..... (**Qualified Generator Manufacturer**) who meets the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s..... (Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the said Indian Subsidiary Company for a lock in period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

The details of Indian Subsidiary Company are as follows :

S.No.	Item Description	
1.00.00	Date of Incorporation of Indian Subsidiary Company	
1.01.00	Equity participation of Qualified Steam Turbine Generator* manufacturer in the subsidiary company (In percentage of the total equity)	
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish letter of undertaking as per format enclosed at Attachment-3A10 for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/ 1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)	
2.00.00	*Equity participation of other Promoter having Equity more than 25% in Indian Subsidiary Company	
2.01.00	*Lock in period for above equity participation from the date of incorporation.	
3.00.00	*Equity participation of Qualified Generator manufacturer, in the Indian Subsidiary company.	
3.01.00	*Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian subsidiary company or up to the end of defect liability period of the contract whichever is later?	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description
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(Qualified Generator manufacturer to furnish letter of undertaking as per format enclosed at Attachment -3A-10 for their equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator manufacturer)

- 4.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
- 4.01.00 Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure _____ of this Attachment

2.2.0*(b) We confirm that *we / *our Associate, a QSTGM, have registered a Joint Venture (JV) Company M/s..... / our Associate is a Joint Venture Company of QSTGM registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator set** covering the type, size and rating specified. The Joint Venture (JV) Company is promoted by (i) M/ S....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a **QSTGM**, who meets the requirement as per the details furnished in clause 2.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We further confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Further M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*We further confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS **except for Generator** and accordingly, the JV Company have associated and have a technology transfer agreement with M/s(**Qualified Generator Manufacturer**) who meets the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s..... (Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the JV Company for a lock in period of 7 years from the date of incorporation of this JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of Qualified Steam Turbine Generator* manufacturer in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation

(Bidder to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company	
2.01.00	Lock in period for above equity participation from the date of incorporation (Majority Stake Holder to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)	
3.00.00	*Equity participation of Qualified Generator manufacturer in the JV Company	
3.01.00	*Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later? (Qualified Generator Manufacturer to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator Manufacturer)	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description
4.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
4.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

2.2.0**(b)(i) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate) is an entity other than the QSTGM and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No. Tel. No. and e-mail			
1.02	Name of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			

*Bidder to furnish 2.2.0**(b)(i) only when his Associate is a JV Company of QSTGM as per clause no. 1.4.1(a) of Item no. 4 of BDS.*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

2.2.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSTGM, are an Indian Company. Our Associate's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of their Parent Company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

The qualification details of the Parent Company are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No. Tel. No. and e-mail			
1.02	Name of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			

*2.2.0***(b)(ii) is to be filled in only in pursuance of Note 6 for clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later?	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
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(Bidder to furnish Letter of Undertaking as per format enclosed at Attachment 3A-10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)

2.2.0*(c) We confirm that M/s our / our Associate's *Indian subsidiary Company / our Associate (an Indian *Subsidiary / *JV Company), whose details are indicated at *2.2.0(a) / *2.2.0(b) above, have registered **another Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam turbine generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening(Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... the manufacturing subsidiary company shall remain a subsidiary of the Indian Subsidiary/ JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian manufacturing Subsidiary Company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of Indian Manufacturing Subsidiary Company

2.2.0*(c) is to be filled in only in pursuance of Note 8 for clause. no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	
1.01.00	Equity participation of the *Indian Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ?	*Yes/*No
	(Bidder to furnish Letter of Undertaking as per Attachment-3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of *Indian subsidiary / *JV company)	
2.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment	
2.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this Attachment	

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

2.3.0** We confirm that M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence, as per clause 1.1.4 of item no. 4.0 of BDS, the Subsidiary Company / JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.1.4 of item no. 4.0 of BDS fully in respect of generator. The details are as follows:

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian Subsidiary / JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian Subsidiary / JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.00.00	Name of the reference station and its location			
1.01.00	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.01	Name, address, e-mail, Fax No. and Tel. No. of intermediary organization in case the award has been recieved by Qualified Generator Manufacturer from intermediary organization			
1.02.00	Name and Designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization.			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.06.00	Starting date of project			
1.07.00	Scheduled date of commissioning			
1.08.00	Actual date of commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
	(a) Designed	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents / Certificate from the client, in support of Note No. 2 for Clause no 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.02.05	Rated voltage (kV)			
1.02.06	No. of phases			
1.02.07	No. of poles			
1.02.08	Mounting	*Horizontally /*Vertically	*Horizontally /*Vertically	*Horizontally /*Vertically
1.02.09	Installation	* Indoor/ *Outdoor	* Indoor/ *Outdoor	* Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	* Yes/*No	* Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
3.00.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

2.4.0 *We confirm that M/s....., (Bidder / Associate, a QSTGM) is seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per Note No. 4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.4.1	Bidder / Associate and their Subsidiary's(ies)' Experience details in respect of meeting requirement for QSTGM (as per clause 1.1.1(B)) , item 4 of BDS	(To be filled at page this Attachment)	to __	of
2.4.2	Details of Subsidiary Company / Joint Venture Company registered by the Bidder /Associate in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS	(To be filled at page this Attachment)	to __	of

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.4.3	a) *Name, Address, email, Fax, Tel. No. of the Subsidiary(ies) meeting the QR for supercritical Steam Turbine Manufacturer as per clause 1.1.0 of BDS			
	b) *Name, Address, email, Fax, Tel. No. of the Subsidiary(ies) meeting the QR for Generator Manufacturer as per clause 1.1.0 of BDS			
2.4.4	a) *Name, address & Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam turbine			
	b) *Name, address & Telephone No., Fax and e-mail of subsidiary company owning the technology for generator			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between us / our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (**Qualified Steam Turbine Generator Manufacturer**) and above subsidiaries.

2.5.0 Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, our / our Associate's Indian Subsidiary / JV Company (as the case may be), our Associate's QSTGM, Other Promoter having 25% or higher Equity Participation in the Associate's Subsidiary Company/JV Company (as the case may be), *Qualified Generator Manufacturer, *subsidiaries of Holding Company and *the Indian Manufacturing Subsidiary Company, as per clause 1.1.3 and/or 1.1.4 and/or Note No. 4 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS, is enclosed at Annexure_____to this Attachment.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**(Experience details for Indian Steam Generator and Steam Turbine Generator Manufacturer
as per Clause 1.2.0, Item No. 4.0 of BDS)**

Bidder's Name & Address : _____ To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana 134109

1.0.0 We, M/s....., **(Indian Steam Generator and Steam Turbine Generator Manufacturer)**, are seeking Qualification as per clause 1.2.0, Item No. 4 of BDS. We have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning (i) at least one number pulverised coal fired steam generator for a 500MW or higher size unit and (ii) at least one (1) number of reheat type of steam turbine and generator set of 500MW or above capacity, which are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

1.1.0(A) The details of Steam Generator are furnished as below:

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.01.00	Name of the reference station and its location			
1.01.01	Name, address, e-mail ID, Fax and Tel. No. of Owner of Station			
1.01.02	Name, address, e-mail ID, Fax and Tel. No. of intermediary organization in case the award has been received by Qualified Steam Generator Manufacturer from intermediary organization.			
1.01.03	Name and Designation of the responsible person in Owner's organization			
1.01.04	Name and Designation of the responsible person in Intermediary organization			
1.01.05	No. of units & capacity of each unit in MW			

*Bidder to Strike off if not applicable Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.01.06	No. of steam generator sets supplied by us for reference station			
1.01.07	Contract No. & Date			
1.01.08	Starting date of project			
1.01.09	Scheduled date of commissioning			
1.01.10	(i) Actual date of completion			
	(ii) Date of commencement of Successful operation			
1.01.11	Whether the Plant is pulverised coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.01.12	Scope of work executed by us for the aforesaid Steam Generator includes the following:			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) Manufactured*/got manufactured*	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**acted as adviser for erection	Yes*/No*	Yes*/No*	Yes*/No*
	e) *Commissioned/*Supervised commissioning/ **acted as adviser for Commissioning	Yes*/No*	Yes*/No*	Yes*/No*
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to the date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

** Necessary Document certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.00.00	Steam Generator steam flow capacity at Super heater Outlet (T/Hr.)			
2.01.00	Main Steam Temperature at SH outlet (°C)			
2.02.00	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not			
2.06.00	Type fo Steam Generator			
	i) Single pass (tower type) or two pass type			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
2.07.00	Type of circulation system (Natural or Forced/Assisted)			
2.08.00	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled)			
2.09.00	Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.10.00	Type of coal used			
	i) Max. HHV (Kcal/Kg)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max. °C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
4.00.00	List of all the similar Steam Generator under execution along with the details such as order No. & date, order value and scheduled date of commissioning is enclosed separately at Annexure			
4.01.00	Documentary evidence in support of QR Data is enclosed at Annexure to this Attachment			

Notes:

- Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

1.1.0(B) The details of Steam Turbine Generator are furnished as below:

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.00.00	Name of the reference station and its location			
1.01.00	Name, address, Fax No. e-mail and Tel. No. of Owner of Station			
1.01.01	Name, address, Fax No. e-mail and Tel. No. of intermediary organization in case the award has been received by Indian Steam Turbine Generator Manufacturer from intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.02.00	Name and Designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of Steam Turbine Generator Sets supplied for the Station			
1.04.00	Contract No. and Date			
1.05.00	Unit Capacity in MW			
1.06.00	Starting Date of the Project			
1.07.00	Schedule Date of Commissioning			
1.08.00	Actual Date of Commissioning			
1.09.00	Date of Commencement of Successful Operation			
1.10.00	Scope of work executed for the aforesaid Steam Turbine and Generator includes the following:			
	(i) Designed			*Yes/*No
	(ii) Engineered			*Yes/*No
	(iii) Manufactured*/got manufactured*			*Yes/*No
	(iv) *Erected / *Supervised Erection / **acted as adviser for Erection			*Yes/*No
	(v) *Commissioned / *Supervised Commissioning / **acted as adviser for Commissioning			*Yes/*No

** Necessary Documents/Certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.00.00	Details of Steam Turbine			
2.01.01	Steam Turbine make			
2.01.02	Tandem Compound / Cross Compound			
2.01.03	No. of Reheat			
2.01.04	No. of Cylinders:			
	(i) HP			
	(ii) IP			
	(iii) Combined HP & IP			
	(iv) LP			
2.01.05	Module Number			
	(i) HP Turbine			
	(ii) IP Turbine			
	(iii) LP Turbine			
	(iv) Combined HP & IP turbine (if applicable)			
2.01.06	Main Steam Pressure (Gauge)			
2.01.07	Main Steam Temperature (deg.C)			
2.01.08	Reheat Steam Temperature (deg.C)			
2.01.09	Exhaust Pressure (Gauge)			
2.01.10	Type of Turbine	*Condensing /*Non Condensing	*Condensing /*Non Condensing	*Condensing /*Non Condensing

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
2.01.11	Rated speed (RPM) and operating frequency range (Hz)			
2.01.12	No. of Steam Extractions for regeneration			
3.00.00	Details of Generator			
3.01.01	Generator make and model No.			
3.01.02	Generator MVA Rating			
3.01.03	Generator MW Rating			
3.01.04	Rated Power Factor			
3.01.05	Rated voltage (kV)			
4.00.00	Certificate from the Owner that the aforesaid Steam Turbine Generator Set is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial Bid Opening, and caused no serious problem in past, is furnished at Annexure.... to this Attachment			
4.01.01	List of all the similar Steam Turbine Generator under execution along with the details such as order No. & date, order value and scheduled date of commissioning is enclosed separately at Annexure			
4.02.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

1.2.0(A) We, Indian Steam Generator and Steam Turbine Generator Manufacturing Company, have valid ongoing collaboration and technology transfer agreement including license to manufacture and supply supercritical steam generator sets covering the type, size and rating specified, in India with M/s, a

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Qualified Steam Generator Manufacturer meeting requirements of clause 1.1.1(A), item 4 of BDS, valid minimum up to the end of the defect liability period of the contract. Further, we confirm that the offered Steam Generator set is of the same type (i.e. single pass (tower type) or two pass type and same type of water wall tubing) for which our collaborator (i.e. Qualified Steam Generator Manufacturer) is qualified. The details of Qualified Steam Generator Manufacturer, meeting the requirements of clause 1.1.1(A), item 4 of BDS, are as under:

S. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name, address, email, Tel no. and Fax no. of QSGM			
1.01.00	Name and Designation of the responsible person in QSGM			
1.01.01	Name of the reference station and its location			
1.01.02	Name, address, email, Fax No. and Tel. No. of Owner of station			
1.01.03	Name and Designation of the responsible person in Owner's organization			
1.02.00	Name, address, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Steam Generator Manufacturer from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by us for the reference station			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is pulverised coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QSGM for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
	e) *Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to the date of bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the bidder has acted as advisor for erection / commissioning of reference Steam Generator, bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for clause no. 1.0.0, Item No. 4 of BDS.)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.00.00	Steam Generator steam flow capacity at Super heater Outlet (T/Hr.)			
2.01.00	Main Steam Temperature at SH outlet (°C)			
2.02.00	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not			
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*

(In case the answer to above clause (iii) is "No", in such a case, the bidder shall furnish additional data in support of requirements indicated at Note (5) to clause 1.0.0, Item No. 4 of BDS as detailed in clause 1.4.0)

2.07.00 Type of circulation system (Natural or Forced/Assisted)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.08.00	Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled]			
2.09.00	Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.10.00	Type of coal used			
	i) Max. HHV (Kcal/Kg)			
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting b) If yes, number of such operations it has been designed for c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved i) Hot start (after shut down period less than 10 hours) ii) Warm start (after shut down period between 10 hours & 72 hours) iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Bidder (Qualified Steam Generator Manufacturer) from Owner of plant or any other intermediary organization			
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by bidder (Qualified Steam Generator Manufacturer) in support of the claim of meeting requirement of Note (3) of clause 1.0.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			

Sl. No.	Item Description	Station-1	Station-2	Station-3
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- (ii) Certificate from Owner of the plant to be furnished by bidder (Qualified Steam Generator Manufacturer) for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

1.2.0(B) We, Indian Steam Generator and Steam Turbine Generator Manufacturing Company, have 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 M/s....., a Qualified Steam Turbine Generator Manufacturer meeting requirements of clause 1.1.1(B), item 4 of BDS, valid minimum up to the end of the defect liability period of the contract. The details of Qualified Steam Turbine Generator Manufacturer, meeting the requirements of clause 1.1.1(B), item 4 of BDS, are as under :

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
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1.00.00 Name, address, email, Tel no. and Fax no. of QSTGM

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
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- 1.01.00 Name and Designation of the responsible person in QSTGM
- 1.01.01 Name of the reference station and its location
- 1.01.02 Name, address, Fax No., e-mail and Tel. No. of Owner of station
- 1.01.03 Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by Qualified Steam Turbine Generator Manufacturer from intermediary organization
- 1.02.00 Name and Designation of the responsible person in Owner's organization
- 1.02.01 Name and Designation of the responsible person in intermediary organization
- 1.03.00 No. of Steam Turbine Generator Sets supplied by QSTGM for the station
- 1.04.00 Contract No. and Date
- 1.05.00 Capacity in MW of Unit
- 1.06.00 Starting date of project
- 1.07.00 Scheduled date of commissioning

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by QSTGM for the aforesaid Steam Turbine Generator Set includes the following :		
	(a) Designed	*Yes/No	*Yes/No
	(b) Engineered	*Yes/No	*Yes/No
	(c) *Manufactured / *Got Manufactured	*Yes/No	*Yes/No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/No	*Yes/No
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/No	*Yes/No

** Necessary Documents / certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Turbine

2.01.00 Steam Turbine make

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.00	Tandem compound	*Yes/*No	*Yes/*No	*Yes/*No
2.03.00	No. of Reheat			
2.04.00	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg. C)			
2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00 Generator Details				
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	* Horizontal- tally/*Verti- cal	* Horizontal- tally/*Verti- cal	* Horizontal- tally/*Verti- cal
3.09.00	Installation	* Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate(s) from the Owner that the aforesaid Steam Turbine Generator Set /Steam Turbine / Generator (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno- Commercial Bid Opening, and caused no serious problem in the past, is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam turbine generator set) has been received by Bidder (Qualified Steam Turbine Generator Manufacturer) from Owner of plant or any other intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
(i)	Certificate from *Owner of the plant or *intermediary organization to be furnished by bidder (Qualified Steam Turbine Generator Manufacturer) in support of the claim of meeting requirement of Note (3) of clause 1.0.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
(ii)	Certificate from Owner of the plant to be furnished by bidder (Qualified Steam Turbine Generator Manufacturer) for the successful operation of the Steam Turbine Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

1.3.0 *M/s....., a super critical steam turbine manufacturer meets the requirements of clause 1.1.1(B) of Item No. 4.0 of BDS **except for generator**. Hence, as per clause 1.2.3 of Item No. 4.0 of BDS, we have associated and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.2.3 of Item No. 4.0 of BDS fully in respect of generator. The details are as follows:

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name, address, email, Tel no. and Fax no. of Qualified Generator Manufacturer			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.01.00	Name of the reference station and its location			
1.01.01	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.02	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Generator Manufacturer from intermediary organization.			
1.02.00	Name and Designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			
1.06.00	Starting date of project			
1.07.00	Scheduled date of commissioning			
1.08.00	Actual date of commissioning			
1.09.00	Date of commencement of successful operation			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
(a)	Designed	*Yes/*No	*Yes/*No	*Yes/*No
(b)	Engineered	*Yes/*No	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents / certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

1.02.05 Rated voltage (KV)

1.02.06 No. of phases

1.02.07 No. of poles

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.08	Mounting	*Horizontal/ *Vertical	*Horizontal/ *Vertical	*Horizontal/ *Vertical
1.02.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	* Yes/*No	* Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening, and caused no serious problem in past, is furnished at Annexure..... to this Attachment			
3.00.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

TO BE FILLED IN BY THE BIDDER WHO IS SEEKING QUALIFICATION AS PER CLAUSE 1.2.0, ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E., IF THE ANSWER TO SUB-CLAUSE 2.06.00 (iii) TO CLAUSE 1.2.0 (A) ABOVE IS "NO")

1.4.0 We confirm that M/s _____(Qualified Steam Generator Manufacturer) meet all the requirement as per 1.1.1(A), Item 4 of BDS **except that the evaporator** indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only and seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening.

We further confirm that the offered type of waterwall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) is of the type for which our licencer is qualified. The details of Licensor and his experience details are as follows:-

I. Details of Technology Owner (Licensor)

- 1.01.00 Name of the original technology owner (Licensor)
- 1.02.00 Address, Email ID & Tel No. & Fax. No.
- 1.03.00 Name and Designation of the Responsible person in the Organization
- 1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

- 1.05.00 Date of Start of Licensing agreement
- 1.06.00 Date of End of Licensing agreement
- 1.07.00 Whether Scope of licensing agreement covers 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) *Yes/*No
- 1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

II. Details of experience of Technology Owner (Licensor)

S. No.	Item Description	Station-1	Station-2	Station-3
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel. No., email ID			
1.03.00	i) Actual date of completion			
	ii) Date of commencement of Successful operation			
1.04.00	Whether the Plant is in Successful operation	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following:			
	i) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Super heater Outlet (T/Hr.)			
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Pulverised Coal)	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.10.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Deed of Joint Undertaking (DJU) as per proforma enclosed in Section-VII (Forms & Procedures) is furnished along with the bid at Annexure			
1.5.0	*We confirm that our Qualified Steam Generator Manufacturer and/or Steam Turbine Generator Manufacturer are seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per Note No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :			
1.5.1	a) QSGM and its subsidiary's(ies') Experience Details in respect of meeting requirement for QSGM [as per clause 1.1.1(A)], item 4 of BDS	(To be filled at page of this Attachment)	to	_
	b) QSTGM and its subsidiary's(ies') Experience Details in respect of meeting requirement for QSTGM [as per clause 1.1.1(B)], item 4 of BDS	(To be filled at page of this Attachment)	to	_
1.5.2	Details of Subsidiary Company/Joint Venture Company registered by Holding Company in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS	(To be filled at page of this Attachment)	to	of

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

- 1.5.3 a) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for supercritical steam generator manufacturer as per clause 1.1.0(A) of BDS
- b) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for supercritical steam Turbine manufacturer as per clause 1.1.0(B) of BDS
- c) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for Generator manufacturer as per clause 1.1.0(B) of BDS

- 1.5.4 a) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam generators
- 1.5.4 b) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam turbine
- c) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical generator

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0(A) above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0(B) above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Turbine Generator Manufacturer) and above subsidiaries.

1.6.0 Deed of Joint Undertaking (DJU) executed by us, Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, *Qualified Generator Manufacturer and *subsidiaries of Holding Company (Qualified Steam Generator Manufacturer and / or Qualified Steam Turbine Generator Manufacturer), Technology Owner (Licensor) of Supercritical Steam Generator as per clause 1.2.2 and/or 1.2.3 and/or Note No 4 and / or Note No. 5 for clause no. 1.0.0 of Item No. 4.0 of BDS is enclosed at Annexure_____to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT # 03/HPGCL/DCRTPP/EPC/800MW

(Experience details for an Indian Subsidiary Company of a Qualified Steam Generator Manufacturer (QSGM) and/or a Qualified Steam Turbine Generator Manufacturer (QSTGM) as Bidder, as per Clause 1.3.0, Item No. 4.0 of BDS)

Bidder's Name & Address :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0.0 *We, M/s....., an Indian Subsidiary Company of a Qualified Steam Generator Manufacturer (QSGM), are seeking Qualification as per clause 1.3.0, Item No. 4 of BDS.

*We, M/s..... (an Indian Subsidiary Company of a QSTGM, as Bidder), are associating with M/s..... (*Qualified Steam Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Generator Manufacturer / *Indian JV Company of a Qualified Steam Generator Manufacturer) and shall source the Steam Generator Set from M/s (Associate) as per clause 1.3.1(b) item no. 4 of BDS. The details are as follows :

1.1.0 *(a) We confirm that *we / *our Associate *are / *is an Indian Subsidiary Company of M/s..... (QSGM) registered in India / *our Associate (QSGM) have registered an Indian Subsidiary Company in India, as per Companies Act of India, for manufacturing **supercritical Steam Generator sets** covering the type, size and rating specified.

Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

The details of Indian Subsidiary Company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSGM in the Indian subsidiary company (In percentage of the total equity)
1.02.00	Lock in period for above subsidiary status from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 from the promotor regarding maintaining the subsidiary status as declared along with lock in period in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation.
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure _____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

1.1.0 *(b) We confirm that *our Associate is a Joint Venture Company registered in India / *our Associate (QSGM) have registered an Indian JV Company in India, as per Companies Act of India, for manufacturing supercritical steam generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s..... , an Indian Company registered in India under the Companies Act of India and (ii) M/s , a QSGM, who meets the requirement of clause 1.1.0 (A) of Item 4 of BDS and where details are furnished in clause 1.2.0 below.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the Indian JV Company for a lock-in period of 7 years from the date of incorporation of Indian JV Company or up to the end of the defect liability period of the contract whichever is later.

Further, M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows :

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSGM in the JV company (In percentage of the total equity)

S.No.	Item Description
1.02.00	<p>Lock in period for above equity participation from the date of incorporation</p> <p>(Bidder to furnish letter of undertaking as per formant enclosed at Attachment 3A-10 as per Note 9 of Clause 1.0.0 of Item 4 of BDS for QSGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)</p>
2.00.00	<p>Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company</p>
2.01.00	<p>Lock in period for above equity participation from the date of incorporation</p> <p>(Bidder to furnish letter of undertaking as per formant enclosed at Attachment 3A-10 as per Note 9 of Clause 1.0.0 of Item 4 of BDS for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)</p>
3.00.00	<p>Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment</p>
3.01.00	<p>Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment</p>

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

1.1.0**(b)(i) We, on behalf of our Associate, confirm that M/s..... , the majority stake holder in the said JV Company, is an entity other than the QSGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a ontract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows :

S. No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			

*Bidder to furnish 1.1.0**(b)(i) & (ii) only when his Associate is a JV Company of QSGM, as per clause no. 1.4.1(a), Item no. 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to the date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

1.1.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company, an entity other than the QSGM, are an Indian Company. The said Indian JV Company's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that the Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

*1.1.0**(b)(ii) is to be filled in only in pursuance of Note 6 for clause no. 1.0.0 of Item no. 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorized Signatory.....

The qualification details of Parent Company of Indian JV Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)	*Yes/ *No	*Yes/ *No	*Yes/ *No

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

1.2.0 We confirm that the QSGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of at least one (1) number of pulverized coal fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

* Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that offered steam generator is of the same type, having same type of water wall tubing for which reference of Steam Generator has been furnished below The details are as follows :-

S.No.	Item Description	Station#1	Station#2	Station#3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSGM			
1.01.00	Name and Designation of the responsible person in QSGM			
1.01.01	Name of the reference station and its location			
1.01.02	Name, address, e-mail, Fax No. and Tel. No. of Owner of station			
1.01.03	Name and Designation of the responsible person in Owner's organization			
1.02.00	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by QSGM from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by QSGM for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is pulverized coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QGM for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
	e) *Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
	(**In case the QSGM has acted as advisor for erection / commissioning of reference Steam Generator & auxiliaries, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure... to this Attachment, pursuant to note no. 2 for clause no. 1.0.0, Item no. 4 of BDS)			
2.00.00	Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			
2.01.00	Main Steam Temperature at SH outlet (°C)			
2.02.00	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not	Yes*/No*	Yes*/No*	Yes*/No*
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
	(In case the answer to above clause (iii) is "No", in such a case, the Bidder on behalf of the QSGM shall furnish additional data in support of requirements indicated at Note (5) to clause 1.0.0, Item 4 of BDS and detailed in clause 1.5.0 to this Attachment)			
2.07.00	Type of circulation system (Natural or Forced/Assisted)			
2.08.00	Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled]			
2.09.00	Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.10.00	Type of coal used			
	i) Max. HHV (Kcal/Kg)			
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting			
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved			
	i) Hot Start (after shut down period of 10 hours)			
	ii) Warm start (after shut down between 10 hrs & 72 hours)			

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S. No.	Item Description	Station#1	Station#2	Station#3
	iii) Cold start (after shut down of exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Bidder (*Indian Subsidiary Company of QSGM) / *Associate (*QSGM / Indian *Subsidiary / *JV Company of QSGM) from Owner of plant or any other intermediary organization			
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder / *Bidder on behalf of its Associate in support of the claim of meeting requirement of Note 3 of clause 1.1.0, item 4 of as the case may be, enclosed at Annexure..... to this Attachment			BDS

S. No.	Item Description	Station#1	Station#2	Station#3
	(ii) Certificate from Owner of the plant to be furnished by *Bidder / *Bidder on behalf of its Associate for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

Notes :

- Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

1.3.0 We confirm that we (an Indian Subsidiary Company of a QSGM) / our Associate (Indian *Subsidiary / *JV Company of a QSGM) / our Associate's (QSGM's) *Indian subsidiary / *JV Company, whose details are indicated at *1.1.0(a) / *1.1.0(b) above have registered another **Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the manufacturing company shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

1.3.0 is to be filled in only in pursuance of Note 8 for clause no. 1.0.0 of Item 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

The details of Indian manufacturing Subsidiary Company are as follows :

S.No.	Item Description	
1.00.00	Date of Incorporation of Indian manufacturing Subsidiary Company	
1.01.00	Equity participation of the *Indian subsidiary / *JV company in the Indian manufacturing subsidiary company (in percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ?	*Yes/*No
	(Bidder to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company)	
2.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment	
2.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this Attachment	

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

1.4.0 *We confirm that our Associate (QSGM) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per Note No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

1.4.1 Associate (QSGM) and their subsidiary's(ies) Experience Details in respect of meeting requirement for QSGM (as per clause **1.1.1(A)**), item 4 of BDS (To be filled at page _____ of this Attachment) to _

1.4.2 Details of *Subsidiary Company/ *Joint Venture Company registered by the Associate (QSGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page _____ of this Attachment) to of

1.4.3 *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for QSGM as per clause 1.1.0 of BDS

1.4.4 *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam generators

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

TO BE FILLED IN BY THE BIDDER WHO / WHOSE ASSOCIATE IS SEEKING QUALIFICATION AS PER CLAUSE 1.1.1(A), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E. IF THE ANSWER TO SUB-CLAUSE 2.06.00(iii) TO CLAUSE 1.2.0 ABOVE IS "NO")

1.5.0 We confirm that M/s _____(supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A), Item 4 of BDS **except that the evaporator** indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and is seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening. We further confirm that the offered type of water wall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) is of the type for which our licensor is qualified The details of Licensor and his experience details are as follows:-

I. Details of Technology Owner (Licensor)

- | | |
|---------|---|
| 1.01.00 | Name of the original technology owner (Licensor) |
| 1.02.00 | Address, Email ID & Tel No. & Fax |
| 1.03.00 | Name and Designation of the Responsible person in the Organization |
| 1.04.00 | Licensing agreement for max. Capacity rating of Steam Generator (in MW) |

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

- n1.05.00 Date of Start of Licensing agreement
- 1.06.00 Date of End of Licensing agreement
- 1.07.00 Whether Scope of licensing agreement covers 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). *Yes/*No
- 1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

II. Details of experience of Technology Owner (Licensor)

S.No.	Item Description	Station#1	Station#2	Station#3
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel. No., email ID			
1.03.00	Actual date of completion/ date of commencement of Successful operation			
1.04.00	Whether the Plant is in Successful operation		Yes*/No*	

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following:			
	i) Designed	Yes*/No	*Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No	*Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) as on date of Techno-Commercial bid opening	Yes*/No	*Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No	*Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No	*Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No	*Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Pulverised Coal)	Yes*/No	*Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorized Signatory.....

S.No.	Item Description	Station#1	Station#2	Station#3
1.10.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Deed of Joint Undertaking (DJU) as per proforma enclosed in Section-VI (Forms & Procedures) is furnished along with the bid at Annexure			

1.6.0 Deed(s) of Joint Undertaking (DJU) executed by us, our QSGM, our Associate / our Associate's QSGM / Indian *Subsidiary Company / *JV Company (as the case may be), Other Promoter having 25% or higher equity participation in the Indian Subsidiary / JV Company (as the case may be), *subsidiaries of Holding Company and *the Indian manufacturing subsidiary Company, *Technology Owner (Licensor) of supercritical steam generator as per clause 1.3.2 and/or Note No. 4 and/or Note No. 5 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure____to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

***Bidder to Strike off if not applicable**

2.0.0 *We, M/s....., an Indian Subsidiary Company of a Qualified Steam Turbine Generator Manufacturer (QSTGM), are seeking Qualification as per clause 1.3.0, Item No. 4 of BDS.

*We, M/s..... (an Indian Subsidiary Company of QSGM, as Bidder), are associating with M/s (*Qualified Steam Turbine Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Turbine Generator Manufacturer / *Indian JV Company of a Qualified Steam Turbine Generator Manufacturer) and shall source the Steam Turbine Generator Set from M/s(Associate) as per clause 1.3.1(b) item no. 4 of BDS. The details are as follows:

2.1.0 *(a) We confirm that *we / *our Associate *are / *is an Indian Subsidiary Company of M/s..... (QSTGM) registered in India / *our Associate (QSTGM) have registered an Indian Subsidiary Company in India, as per Companies Act of India, for manufacturing **supercritical Steam Turbine Generator sets** covering the type, size and rating specified. Further, the Indian Subsidiary Company have obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSTGM in the Indian subsidiary company (In percentage of the total equity)

S. No.	Item Description
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment-3A10 from the promotor regarding maintaining the subsidiary status as declared above for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation.
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____of this Attachment

2.1.0 *(b) We confirm that *our Associate is a Joint Venture Company registered in India / *our Associate (QSTGM) have registered an Indian JV Company in India, as per Companies Act of India, for manufacturing supercritical steam generator sets covering the type, size and rating specified.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a QSTGM, who meets the requirement of clause 1.1.0 (B) of Item 4.0 of BDS and whose details are furnished in clause 2.2.0 below.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the Indian JV Company for a lock-in period of 7 years from the date of incorporation of Indian JV Company or up to the end of the defect liability period of the contract whichever is later.

Further, M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Indian Joint Venture (JV) company are as follows :

S. No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSTGM in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment-3A-10 as per Note (9) of Clause 1.0.0, Item 4 of BDS for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company
2.01.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment-3A-10 as per Note 9 of clause 1.0.0, Item 4 of BDS for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

2.1.0**(b)(i) We, on behalf of our Associate, confirm that M/s..... , the majority stake holder in the said JV Company is an entity other than the QSTGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows:

*Bidder to furnish 2.1.0**(b)(i) & (ii) only when his Associate is a JV Company of QSTGM, as per clause no. 1.4.1(a), Item No. 4 of BDS.*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.11	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

2.1.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company, an entity other than the QSTGM, are an Indian Company. The said Indian JV Company's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that the said Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or upto the end of defect liability period of the contract whichever is later.

The details are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax no., Tel. no. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			

2.1.0**(b)(ii) is to be filled in only in pursuance of Note 6 of clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.14	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per format enclosed at Attachment-3A-10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)	Yes*/No	*Yes*/No*	Yes*/No*

2.2.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number Super Critical Steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm² (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows:-

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSTGM		
1.01.00	Name and Designation of the responsible person in QSTGM		
1.01.01	Name of the reference station and its location		
1.01.02	Name, address, Fax No., e-mail and Tel. No. of Owner of the reference station		
1.01.03	Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by QSTGM from intermediary organization		
1.02.00	Name and Designation of the responsible person in Owner's organization		
1.02.01	Name and Designation of the responsible person in intermediary organization.		
1.03.00	No. of Steam Turbine Generator Sets supplied by QSTGM for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by QSTGM for the aforesaid Steam Turbine Generator Set includes the following :		
	(a) Designed	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) as on date of Techno- Commercial bid opening		Yes/*No*

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.00.00 Details of Turbine				
2.01.00	Steam Turbine make			
2.02.00	Tandem compound	*Yes/*No	*Yes/*No	*Yes/*No
2.03.00	No. of Reheat			
2.04.00	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg.C)			
2.08.00	Reheat Steam temperature (deg.C)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	*Horizon- tally / *Vertical	*Horizon- tally / *Vertical	*Horizon- tally / *Vertical
3.09.00	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
3.11.00	Cooling medium			
	(a) Stator			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(b) Rotor			
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate(s) from the Owner that the aforesaid Steam Turbine Generator Set / Steam Turbine / Generator Set (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Bidder (*Indian Subsidiary Company of QSTGM) / *Associate (*QSTGM / Indian *Subsidiary / *JV Company of QSTGM) from Owner of plant or any other intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder / *Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure... to this Attachment			
	(ii) Certificate from Owner of the plant to be furnished by *Bidder / *Bidder on behalf of its Associate for the successful operation of the Steam Turbine Generator Set / Steam Turbine / Generator Set (as applicable) as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure.... to this Attachment			

2.3.0* We confirm that, We (an Indian subsidiary company of a QSTGM) / *our Associate (an Indian *Subsidiary / *JV Company of QSTGM) / *our Associate's (QSTGM's) *Indian subsidiary / *JV Company, whose details are indicated at *2.1.0(a) / *2.1.0(b) above, have registered **another Indian manufacturing Subsidiary Company** M/ S....., as per Companies Act of India for manufacturing **supercritical steam turbine generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

2.3.0 is to be filled in only in pursuance of Note 8 for clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

We confirm that M/s....., the manufacturing subsidiary company shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Manufacturing Subsidiary Company are as follows:

S. No.	Item Description	
1.00.00	Date of Incorporation of Indian Manufacturing Subsidiary Company	
1.01.00	Equity participation of the *Indian Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ?	*Yes/*No
	(Bidder to furnish letter of undertaking as per format enclosed at Attachment 3A-10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company)	
2.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment	

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description
2.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure_____of this Attachment

2.4.0** We confirm that M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence, as per clause 1.3.3 of item no. 4.0 of BDS, the Subsidiary Company / JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.1.4 / 1.3.3 of item no. 4.0 of BDS fully in respect of generator. The details are as follows:

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian Subsidiary /JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian Subsidiary / JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name of the reference station and its location			
1.01.00	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.01	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Generator Manufacturer from intermediary organization			
1.02.00	Name and Designation of the responsible person in Owner's organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.01	Name and Designation of the responsible person in intermediary organization.			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			
1.06.00	Starting date of project			
1.07.00	Scheduled date of commissioning			
1.08.00	Actual date of commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
	(a) Designed		*Yes/*No	
	(b) Engineered		*Yes/*No	
	(c) *Manufactured / *Got Manufactured		*Yes/*No	
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection		*Yes/*No	
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning		*Yes/*No	

** Necessary Documents / certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure..... of this Attachment.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.00	Details of Generator			
1.02.01	Generator make and model No.			
1.02.02	Rated MVA			
1.02.03	Rated Power Factor			
1.02.04	MW rating			
1.02.05	Rated voltage (kV)			
1.02.06	No. of phases			
1.02.07	No. of poles			
1.02.08	Mounting	*Horizontally /*Vertically	*Horizontally /*Vertically	*Horizontally /*Vertically
1.02.09	Installation	* Indoor/ *Outdoor	* Indoor/ *Outdoor	* Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	*Yes/*No	*Yes / *No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure.....to this Attachment			
3.00.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

2.5.0 *We confirm that our Associate (QSTGM) is seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per Note No. 4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

2.5.1 Associate (QSTGM) and their Subsidiary's(ies)' Experience details in respect of meeting requirement for **QSTGM [as per clause 1.1.1(B)]**, item 4 of BDS (To be filled at page ___ of this Attachment) to ___ of

2.5.2 Details of Subsidiary Company / Joint Venture Company registered by the Associate (QSTGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page ___ of this Attachment) to ___ of

2.5.3 a) *Name, Address, e-mail, Fax, Tel. No. of the Subsidiary meeting the QR for supercritical Steam Turbine Manufacturer as per clause 1.1.0 of BDS

b) *Name, Address, e-mail, Fax, Tel. No. of the Subsidiary meeting the QR for Generator Manufacturer as per clause 1.1.0 of BDS

- 2.5.4 a) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam turbine
- b) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for generator

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (**Qualified Steam Turbine Generator Manufacturer**) and above subsidiaries.

2.6.0 Deed(s) of Joint Undertaking (DJU) executed by us, our QSTGM, our Associate/our Associate's QSTGM / Indian Subsidiary / JV Company (as the case may be), Other Promoter having 25% or higher Equity Participation in the Indian Subsidiary / JV Company (as the case may be), *Qualified Generator Manufacturer, *subsidiaries of Holding Company and *the Indian Manufacturing Subsidiary Company, as per clause 1.3.2 and/or 1.3.3 and/or Note No. 4 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS, is enclosed at Annexure _____ to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(EXPERIENCE DETAILS FOR AN INDIAN JV COMPANY OF A QUALIFIED STEAM GENERATOR
MANUFACTURER (QSGM) AND/OR A QUALIFIED STEAM TURBINE GENERATOR
MANUFACTURER (QSTGM) AS BIDDER, AS PER CLAUSE 1.4.0, ITEM NO. 4.0 OF BDS)

Bidder's Name & Address :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0.0 *We, M/s....., an Indian Joint Venture (JV) Company of a Qualified Steam Generator Manufacturer (QSGM), are seeking Qualification as per clause 1.4.0, Item No. 4 of BDS.

*We, M/s..... (an Indian JV Company of a QSTGM as Bidder), are associating with M/s.....(*Qualified Steam Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Generator Manufacturer / *Indian JV Company of a Qualified Steam Generator Manufacturer) and shall source the Steam Generator Set from M/s(Associate) as per clause 1.4.1(b) item no. 4 of BDS. The details are as follows:

1.1.0 *(a) We confirm that *we / *our Associate *are / *is an Indian Joint Venture Company registered in India / *our Associate (QSGM) have registered an Indian JV Company in India, as per Companies Act of India, for manufacturing supercritical steam generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a QSGM, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Further, M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Indian Joint Venture (JV) company are as follows:

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSGM in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/ 1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company
2.01.00	Lock in period for above equity participation from the date of incorporation

S.No.	Item Description
	(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/ 1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

1.1.0**(a)(i) We confirm that M/s....., the majority stake holder in the said JV Company, is an entity other than the QSGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the the date of Techno-Commercial bid opening. The details are as follows :

*Bidder to furnish 1.1.0**(a)(i) & (ii) only when he / his Associate is a JV Company of QSGM, as per clause 1.4.1(a), item 4 of BDS;*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and Designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.11	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

1.1.0**(a)(ii) We confirm that M/s....., the majority stake holder in the said JV Company, an entity other than the QSGM, are an Indian Company. The said Indian JV Company's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno- Commercial bid opening.

We confirm that the Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

The qualification details of Parent Company of Indian JV Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and Designation of the responsible person in Owner's organization			

1.1.0**(a)(ii) is to be filled in only in pursuance of Note No. 6 of clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.14 Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)

1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? *Yes/*No

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)

1.1.0 *(b) We confirm that *our Associate is an Indian Subsidiary Company of M/s..... (QSGM) registered in India / *our Associate (QSGM) have registered an Indian Subsidiary Company in India as per Companies Act of India, for manufacturing **Supercritical Steam Generator sets** covering the type, size and rating specified.

Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

S.No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSGM in the Indian subsidiary company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____of this Attachment

1.2.0 We confirm that the QSGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of at least one (1) number of pulverized coal fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

*Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that we have offered steam generator of the same type, having same type of water wall tubing for which reference of Steam Generator has been furnished below The details are as follows :-

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSGM			
1.01.00	Name and Designation of the responsible person in QSGM			
1.01.01	Name of the reference station and its location			
1.01.02	Name, address, e-mail, Fax No. and Tel. No. of Owner of station			
1.01.03	Name and Designation of the responsible person in Owner's organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.02.00	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by QSGM from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by QSGM for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QSGM for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
b)	Engineered	Yes*/No*	Yes*/No*	Yes*/No*
c)	*Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
d)	*Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
e)	*Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the QSGM has acted as advisor for erection / commissioning of reference Steam Generator & auxiliaries, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment pursuant to Note No. 2 for Clause 1.0.0, Item No. 4 of BDS.)

2.00.00 Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)

2.01.00 Main Steam Temperature at SH outlet (°C)

2.02.00 Main Steam Pressure at SH outlet [kg/cm² (a)]

2.03.00 Reheat steam flow (T/Hr.)

2.04.00 a) Reheater outlet pressure [kg/cm² (a)]

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not			
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*

(In case the answer to above clause (iii) is "No", in such a case, the Bidder on behalf of the QSGM shall furnish additional data in support of requirements indicated in clause 1.5.0 to this attachment)

- 2.07.00 Type of circulation system (Natural or Forced/Assisted)
- 2.08.00 Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled] (must match with offered type)
- 2.09.00 Minimum mass flow through the water wall tubes Kg/sec./m²
- 2.10.00 Type of coal used
 - i) Max. HHV (Kcal/Kg)
 - ii) Min. HHV (Kcal/Kg)
 - iii) Max. Ash content (%)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
*Bidder to Strike off if not applicable		Signature of Authorised Signatory.....		

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.02.00	<p>Documentary evidence in case the award for reference work (steam generator set) has been received by *Bidder (Indian JV Company of QSGM) / *Associate (*QSGM / Indian *Subsidiary / *JV Company of QSGM) from Owner of plant or any other intermediary organization</p> <p>(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder / *Bidder on behalf of its Associate in support of the claim of meeting requirement of Note 3 of clause 1.0.0, item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment</p> <p>(ii) Certificate from Owner of the plant to be furnished by *Bidder / *Bidder on behalf of its Associate for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment</p>			

Notes :

- Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.3.0 *We confirm that *we (an Indian JV Company of a QSGM) / *our Associate (an Indian *Subsidiary / *JV Company of a QSGM) / *our Associate's (QSGM's) *Indian subsidiary / *JV Company, whose details are indicated at *1.1.0(a) / *1.1.0(b) above have registered another **Indian Manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the manufacturing company shall remain a subsidiary of Indian *Subsidiary / *JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian Manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Manufacturing Subsidiary Company are as follows:

S. No.	Item Description	
1.00.00	Date of Incorporation of Indian Manufacturing Subsidiary Company	
1.01.00	Equity participation of the Indian *Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian Manufacturing Subsidiary Company or upto the end of defect liability period of the contract whichever is later ?	*Yes/*No

1.3.0 is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description
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(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company

2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this Attachment

1.4.0 *We confirm that our Associate (QSGM) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per notes No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

1.4.1 Associate (QSGM) and their subsidiary's (ies') Experience Details in respect of meeting requirement for QSGM (as per clause **1.1.1(A)**), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

1.4.2 Details of *Subsidiary Company/*Joint Venture Company registered by the Associate (QSGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.4.3 *Name, Address, email, Fax,
Tel. No. of the Subsidiary
meeting the QR for QSGM as
per clause 1.1.0 of BDS

1.4.4 *Name, address, Telephone No.,
Fax and email of subsidiary company
owning the technology for
supercritical steam generators

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

TO BE FILLED IN BY THE BIDDER WHO / WHOSE ASSOCIATE IS SEEKING QUALIFICATION AS PER CLAUSE 1.1.1(A), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E. IF THE ANSWER TO SUB-CLAUSE 2.06.00(iii) TO CLAUSE 1.2.0 ABOVE IS "NO")

1.5.0 We confirm that M/s _____ (supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A), Item 4 of BDS **except that the evaporator** indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and is seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverized coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening. The details of Licensor and his experience details are as follows:-

I. Details of Technology Owner (Licensor)

1.01.00 Name of the original technology owner (Licensor)

1.02.00 Address, Email ID & Tel No. & Fax No.

1.03.00 Name and Designation of the Responsible person in the Organization

1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)

1.05.00 Date of Start of Licensing agreement

1.06.00 Date of End of Licensing agreement

1.07.00 Whether Scope of licensing agreement covers 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). *Yes/*No

1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
II. Details of experience of Technology Owner (Licensor)				
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel.No., email ID			
1.03.00	(i) Actual date of completion			
	(ii) Date of commencement of Successful operation			
1.04.00	Whether the Plant is in Successful operation	Yes*/No*	Yes*/No*	Yes*/No*
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following:			
	i) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) as on date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Coal)	Yes*/No*	Yes*/No*	Yes*/No*
1.10.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Deed of Joint Undertaking (DJU) as per proforma enclosed in Section-VII (Forms & Procedures) is furnished along with the bid at Annexure			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.6.0 Deed(s) of Joint Undertaking (DJU) executed by us, our QSGM, *our Associate / *our Associate's QSGM / Indian *Subsidiary Company / *JV Company (as the case may be), Other Promoter having 25% or higher equity participation in the Indian Subsidiary / JV Company (as the case may be), *subsidiaries of Holding Company and *the Indian manufacturing subsidiary Company, *Technology Owner (Licensor) of supercritical steam generator as per clause 1.4.2 and/or Note No. 4 and/or Note No. 5 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure_____to this Attachment.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

2.0.0 *We, M/s....., an Indian Joint Venture (JV) Company of a Qualified Steam Turbine Generator Manufacturer (QSTGM), are seeking Qualification as per clause 1.4.0, Item No. 4 of BDS.

*We, M/s..... (an Indian JV company of a QSGM, as Bidder), are associating with M/s(*Qualified Steam Turbine Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Turbine Generator Manufacturer / *Indian JV Company of a Qualified Steam Turbine Generator Manufacturer) and shall source the Steam Turbine Generator Set from M/s (Associate) as per clause 1.4.1(b) item no. 4 of BDS. The details are as follows:

2.1.0 *(a) We confirm that *we / *our Associate *are/is an Indian Joint Venture Company registered in India / *our Associate (QSTGM) have registered an Indian JV Company in India, as per Companies Act of India, for manufacturing supercritical steam turbine generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a QSTGM, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the Indian JV Company for a lock-in period of 7 years from the date of incorporation of Indian JV Company or up to the end of the defect liability period of the contract whichever is later.

Further, M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Indian Joint Venture (JV) company are as follows:

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
1.01.00	Equity participation of QSTGM in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 evidence for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company
2.01.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

2.1.0**(a)(i) We confirm that M/s....., the majority stake holder in the said JV Company is an entity other than the QSTGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and email			
1.02	Name and Designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to furnish 2.1.0**(a)(i) & (ii) only when he / his Associate is a JV Company of QSTGM, as per cl. 1.4.1(a), item 4 of BDS;*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.1.0**(a)(ii) We confirm that M/s....., the majority stake holder in the said JV Company, an entity other than the QSTGM, are an Indian Company. The said Indian JV Company's parent company M/shave executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year as on the date of Techno-Commercial bid opening.

We confirm that the said Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

The qualification details of Parent Company of Indian JV Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and Designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			

2.1.0**(a)(ii) is to be filled in only in pursuance of Note No. 6 of clause no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or upto the end of defect liability period of the contract whichever is later?

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)

2.1.0 *(b) We confirm that *our Associate is an Indian Subsidiary Company of M/s..... (QSTGM) registered in India / *our Associate (QSTGM) have registered an Indian Subsidiary Company in India, as per Companies Act of India, for manufacturing **supercritical Steam Turbine Generator sets** covering the type, size and rating specified.

Further, the Indian Subsidiary Company have obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s.....(QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

S. No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSTGM in the Indian subsidiary company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per formant enclosed at Attachment-3A10 for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation.
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure _____ of this Attachment			

2.2.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number supercritical steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm² (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows :-

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSTGM		
1.01.00	Name and Designation of the responsible person in QSTGM		
1.01.00	Name of the reference station and its location		
1.01.01	Name, address, Fax No., e-mail and Tel. No. of Owner of the reference station		

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.01.02	Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by QSTGM from intermediary organization.		
1.02.00	Name and Designation of the responsible person in Owner's organization		
1.02.01	Name and Designation of the responsible person in intermediary organization.		
1.03.00	No. of Steam Turbine Generator Sets supplied by QSTGM for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by us for the aforesaid Steam Turbine Generator Set includes the following :		
	(a) Designed	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
(b)	Engineered	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening		Yes*/No*

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Turbine

2.01.00 Steam Turbine make

2.02.00 Tandem compound *Yes/*No *Yes/*No *Yes/*No

2.03.00 No. of Reheat

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.04.00	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg.C)			
2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	* Horizontally/*Vertical	* Horizontally/*Vertical	* Horizontally/*Vertical
3.09.00	Installation	* Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate(s) from the Owner that the aforesaid Steam Turbine Generator Set /Steam Turbine / Generator Set (as applicable) is in successful operation for a period of not less than one (1) year prior date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam turbine generator set) has been received by *Bidder (Indian JV Company of QSTGM) / *Associate (*QSTGM / Indian *Subsidiary / *JV Company of QSTGM) from Owner of plant or any other intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder / *Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
	(ii) Certificate from Owner of the plant to be furnished by *Bidder / *Bidder on behalf of its Associate for the successful operation of the Steam Turbine Generator Set /Steam Turbine / Generator Set (as applicable) as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure .....to this Attachment			

2.3.0* We confirm that *we (an Indian JV Company of a QSTGM) / *our Associate (an Indian *Subsidiary / *JV Company of a QSTGM) / *our Associate's (QSTGM's) *Indian subsidiary / *JV Company, whose details are indicated at *2.1.0(a) / *2.1.0(b) above, have registered **another Indian Manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam turbine generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the manufacturing company shall remain a subsidiary of the Indian *Subsidiary / *JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Manufacturing Subsidiary Company are as follows:

S.No.	Item Description	
1.00.00	Date of Incorporation of Indian Manufacturing Subsidiary Company	
1.01.00	Equity participation of the Indian *Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or upto the end of defect liability period of the contract whichever is later ?	*Yes/*No

2.3.0 is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No. Item Description

(Bidder to furnish a letter of undertaking as per format at Attachment-3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company

2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment

2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure_____ of this Attachment

2.4.0** We confirm that M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence, as per clause 1.4.3 of item no. 4.0 of BDS, the Subsidiary Company / JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.1.4 / 1.3.3 / 1.4.3 of item no. 4.0 of BDS fully in respect of generator. The details are as follows :-

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian Susidiary / JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian Subsidiary / JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name of the reference station and its location			
1.01.00	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.01	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been recieved by Qualified Generator Manufacturer from intermediary organization			
1.02.00	Name and Designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			
1.06.00	Starting date of project			
1.07.00	Scheduled date of commissioning			
1.08.00	Actual date of commissioning			
1.09.00	Date of commencement of successful operation			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
(a)	Designed	*Yes/*No	*Yes/*No	*Yes/*No
(b)	Engineered	*Yes/*No	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure..... of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

1.02.05 Rated voltage (kV)

1.02.06 No. of phases

1.02.07 No. of poles

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.08	Mounting	* Horizontal / *Vertical	* Horizontal / *Vertical	* Horizontal/*Vertical
1.02.09	Installation	* Indoor/*Outdoor	* Indoor/*Outdoor	* Indoor/*Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	* Yes/*No	* Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure. to this Attachment			
3.00.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.5.0 *We confirm that our Associate (QSTGM) is seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per Note No. 4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.5.1	Associate (QSTGM) and their Subsidiary's(ies') Experience details in respect of meeting requirement for QSTGM (as per clause 1.1.1(B)) , item 4 of BDS	(To be filled at page this Attachment)		to ___ of
2.5.2	Details of Subsidiary Company/Joint Venture Company registered by the Associate (QSTGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS	(To be filled at page this Attachment)		to ___ of
2.5.3	a) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for supercritical Steam Turbine Manufacturer as per clause 1.1.0 of BDS b) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for Generator Manufacturer as per clause 1.1.0 of BDS			
2.5.4	a) *Name, address, Telephone No., Fax and email of subsidiary company owning the technology for supercritical steam turbine b) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for generator			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/ S....., (**Qualified Steam Turbine Generator Manufacturer**) and above subsidiaries.

2.6.0 Deed(s) of Joint Undertaking (DJU) executed by us, our QSTGM, our Associate/ our Associate's QSTGM / Indian Subsidiary / JV Company (as the case may be), Other Promoter having 25% or higher Equity Participation in the Indian Subsidiary Company/JV Company (as the case may be), *Qualified Generator Manufacturer, *subsidiaries of Holding Company and *the Indian Manufacturing Subsidiary Company, as per clause 1.4.2 and/or 1.4.3 and/or Note No. 4 and/or Note No. 6, and/ or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS, is enclosed at Annex-
ure_____to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

(Experience details for an Indian Company holding at least 51% equity in a Joint Venture Company for manufacturing Super Critical Steam Generator sets and/or Super Critical Steam Turbine Generator sets in India between an Indian Company and a Qualified Steam Generator Manufacturer and / or Qualified Steam Turbine Generator Manufacturer as per clause 1.5.0 of Item No. 4.0 of BDS)

Bidder's Name & Address : To
Chief Engineer (Projects, HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0.0 *We, M/s..... (Bidder), are an Indian Company holding majority (i.e. at least 51%) stake in M/s....., an Indian Joint Venture (JV) Company for manufacturing supercritical steam generator sets between an Indian company and a Qualified Steam Generator Manufacturer, and we are seeking Qualification as per clause 1.5.0 of Item No. 4.0 of BDS as per following details.

*We, M/s..... (Bidder), are an Indian Company and hold, through our wholly owned subsidiary M/s....., majority (i.e. at least 51%) stake in M/s....., an Indian Joint Venture (JV) Company for manufacturing supercritical steam generator sets between an Indian company and a Qualified Steam Generator Manufacturer, and are seeking Qualification as per clause 1.5.0 together with Note 7 for clause no. 1.5.0 of Item No. 4.0 of BDS as per following details.

*We, M/s..... (an Indian Company holding, *through our wholly owned subsidiary M/s....., at least 51% equity in a JV company for manufacturing supercritical steam turbine generator sets between an Indian company and a Qualified Steam Turbine Generator Manufacturer, as Bidder), are associating with M/s(*Qualified Steam Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Generator Manufacturer / *Indian JV Company of a Qualified Steam Generator Manufacturer) and shall source the Steam Generator Set from M/s (Associate) as per clause 1.5.1(b) item no. 4 of BDS.

*Further, our Associate (QSGM) has registered a *Subsidiary / *JV Company M/s.....in India under the Companies Act of India.

1.1.0(a)*M/s....., the Indian Joint Venture (JV) Company has been incorporated in India under the Companies Act of India for the purpose of manufacturing supercritical steam generator sets in India covering the type, size and rating specified.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

The above Joint Venture (JV) Company is promoted by (i) M/s., a Company registered in India under the Companies Act of India and (ii) M/s , a Qualified Steam Generator Manufacturer (QSGM) meeting the requirement of clause 1.1.1(A), item no. 4 of BDS.

The above said JV Company have obtained certificate for commencement of Business in India as on the date of techno-commercial bid opening, (Applicable in case the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of the JV Company or up to the end of the defect liability period of the contract whichever is later.

*Further, we, the majority stakeholder have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

* Further, our wholly owned subsidiary M/s....., the majority stakeholder, have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later. We shall maintain our 100% equity in the said subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*We, on behalf of our Associate (*QSGM / *JV Company of QSGM) confirm that M/s....., the majority stakeholder in the said JV Company, is an entity other than QSGM, are an Indian Company.

The details of the Joint Venture (JV) company are as follows:

(in fulfillment of requirement as per clause 1.5.1(a) / 1.1.2(b) / 1.4.1(a) of Item no. 4 of BDS)

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSGM in the JV company (In percentage of the total equity)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	
1.02.00	<p>Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later?</p> <p>(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a)/1.4.1(a)/1.1.2(b) of Item No. 4.0 of BDS supported by Board Resolution of the QSGM)</p>	*Yes/*No
2.00.00	Equity participation of the Majority Stake Holder having Equity equal to or more than 51% in JV Company	
2.01.00	<p>Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later?</p> <p>(Majority Stake Holder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a)/1.4.1(a)/1.1.2(b) of Item No. 4.0 of BDS supported by Board Resolution of the Majority Stake Holder)</p>	*Yes/*No
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment	

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
3.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

1.1.0(a)(i) *We (Bidder) confirm that we are the majority stakeholder in the said JV company

*We (Bidder) confirm that we, through our wholly owned subsidiary M/s., are the majority stakeholder in the said JV company

*We, on behalf of our Associate, confirm that M/s, the majority stakeholder in the said JV company, is an Indian company and an entity other than the Qualified Steam Generator Manufacturer (QSGM).

We further confirm that the majority stake holder in the JV Company, have executed in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of techno-commercial bid opening. The details are as follows:

S.No.	Item Description	Project #1	Project #2	Project #3
1.00	Name of the reference station & its Location			
1.01	Owner's Name, email and its address, Fax No. and Tel. No.			
1.02	Name and Designation of the responsible person in Owner's organization			

1.1.0(a)(i) is applicable in case the Bidder is the majority stake holder in the JV Company either on its own or through its wholly owned subsidiary, or the Bidder's Associate is a JV Company.

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

S.No.	Item Description	Project #1	Project #2	Project #3
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid plants are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.14 Equity participation of majority Stake Holder Company in the Indian JV company (in percentage of the total equity)

1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or upto the end of defect liability period of the contract whichever is later? *Yes/ *No

(Bidder to furnish a letter of undertaking as per formant enclosed at Attachment-3A10 for equity participation of majority Stake Holder Company in the Indian JV company along with lock in period of such equity in compliance to note 7 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of majority Stake Holder Company)

1.1.0**(a)(ii) We, on behalf of our Associate, confirm that the said Indian JV Company's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that the Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

1.1.0**(a)(ii) is to be filled in only in pursuance of Note No. 6 for cl. no. 1.0.0 of Item no. 4 of BDS.

The qualification details of Parent Company of Indian JV Company are as follows :

S.No.	Item Description	Project #1	Project #2	Project #3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and Designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project #1	Project #2	Project #3
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per formant enclosed at Attachment-3A10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)		*Yes/ *No	

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.1.0 *(b) We confirm that our wholly owned subsidiary M/s..... , the majority stakeholder, have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later. We shall maintain our 100% equity in the said subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

1.1.0(b) is to be filled in only in pursuance of Note No. 7 for clause 1.0.0 of Item No. 4 of BDS.*

The details of the wholly owned Subsidiary Company are as follows :

S.No.	Item Description
1.00.00	Date of Incorporation of the Subsidiary Company
1.01.00	Our equity participation in the subsidiary company (in percentage of the total equity)

S.No.	Item Description
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the Subsidiary Company along with lock in period of such equity in compliance to Note 7 for clause 1.0.0 of item 4 of BDS supported by their Board Resolution)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.00.00 Equity participation of the subsidiary company having equity equal to or more than 51% in the JV company for manufacturing supercritical steam generator sets in India between an Indian company and a QSGM

2.01.00 Lock in period for above equity participation from the date of incorporation

(Bidder to furnish, on behalf of its subsidiary, a letter of undertaking as per format enclosed at Attachment-3A10 for the subsidiary's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a) together with Note 7 for clause 1.0.0 of item 4 of BDS supported by Board Resolution of the subsidiary)

3.00.00 Copy of Certificate of Incorporation and Memorandum of Association of Bidder's subsidiary company is enclosed at Annexure _____ of this Attachment

1.1.0 *(c) We confirm that *our Associate is an Indian Subsidiary Company of M/s..... (QSGM) registered in India / *our Associate (QSGM) have registered an Indian Subsidiary Company M/s. in India, as per Companies Act of India, for manufacturing supercritical Steam Generator sets covering the type, size and rating specified. Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

- 1.00.00 Date of Incorporation of Indian Subsidiary Company
- 1.01.00 Equity participation of QSGM in the Indian subsidiary company (In percentage of the total equity)
- 1.02.00 Lock in period for above equity participation from the date of incorporation

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment-3A10 for QSGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
- 2.00.00 *Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
- 2.01.00 *Lock in period for above equity participation from the date of incorporation.
- 3.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.01.00 Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____of this Attachment

1.2.0 M/s.....(Qualified Steam Generator Manufacturer) have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of at least one (1) number of pulverized coal fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above. Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

*Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that offered steam generator is of the same type, having same type of water wall tubing for which reference of Steam Generator has been furnished below The details are as follows :-

Sl. No.	Item Description	Station-1	Station-2	Station-3
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1.00.00 Name, address, email, Tel. no. and Fax of QSGM

1.01.00 Name and Designation of the responsible person in QSGM

1.01.01 Name of the reference station and its location

1.01.02 Name, address, email, Fax No. and Tel. No. of Owner of station

1.01.03 Name and Designation of the responsible person in Owner's organization

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.02.00	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Steam Generator Manufacturer from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by QSGM for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is pulverized coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by us for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
d)	*Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
e)	*Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the bidder has acted as advisor for erection / commissioning of reference Steam Generator, bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment pursuant to Note No. 2 for clause no. 1.0.0, Item 4 of BDS)

2.00.00 Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)

2.01.00 Main Steam Temperature at SH outlet (°C)

2.02.00 Main Steam Pressure at SH outlet [kg/cm² (a)]

2.03.00 Reheat steam flow (T/Hr.)

2.04.00 a) Reheater outlet pressure [kg/cm² (a)]

b) Reheater outlet temperature (°C)

2.05.00	Whether balanced draft type or not	Yes*/No*	Yes*/No*	Yes*/No*
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*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.06.00 Type of Steam Generator

Sl. No.	Item Description	Station-1	Station-2	Station-3
i)	Single pass (tower type) or two pass type (must match with offered type)			
ii)	Once through type	Yes*/No*	Yes*/No*	Yes*/No*
iii)	Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*

(In case the answer to above clause (iii) is "No", in such a case, the bidder shall furnish additional data in support of requirements indicated in clause 1.5.0 to this attachment)

2.07.00 Type of circulation system (Natural or Forced/Assisted)

2.08.00 Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled] (must match with offered type)

2.09.00 Minimum mass flow through the water wall tubes Kg/sec./m²

2.10.00 Type of coal used

- i) Max. HHV (Kcal/Kg)
- ii) Min. HHV (Kcal/Kg)
- iii) Max. Ash content (%)
- iv) Max. total moisture content (%)
- v) Volatile matter content (%)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.10.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverized coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting			
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

operated on till date

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.16.00	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by *Bidder (Qualified Steam Generator Manufacturer) from Owner of plant or *any other			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

intermediary organization

Sl. No.	Item Description	Station-1	Station-2	Station-3
(i)	Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder/ *Bidder on behalf of Qualified Steam Generator Manufacturer, in support of the claim of meeting requirement of Note 3 of clause 1.0.0, item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
(ii)	Certificate from Owner of the plant to be furnished by *Bidder/ *Bidder on behalf of Qualified Steam Generator Manufacturer for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0, item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

1.3.0* We confirm that *our JV Company / *our Associate (an Indian *Subsidiary / *JV Company of a QSGM) / *our Associate's (QSGM's) *Indian subsidiary / *JV Company, whose details are indicated at *1.1.0(a) / *1.1.0(c) above, have registered another **Indian Manufacturing Subsidiary Company M/ s.....**, as per Companies Act of India for manufacturing supercritical steam generator sets in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the manufacturing company shall remain a subsidiary of Indian *Subsidiary / *JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian Manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

1.3.0 is to be filled in only in pursuance of Note No. 8 for clause no. 1.0.0 of Item no. 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

The details of Indian Manufacturing Subsidiary Company are as follows :

S.No.	Item Description	
1.00.00	Date of Incorporation of Indian manufacturing Subsidiary Company	
1.01.00	Equity participation of the Indian *Subsidiary / *JV Company in the Indian manufacturing subsidiary company (In percentage of the total equity)	
1.02.00	Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or upto the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to Note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the *Subsidiary / *JV company)	*Yes/*No
2.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment	

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
2.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this Attachment

1.4.0 *We confirm that our Associate (QSGM) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per notes No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

1.4.1 Associate (QSGM) and their subsidiary's(ies') Experience Details in respect of meeting requirement for QSGM (as per clause **1.1.1(A)**), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

1.4.2 Details of *Subsidiary Company/*Joint Venture Company registered by the Associate (QSGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

1.4.3 *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for QSGM as per clause 1.1.0 of BDS

1.4.4 *Name, address, Telephone No., Fax and email of subsidiary company owning the technology for supercritical steam generators

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (QSGM) and above subsidiaries.

TO BE FILLED IN BY THE BIDDER WHO IS SEEKING QUALIFICATION AS PER CLAUSE 1.5.1(a), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E. IF THE ANSWER TO SUB-CLAUSE 2.06.00(iii) TO CLAUSE 1.2.0 ABOVE IS "NO")

1.5.0 *We confirm that M/s _____(Supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A) of BDS **except that the evaporator indicated** in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only and seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is be in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The detail of Licensor and his experience detail are as follows:-

I. Details of Technology Owner (Licensor)

- 1.01.00 Name of the original technology Owner (Licensor)
- 1.02.00 Address, Email ID & Tel No.
- 1.03.00 Name and Designation of the Responsible person in the Organization
- 1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)
- 1.05.00 Date of Start of Licensing agreement

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.06.00 Date of End of Licensing agreement

1.07.00 Whether Scope of licensing agreement covers 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) *Yes/*No

1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

II. Details of experience of Technology owner (Licensor)

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel. No., email ID			
1.03.00	(i) Actual date of completion (ii) Date of commencement of Successful operation			
1.04.00	Whether the Plant in Successful operation	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following :			
	i) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Super heater Outlet (T/Hr.)			
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Coal)	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.10.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Deed of Joint Undertakings as per performance enclosed in Section-VII (Forms & Procedures) is furnished along with the bid at Annexure			

1.6.0 Deed of Joint Undertaking (DJU) executed by us, our wholly owned subsidiary, the QSGM, the JV Company, our Associate / our Associate's QSGM / Indian *Subsidiary / *JV Company (as the case may be), other Promoter having 25% or higher equity participation in the Indian Subsidiary Company / JV Company (as the case may be), *subsidiaries of Holding Company, *Technology Owner (Licensor) of supercritical steam generator, and *Indian manufacturing subsidiary company as per clause 1.5.2 and/or Note No. 4 and/or 5 and/or 6 and/or 7 and/or 8 for clause no. 1.0.0 of Item No. 4.0 of BDS is enclosed at Annexure _____ to this Attachment.

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common Seal).....

2.0.0 *We, M/s.....(Bidder), are an Indian Company holding majority (i.e. at least 51%) stake in M/s....., an Indian Joint Venture (JV) Company for manufacturing supercritical steam turbine generator sets between an Indian company and a Qualified Steam Turbine Generator Manufacturer, and we are seeking Qualification as per clause 1.5.0 of Item No. 4.0 of BDS as per following details.

*We, M/s..... (Bidder), are an Indian Company and hold, through our wholly owned subsidiary M/s....., majority (i.e. at least 51%) stake in M/s....., an Indian Joint Venture (JV) Company for manufacturing supercritical steam turbine generator sets between an Indian company and a Qualified Steam Turbine Generator Manufacturer, and are seeking Qualification as per clause 1.5.0 together with Note 7 for clause no. 1.5.0 of Item No. 4.0 of BDS as per following details.

*We, M/s(an Indian Company holding, *through our wholly owned subsidiary M/s....., at least 51% equity in a JV company for manufacturing supercritical Steam Generator sets between an Indian company and a Qualified Steam Generator Manufacturer, as Bidder), are associating with M/s (*Qualified Steam Turbine Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Turbine Generator Manufacturer / *Indian JV Company of a Qualified Steam Turbine Generator Manufacturer) and shall source the Steam Turbine Generator Set from M/s (Associate) as per clause 1.5.1(b) item no. 4 of BDS.

*Further, our Associate (QSTGM) have registered a *Subsidiary / *JV Company M/s.....in India under the Companies Act of India.

*We, M/s..... (Bidder), through our wholly owned subsidiary M/s....., are seeking Qualification as per clause 1.5.0 together with Note 7 for clause 1.5.0 of Item No. 4.0 of BDS as per following details.

2.1.0(a) *M/s....., the Indian Joint Venture (JV) Company has been incorporated in India under the Companies Act of India for the purpose of manufacturing supercritical steam turbine generator sets in India covering the type, size and rating specified.

The above Joint Venture (JV) Company is promoted by (i) M/s....., a Company registered in India under the Companies Act of India and (ii) M/s , a Qualified Steam Turbine Generator Manufacturer (QSTGM) meeting the requirement of clause 1.1.1(B), item no. 4 of BDS.

The above said JV Company have obtained certificate for commencement of Business in India as on the date of techno-commercial bid opening, (Applicable in case the JV Company is incorporated as a public limited Company).

We confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of the JV Company or up to the end of the defect liability period of the contract whichever is later.

*Further, we, the majority stakeholder have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*Further, our wholly owned subsidiary M/s....., the majority stakeholder, have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later. We shall maintain our 100% equity in the said subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*We, on behalf of our Associate (*QSTGM / *JV Company of a QSTGM), confirm that M/s....., the majority stakeholder in the said JV Company, is an entity other than QSTGM, are an Indian Company.

The details of the Joint Venture (JV) company are as follows :

(in fulfillment of requirement as per clause 1.5.1(a) / 1.1.2(b) / 1.4.1(a) of Item no. 4 of BDS)

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSTGM in the JV company (In percentage of the total equity)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	
1.02.00	<p>Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or upto the end of defect liability period of the contract whichever is later?</p> <p>(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a)/1.4.1(a)/1.1.2(b) of Item No. 4.0 of BDS supported by Board Resolution of the QSTGM)</p>	*Yes/*No
2.00.00	<p>Equity participation of the Majority Stake Holder having Equity equal to or more than 51% in JV Company</p>	
2.01.00	<p>Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or upto the end of defect liability period of the contract whichever is later?</p> <p>(Majority Stake Holder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a)/1.4.1(a)/1.1.2(b) of Item No. 4.0 of BDS supported by Board Resolution of the Majority Stake Holder)</p>	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

2.1.0(a)(i)**We (Bidder) confirm that we are the majority stakeholder in the said JV company.

*We, on behalf of our Associate, confirm that M/s, the majority stakeholder in the said JV company, is an Indian company and an entity other than the Qualified Steam Turbine Generator Manufacturer (QSTGM).

We further confirm that the majority stake holder in the JV Company, have executed in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of techno-commercial bid opening. The details are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name, email and its address, Fax No. and Tel. No.			
1.02	Name and designation of the responsible person in Owner's organization			

2.1.0(a)(i) is applicable in case the Bidder is the majority stake holder in the JV company either on its own or through its wholly owned subsidiary, or the Bidder's Associate is a JV Company.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment Note 7 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

- 1.13 Date of Incorporation of JV Company
- 1.14 Equity participation of majority Stake Holder Company in the Indian JV company (in percentage of the total equity)
- 1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later? *Yes/ *No

(Bidder to furnish a letter of undertaking as per formant enclosed at Attachment-3A10 for equity participation of majority Stake Holder Company in the Indian JV company along with lock in period of such equity in compliance to Note 7 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of majority Stake Holder Company)

2.1.0**(a)(ii) We, on behalf of our Associate, confirm that the said Indian JV Company's Parent Company M/s..... have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that the Indian JV Company is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the said Indian JV Company (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

2.1.0**(a)(ii) is to be filled in only in pursuance of Note No. 6 for cl. no. 1.0.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

The qualification details of Parent Company of Indian JV Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year as on date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of parent company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)		*Yes / *No	

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.1.0 *(b) We confirm that our wholly owned subsidiary M/s..... , the majority stakeholder, have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the said JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later. We shall maintain our 100% equity in the said subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

2.1.0(b) is to be filled in only in pursuance of Note No. 7 for clause 1.0.0 of Item No. 4 of BDS.*

The details of the wholly owned Subsidiary Company are as follows :

- 1.00.00 Date of Incorporation of the Subsidiary Company
- 1.01.00 Our equity participation in the subsidiary company (in percentage of the total equity)
- 1.02.00 Lock in period for above equity participation from the date of incorporation

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the Subsidiary Company along with lock in period of such equity in compliance to Note 7 for clause 1.0.0 of item 4 of BDS supported by their Board Resolution)
- 2.00.00 Equity participation of the subsidiary company having equity equal to or more than 51% in the JV company for manufacturing supercritical steam turbine generator sets in India between an Indian company and a QSTGM

2.01.00 Lock in period for above equity participation from the date of incorporation

(Bidder to furnish, on behalf of its subsidiary, a letter of undertaking as per format enclosed at Attachment 3A10 for the subsidiary's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.5.1(a) together with Note 7 for clause 1.0.0 of item 4 of BDS supported by Board Resolution of the subsidiary)

3.00.00 Copy of Certificate of Incorporation and Memorandum of Association of Bidder's subsidiary company is enclosed at Annexure_____of this Attachment

2.1.0 *(c) We confirm that *our Associate is an Indian Subsidiary Company of M/s..... (QSTGM) registered in India / *our Associate (QSTGM) have registered an Indian Subsidiary Company M/s.....in India as per Companies Act of India, for manufacturing supercritical Steam Turbine Generator sets covering the type, size and rating specified. Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of the Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows :

- 1.00.00 Date of Incorporation of Indian Subsidiary Company
- 1.01.00 Equity participation of QSTGM in the Indian subsidiary company (In percentage of the total equity)
- 1.02.00 Lock in period for above equity participation from the date of incorporation
- (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
- 2.00.00 *Equity participation of other Promoter having Equity equal to or more than 25% in the Indian Subsidiary Company
- 2.01.00 *Lock in period for above equity participation from the date of incorporation.
- 3.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
- 3.01.00 Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.2.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number supercritical steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm² (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows :-

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.00.00	Name, address, email, Tel no. and Fax of QSTGM		
1.01.00	Name and Designation of the responsible person in QSTGM		
1.01.01	Name of the reference station and its location		
1.01.02	Name, address, Fax No., e- mail and Tel. No. of Owner of reference station		
1.01.03	Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by Qualified Steam Turbine Generator Manufacturer from intermediary organization		
1.02.00	Name and Designation of the responsible person in Owner's organization		

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.02.01	Name and Designation of the responsible person in intermediary organization		
1.03.00	No. of Steam Turbine Generator Sets supplied by QSTGM for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by QSTGM for the aforesaid Steam Turbine Generator Set includes the following :		
	(a) Designed	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No
	(e) *Commissioned/*Super- vised Commissioning / **Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.00.00 Details of Turbine				
2.01.00	Steam Turbine make			
2.02.00	Tandem compound	*Yes/*No	*Yes/*No	*Yes/*No
2.03.00	No. of Reheat			
2.04.00	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg.C)			
2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	* Horizontally / *Vertical	* Horizontally / *Vertical	* Horizontally / *Vertical
3.09.00	Installation	* Indoor/ *Outdoor	*Indoor/ Outdoor	*Indoor/ Outdoor
3.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate(s) from the Owner that the aforesaid Steam Turbine Generator Set/Steam Turbine/Generator (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening, and caused no serious problem in past, is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
4.02.00	<p>Documentary evidence in case the award for reference work (steam Turbine generator set) has been received by *Bidder (*Indian Subsidiary Company of QSTGM)/ *Associate (*QSTGM/ Indian *Subsidiary/*JV Company of QSTGM) from Owner of plant or *any other intermediary organization</p> <p>(i) Certificate from *Owner of the plant or *intermediary organization to be furnished by *Bidder / *Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment</p> <p>(ii) Certificate from Owner of the plant to be furnished by *Bidder / *Bidder on behalf of its Associate for the successful operation of the Steam Turbine *Generator Set (as applicable) as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment</p>			

2.3.0* We confirm that *our JV Company / *our Associate (an Indian *Subsidiary / *JV Company of a QSTGM) / *our Associate's (QSTGM's) *Indian subsidiary / *JV Company, whose details are indicated at *2.1.0(a) / *2.1.0(c) above have registered another **Indian Manufacturing Subsidiary** Company M/s....., as per Companies Act of India for manufacturing supercritical steam turbine generator sets in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the manufacturing company shall remain a subsidiary of Indian *Subsidiary / *JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian Manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

2.3.0 is to be filled in only in pursuance of Note No. 8 for clause no. 1.0.0 of Item no. 4 of BDS.*

The details of Indian Manufacturing Subsidiary Company are as follows:

- | | | |
|---------|--|----------|
| 1.00.00 | Date of Incorporation of Indian manufacturing Subsidiary Company | |
| 1.01.00 | Equity participation of the Indian *Subsidiary / *JV Company in the Indian manufacturing subsidiary company (In percentage of the total equity) | |
| 1.02.00 | Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later? | *Yes/*No |

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to Note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the
*Subsidiary/ *JV company)

- 2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
- 2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure_____ of this Attachment

2.4.0** We confirm that M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence as per clause 1.5.3 of item no. 4.0 of BDS, the *Subsidiary Company / *JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.5.3 of item no. 4.0 of BDS fully in respect of generator. The details are as follows :-

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian *Subsidiary / *JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian *Subsidiary / *JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name, address, email, Tel. No. and Fax of the Qualified Generator Manufacturer			
1.01.00	Name of the reference station and its location			
1.01.01	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.02	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Generator Manufacturer from intermediary organization			
1.02.00	Name and designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization.			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			
1.06.00	Starting date of project			
1.07.00	Scheduled date of commissioning			
1.08.00	Actual date of commissioning			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.09.00	Date of commencement of successful operation			
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
	(a) Designed	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure..... of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

1.02.05 Rated voltage (kV)

1.02.06 No. of phases

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.07	No. of poles			
1.02.08	Mounting	*Horizontal / *Vertical	*Horizontal / *Vertical	*Horizontal / *Vertical
1.02.09	Installation	* Indoor/ *Outdoor	* Indoor/ *Outdoor	* Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	* Yes/*No	* Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
3.00.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.5.0 *We confirm that our Associate (QSTGM) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per notes No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

2.5.1 Associate (QSTGM) and their subsidiary's(ies)' Experience Details in respect of meeting requirement for QSTGM (as per clause **1.1.1(B)**), item 4 of BDS (To be filled at page _____ of this Attachment) to _

2.5.2 Details of *Subsidiary Company/*Joint Venture Company registered by the Associate (QSTGM) in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page _____ of this Attachment) to of

2.5.3 a) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for qualified Steam Turbine *Generator Manufacturer as per clause 1.1.0 of BDS

2.5.3 b) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for qualified Generator Manufacturer as per clause 1.1.0 of BDS

2.5.4 a) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical Steam Turbine *Generators

2.5.4 b) *Name, address, Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical Generators

*We have submitted the experience details in support of Qualifying Requirement at 1.2.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 1.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (QSTGM) and above subsidiaries.

2.6.0 Deed of Joint Undertaking (DJU) executed by us, our wholly owned subsidiary, the QSTGM, the JV Company, our Associate / our Associate's QSTGM / Indian *Subsidiary / *JV Company (as the case may be), other Promoter having 25% or higher equity participation in the Indian Subsidiary Company / JV Company (as the case may be), *subsidiaries of Holding Company, *qualified generator manufacturer, and *Indian manufacturing subsidiary company as per clause 1.5.2 and/or and/or Note No. 4 and/or 5 and/or 6 and/or 7 and/or 8 for clause no. 1.0.0 of Item No. 4.0 of BDS is enclosed at Annexure _____ to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

**[Experience details of an Engineering, Procurement and Construction (EPC)
Organization as Bidder, as per Clause 1.6.0, Item No. 4.0 of BDS]**

Bidder's Name & Address : To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0.0 We, M/s....., a company having experience of 500 MW or above supercritical units on EPC basis are seeking Qualification as per clause 1.6.0, Item No. 4 of BDS.

1.1.0 *We confirm that we have executed on Engineering, Procurement and Construction (EPC) basis, minimum one (1) no. 500MW or above Pulverised coal fired supercritical unit comprising of at least Steam Generator and Steam Turbine Generator Sets along with their associated auxiliary equipment, Electrostatic Precipitators / Bag Filters, Switchyard, Coal handling plant, Ash handling plant, Cooling Towers, Condenser Cooling Water System, including associated Civil works for the above equipment and systems, which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause 1.6.1(a) of Item No. 4 of BDS.

*We meet the requirement as per clause 1.6.1(a), Item No. 4 of BDS, except for Electrostatic Precipitators / Bag Filters, Switchyard, Coal handling plant, Ash handling plant, Cooling Towers, Condenser Cooling Water System. **Additionally, we meet the requirement as per clause 4.1.0(b) of Item No. 4 of BDS.**

*We meet the requirement as per clause 1.6.1(a) of Item No. 4 of BDS, except for Electrostatic Precipitators / Bag Filters, Switchyard, Coal handling plant, Ash handling plant, Cooling Towers, Condenser Cooling Water System. Additionally, we are associating with M/s.....a **Project Management Organization (PMO)** who meets the requirement as per clause 4.1.0(b) of Item No. 4 of BDS.

The details are furnished as below:

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name of the reference station and its location			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.01.00	Name, address, email, Tel. no. and Fax of owner of the station			
1.01.01	Name and Designation of the responsible person in owner's organization			
1.01.02	No. of units & Capacity of each unit in MW			
1.01.03	No. of steam generator & steam turbine generator sets supplied for the reference station			
1.01.04	Contract No. & Date			
1.01.05	Starting date of project			
1.01.06	Scheduled date of Commissioning			
1.01.07	Actual date of Commissioning			
1.01.08	Date of commencement of successful operation			
1.01.09	Whether the Plant has coal fired supercritical unit	Yes*/No*	Yes*/No*	Yes*/No*
1.01.10	Scope of work executed by us on EPC basis as detailed below :			
	a) *Engineered/*got Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	b) *Supplied / *Procured	Yes*/No*	Yes*/No*	Yes*/No*
	c) Erected	Yes*/No*	Yes*/No*	Yes*/No*
	d) Commissioned	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.01.11	Whether the scope of work included :			
i)	Steam Generator sets along with their associated auxiliary equipment	Yes*/No*	Yes*/No*	Yes*/No*
ii)	Steam Turbine Generator sets along with their associated auxiliary equipment	Yes*/No*	Yes*/No*	Yes*/No*
iii)	Electrostatic Precipitators / Bag Filters	Yes*/No*	Yes*/No*	Yes*/No*
iv)	Switchyard	Yes*/No*	Yes*/No*	Yes*/No*
v)	Coal Handling Plant	Yes*/No*	Yes*/No*	Yes*/No*
vi)	Ash Handling Plant	Yes*/No*	Yes*/No*	Yes*/No*
vii)	Cooling Towers	Yes*/No*	Yes*/No*	Yes*/No*
viii)	Condenser Cooling Water System	Yes*/No*	Yes*/No*	Yes*/No*
ix)	Associated Civil Works	Yes*/No*	Yes*/No*	Yes*/No*

Details of Steam Generator

- 2.00.00 Name and Address of Steam Generator Set manufacturer
- 2.01.00 Steam Generator steam flow capacity at SH outlet (T/Hr.)
- 2.02.00 Main Steam Temperature at SH outlet (°C)
- 2.03.00 Main Steam Pressure at SH outlet [kg/cm²/(a)]

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.04.00	Reheat steam flow (T/Hr.)			
2.05.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.06.00	Whether balanced draft type or not			
2.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
2.08.00	Type of circulation system (Natural or Forced Circulation)			
2.09.00	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
2.10.00	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			
2.11.00	Type of coal used			
	i) Max. HHV (Kcal/Kg)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.11.01	Type of oil used			
	i) HHV (Kcal/Kg)			
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.12.00	Fuel (other than pulverised coal fired)			
2.12.01	Type of fuel used			
2.12.02	Firing rate			
2.12.03	Calorific value of fuel (Kcal/kg)			
2.13.00	Designed Boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency and corresponding GCV			
2.15.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.16.00	a) Whether used for two shifting			
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.17.00	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.18.00	Availabilities of steam generator for last two years			
2.19.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
Details of Steam Turbine Generator				
3.00.00	Name and address of steam turbine generator set manufacturer			
3.01.00	No. of Steam Turbine Generator set supplied for the station			
3.02.00	Capacity of Turbine Generator Set in MW of unit			
3.03.00	Steam Turbine make & model			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.04.00	*Tandem Compound / *Cross Compound			
3.05.00	No. of Reheat			
3.06.00	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
3.07.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
3.08.00	Main Steam Pressure (gauge)			
3.09.00	Main Steam Temperature (deg C)			
3.10.00	Reheat Steam Temperature (deg C)			
3.11.00	Exhaust Pressure (ata)			
3.12.00	Condensing Type			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.13.00	Rated Speed (rpm) and Operating Frequency Range (Hz)			
3.14.00	No. of Steam extractions			
3.15.00	Steam Turbine and Generator coupled directly	*Yes/*No	*Yes/*No	*Yes/*No
3.16.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
4.00.00 Generator Details				
4.01.00	Generator make and model No.			
4.02.00	Rated MVA			
4.03.00	Rated Power Factor			
4.04.00	MW rating			
4.05.00	Rated voltage (kV)			
4.06.00	No. of phases			
4.07.00	No. of poles			
4.08.00	Mounting	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical
4.09.00	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
4.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
4.11.00	Cooling medium			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	(a) Stator			
	(b) Rotor			
4.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
4.13.00	List of balance power plant equipment and their manufacturers name(s) for the referred station is enclosed at Annexure.....			
5.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set with their Associated Auxiliaries and facilities is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
5.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
6.00.00	List of all the similar Power Plants under execution on EPC basis along with the details such as order no. & date, order value and scheduled date of commissioning is enclosed separately at Annexure.....			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
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7.00.00 List of all the similar Power Plants executed on EPC basis (including associated civil works) along with the date of commissioning is enclosed separately at Annexure.....

2.0.0 *We, M/s..... (Bidder), confirm that we have executed at least one (1) no. of coal / lignite fired reheat type of unit of at least 200 MW which is in succesful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening, as per clause no. 4.1.0(b), Item no. 4 of BDS.

*We are associating with M/s....., a Project Management Organization (PMO), who have carried out project management work of at least one (1) no. of coal / lignite fired reheat type of unit of at least 200 MW which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause 4.1.0(b), Item no. 4 of BDS.

The details are furnished as below :

Sl. No.	Item Description	Station-1	Station-2	Station-3
---------	------------------	-----------	-----------	-----------

1.00.00 Name, address, Tel. No., Fax No. and email of the Project Management Organization (PMO)

1.01.00 Name and Designation of the responsible person in the PMO

1.02.00 Name of the reference station and its location

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.02.01	Name, address, email, Tel. no. and Fax of owner of the station			
1.02.02	Name and Designation of the responsible person in owner's organization			
1.02.03	No. of units & Capacity of each unit in MW			
1.02.04	Contract No. & Date			
1.02.05	Starting date of project			
1.02.06	Scheduled date of Commissioning			
1.02.07	Actual date of Commissioning			
1.02.08.	Date of commencement of successful operation			
1.02.09	Whether the Plant is coal fired or lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
1.02.10	Whether the plant is reheat type	*Yes/*No	*Yes/*No	*Yes/*No
1.02.11	Scope of work executed by *us / *PMO as detailed below :			
	a) Engineering management	Yes*/No*	*Yes/*No	*Yes/*No
	b) Procurement management	Yes*/No*	*Yes/*No	*Yes/*No
	c) Construction management	Yes*/No*	*Yes/*No	*Yes/*No
	d) *Commissioning / *Supervision of Commissioning	Yes*/No*	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.02.12	Whether the scope of work included :			
i)	Steam Generator sets along with their associated auxiliaries	*Yes/No*	*Yes/No*	*Yes/No*
ii)	Steam Turbine Generator sets along with their associated auxiliaries	*Yes/No*	*Yes/No*	*Yes/No*
iii)	Electrostatic Precipitators / Bag filters	*Yes/No*	*Yes/No*	*Yes/No*
iv)	Switchyard	*Yes/No*	*Yes/No*	*Yes/No*
v)	Coal Handling Plant	*Yes/No*	*Yes/No*	*Yes/No*
vi)	Ash Handling Plant	*Yes/No*	*Yes/No*	*Yes/No*
vii)	Cooling Towers	*Yes/No*	*Yes/No*	*Yes/No*
vi)	Condenser Cooling Water System	*Yes/No*	*Yes/No*	*Yes/No*

Details of Steam Generator

- 2.00.00 Name and Address of Steam Generator Set manufacturer
- 2.01.00 Steam Generator steam flow capacity at SH outlet (T/Hr.)
- 2.02.00 Main Steam Temperature at SH outlet (°C)
- 2.03.00 Main Steam Pressure at SH outlet [kg/cm²/(a)]
- 2.04.00 Reheat steam flow (T/Hr.)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.05.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.06.00	Whether balanced draft type or not	*Yes/No*	*Yes/No*	*Yes/No*
2.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	*Yes/No*	*Yes/No*	*Yes/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)			
2.08.00	Type of circulation system (Natural or Forced Circulation)			
2.09.00	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
2.10.00	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			
2.11.00	Type of fuel used			
2.11.01	Firing rate			
2.11.02	Calorific value of fuel (Kcal/kg)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting	*Yes/No*	*Yes/No*	*Yes/No*
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.16.00	Minimum start-up time achieved			
	i) Hot start (after shut down of 10 hours)			
	ii) Warm start (after shut down between 10 hours and 72 hours)			
	iii) Cold start (after shut down of exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
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Details of Steam Turbine Generator

3.00.00	Name and address of steam turbine generator set manufacturer			
3.01.00	No. of Steam Turbine Generator set supplied for the station			
3.02.00	Capacity of Turbine Generator Set in MW of unit			
3.03.00	Steam Turbine make & model			
3.04.00	*Tandem Compound / *Cross Compound			
3.05.00	No. of Reheat			
3.06.00	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
3.07.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.08.00	Main Steam Pressure (gauge)			
3.09.00	Main Steam Temperature (deg C)			
3.10.00	Reheat Steam Temperature (deg C)			
3.11.00	Exhaust Pressure (ata)			
3.12.00	Condensing Type			
3.13.00	Rated Speed (rpm) and Operating Frequency Range (Hz)			
3.14.00	No. of Steam extractions			
3.15.00	Steam Turbine and Generator coupled directly			
3.16.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
4.00.00	Generator Details			
4.01.00	Generator make and model No.			
4.02.00	Rated MVA			
4.03.00	Rated Power Factor			
4.04.00	MW rating			
4.05.00	Rated voltage (kV)			
4.06.00	No. of phases			
4.07.00	No. of poles			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
4.08.00	Mounting	*Hori-/ zontally/ *Vertical	*Hori-/ zontally/ *Vertical	*Hori-/ *Vertical *Vertical
4.09.00	Installation	* Indoor/ *Outdoor	* Indoor/ *Outdoor	* Indoor/ *Outdoor
4.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
4.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
4.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
5.00.00	List of balance power plant equipment and their manufacturers name(s) for the referred stations is enclosed at Annexure.....			
6.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set with their associated auxiliaries and facilities is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
6.01.00	Documentary evidence in support of above QR data is enclosed at Annexure..... to this Attachment			
7.00.00	List of all the similar Power Plants under execution on EPC basis along with the details such as order no. & date, order value and scheduled date of commissioning is enclosed separately at Annexure.....			
8.00.00	List of all the similar Power Plants executed by *us / *PMO, where scope of work included Engineering management, Procurement management, Construction management and commissioning / supervision of commissioning, along with the date of commissioning is enclosed separately at Annexure.....			
9.00.00	Deed of Joint Undertaking (DJU) executed by us and the Project Management Organization (PMO) as per clause no. 4.1.0(b) of Item No. 4 of BDS is enclosed at Annexure _____ to this Attachment.			

3.0.0 We are associating with M/s(*Qualified Steam Generator Manufacturer / Indian *Subsidiary of Qualified Steam Generator Manufacturer / *JV Company of Qualified Steam Generator Manufacturer) and shall source the Steam Generator Set from M/s..... (Associate) as per clause 1.6.2(i) item no. 4 of BDS. The details are as follows:

3.1.0 We confirm that the QSGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised

Commissioning of at least one (1) number of pulverised coal fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above. Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and is in successful operation for a period of not less than one

(1) year prior to the date of Techno-Commercial bid opening.

* Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that offered steam generator is of the same type, having same type of water wall tubing for which reference of Steam Generator has been furnished below The details are as follows :-

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSGM			
1.01.00	Name and Designation of the responsible person in QSGM			
1.01.00	Name of the reference station and its location			
1.01.01	Name, address, e-mail, Fax No. and Tel. No. of Owner of station			
1.01.02	Name and Designation of the responsible person in Owner's organization			
1.02.00	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by QSGM from intermediary organization			
1.02.01	Name and Designation of the responsible person in intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.03.00	No. of units & capacity of each unit in MW			
1.04.00	No. of steam generator sets supplied by QSGM for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QSGM for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
	e) *Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
<p>(**In case the QSGM has acted as advisor for erection / commissioning of reference Steam Generator & auxiliaries, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note 2 for clause no. 1.0.0 of item 4 of BDS)</p>				
2.00.00	Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			
2.01.00	Main Steam Temperature at SH outlet (°C)			
2.02.00	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not	*Yes/No*	*Yes/No*	*Yes/No*
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*

(In case the answer to above clause (iii) is "No", in such a case, the Associate shall furnish additional data in support of requirements indicated in clause 3.4.0 to this attachment)

2.07.00 Type of circulation system
(Natural or Forced/Assisted)

2.08.00 Type of Water wall tubes
[spiral wound (inclined)
or vertical plain or vertical rifled]
(must match with offered type)

2.09.00 Minimum mass flow through
the water wall tubes Kg/sec./m²

2.10.00 Type of coal used

- i) Max. HHV (Kcal/Kg)
- ii) Min. HHV (Kcal/Kg)
- iii) Max. Ash content (%)
- iv) Max. total moisture content (%)
- v) Volatile matter content (%)

2.10.01 Type of oil used

- i) HHV (Kcal/Kg)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.00	Fuel (other than pulverised coal fired)			
2.11.01	Type of fuel used			
2.11.02	Firing rate			
2.11.03	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting	*Yes/No*	*Yes/No*	*Yes/No*
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.16.00	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Associate (*QSGM / Indian *Subsidiary / *JV Company of QSGM) from Owner of plant or any other intermediary organization			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
(i)	Certificate from *Owner of the plant or *intermediary organization to be furnished by Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
(ii)	Certificate from *Owner of the plant to be furnished by Bidder on behalf of its Associate for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

3.2.0 *(a) We confirm that *our Associate (QSGM) have registered an Indian Subsidiary Company M/s..... / *our Associate is an Indian Subsidiary Company of M/s..... (QSGM) registered in India, as per Companies Act of India, for manufacturing **supercritical Steam Generator sets** covering the type, size and rating specified. Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

The details of Indian Subsidiary Company are as follows :

S.No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSGM in the subsidiary company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.2.0 *(b) We confirm that *our Associate (QSGM) have registered a Joint Venture (JV) Company M/s..... / *our Associate is a Joint Venture Company registered in India, as per Companies Act of India for manufacturing supercritical steam generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s..... , an Indian Company registered in India under the Companies Act of India and (ii) M/s , a QSGM, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

Further M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows:

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSGM in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description
	(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company
2.01.00	Lock in period for above equity participation from the date of incorporation
	(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.2.0**(b)(i) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate) is an entity other than the QSGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno- Commercial bid opening. The details are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			

*Bidder to furnish 3.2.0**(b)(i) & (ii) only when his Associate is a JV Company of QSGM, as per clause 1.4.1(a), item no. 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

3.2.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSGM are an Indian Company. Our Associate's Parent Company M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year as on the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of thier parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or upto the end of defect liability period of the contract whichever is later.

3.2.0**(b)(ii) is to be filled in only in pursuance of Note No. 6 of cl. no. 1.0.0 of Item no. 4 of BDS.

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

The qualification details of the Parent Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.15	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or upto the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of Parent Company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.2.0 *(c) We confirm that M/s....., our Associate (an Indian *Subsidiary / *JV Company) / our Associate's *Indian subsidiary / *JV Company, whose details are indicated at *3.2.0(a) / *3.2.0(b) above have registered another **Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the Indian Manufacturing Subsidiary company shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian manufacturing Subsidiary Company are as follows:

- | | | |
|---------|---|--------|
| 1.00.00 | Date of Incorporation of Indian manufacturing Subsidiary Company | |
| 1.01.00 | Equity participation of the *Indian subsidiary / *JV company in the Indian manufacturing subsidiary company (in percentage of the total equity) | |
| 1.02.00 | Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ? | Yes/No |

3.20*(c) is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A-10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company)

2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this attachment

3.3.0 *We confirm that M/s....., (Associate) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per notes No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows:

3.3.1 Associate and their subsidiary's (ies') Experience Details in respect of meeting requirement for QSGM (as per clause **1.1.1(A)**), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

3.3.2 Details of Subsidiary Company/Joint Venture Company registered by the Associate in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page _____ to _____ of this Attachment)

3.3.3 *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for QSGM as per clause 1.1.0 of BDS

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.3.4 *Name, address & Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam generators

*We have submitted the experience details in support of Qualifying Requirement at 3.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 3.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

TO BE FILLED IN BY THE BIDDER WHOSE ASSOCIATE IS SEEKING QUALIFICATION AS PER CLAUSE 1.1.1(A), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E. IF THE ANSWER TO SUB-CLAUSE 2.06.00(iii) TO CLAUSE 3.1.0 ABOVE IS "NO")

3.4.0 We, confirm that M/s _____(supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A), Item 4 of BDS except that the evaporator indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and is seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening.

We further confirm that we have offered only the type of steam generator i.e. single pass (tower type) or two pass type for which we are qualified and have offered only the type or water wall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) for which our licensor is qualified. The details of Licensor and his experience details are as follows:-

I. Details of Technology Owner (Licensor)

1.01.00 Name of the original technology owner (Licensor)

1.02.00 Address, Email ID & Tel No. & Fax

1.03.00 Name and Designation of the Responsible person in the Organization

1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)

1.05.00 Date of Start of Licensing agreement

1.06.00 Date of End of Licensing agreement

1.07.00 Whether Scope of licensing agreement covers 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).

*Yes/*No

1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
II. Details of experience of Technology Owner (Licensor)				
1.01.00	Name of the reference station and its location			
1.02.00	Client name and its address, Fax No. & Tel. No., email ID			
1.03.00	Actual date of completion/ date of commencement of Successful operation			
1.04.00	Whether the Plant is in Successful operation	*Yes*/No*	*Yes*/No*	*Yes*/No*
1.05.00	Scope of work executed for the aforesaid Steam Generator includes the following:			
	i) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Whether the plant is in successful operation for a period of one (1) year (Minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) Supercritical Steam Generator	Yes*/No*	Yes*/No*	Yes*/No*
	ii) Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	i) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.09.00	Type of firing (Coal)	Yes*/No*	Yes*/No*	Yes*/No*
1.10.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Deed of Joint Undertaking (DJU) as per performa enclosed in Section-VII (Forms & Procedures) is furnished along with the bid at Annexure			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.5.0 Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, our Associate's *QSGM / Indian *Subsidiary Company / *JV Company (as the case may be), Other Promoter having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (as the case may be), *subsidiaries of Holding Company (the Associate) and *the manufacturing subsidiary Company, *Technology Owner (Licensor) of supercritical steam generator as per clause 1.6.3 and/or Note No. 4 and/or Note No. 5 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure_____to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

4.0.0 We are associating with M/s(*Qualified Steam Turbine Generator Manufacturer / Indian *Subsidiary of QSTGM / *JV Company of QSTGM) and shall source the Steam Turbine Generator Set from M/s (Associate) as per clause 1.6.2(ii) item no. 4 of BDS. The details are as follows:

4.1.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number supercritical steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm² (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows :-

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.00.00	Name, address, e-mail, Tel. No. and Fax No. of the QSTGM		
1.01.00	Name and Designation of the responsible person in QSTGM		
1.01.00	Name of the reference station and its location		
1.01.01	Name, address, Fax No., e-mail and Tel. No. of Owner of the reference station		
1.01.02	Name, address, Fax No., e-mail and Tel. No. of intermediary organization in case the award has been received by QSTGM from intermediary organization		

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.02.00	Name and Designation of the responsible person in Owner's organization		
1.02.01	Name and Designation of the responsible person in intermediary organization		
1.03.00	No. of Steam Turbine Generator Sets supplied by QSTGM for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by QSTGM for the aforesaid Steam Turbine Generator Set includes the following:		
	(a) Designed	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Super vised Commissioning/ **Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Turbine

2.01.00 Steam Turbine make

2.02.00 Tandem compound *Yes/*No *Yes/*No *Yes/*No

2.03.00 No. of Reheat

2.04.00 (i) No. of Cylinders:

(a) HP

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.05.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg.C)			
2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			
3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical
3.09.00	Installation	* Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
3.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.00.00	Certificate(s) from the Owner of the reference Plant that the aforesaid Steam Turbine *Generator Set (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam turbine generator set) has been received by Associate (*QSTGM / Indian *Subsidiary / *JV Company of QSTGM) from Owner of plant or any other intermediary organization			
(i)	Certificate from *Owner of the plant or *intermediary organization to be furnished by Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
(ii)	Certificate from *Owner of the plant to be furnished by Bidder on behalf of its Associate for the successful operation of the Steam Turbine Generator Set as specified at requirement stipulated at clause 1.1.0, item 4 of BDS, as the case may be, enclosed at Annexure.... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

4.2.0 *(a) We confirm that *our Associate, a QSTGM, have registered an Indian Subsidiary Company M/s..... / *our Associate is an Indian Subsidiary Company of M/s (QSTGM) registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator sets** covering the type, size and rating specified. Further the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/sis a subsidiary company of M/s..... (QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*We confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS **except for Generator** and accordingly, the Indian Subsidiary Company have associated and have a technology transfer agreement with M/s..... (**Qualified Generator Manufacturer**) who meets the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s..... (Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the said Indian Subsidiary Company for a lock in period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows:

- 1.00.00 Date of Incorporation of Indian Subsidiary Company

- 1.01.00 Equity participation of Qualified Steam Turbine Generator* manufacturer in the subsidiary company (In percentage of the total equity)

- 1.02.00 Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
- 2.00.00 *Equity participation of other Promoter having Equity more than 25% in Indian Subsidiary Company
- 2.01.00 *Lock in period for above equity participation from the date of incorporation.
- 3.00.00 *Equity participation of Qualified Generator manufacturer, in the Indian Subsidiary company.
- 3.01.00 *Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian subsidiary company or up to the end of defect liability period of the contract whichever is later? *Yes/*No
- (Qualified Generator manufacturer to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator manufacturer)

- 4.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
- 4.01.00 Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure_____ of this Attachment

4.2.0 *(b) We confirm that *our Associate, a QSTGM, have registered a Joint Venture (JV) Company M/s..... / *our Associate is a Joint Venture Company registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator set** covering the type, size and rating specified. The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s, a **QSTGM**, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We further confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

Further M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*We further confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS except for Generator and accordingly, the JV Company have associated and have a technology transfer agreement with M/s.....(**Qualified Generator Manufacturer**) who meets the the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s..... (Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the JV Company for a lock

in period of 7 years from the date of incorporation of this JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows :

1.00.00 Date of Incorporation of JV Company

1.01.00 Equity participation of **Qualified Steam Turbine Generator*** manufacturer in the JV company (In percentage of the total equity)

1.02.00 Lock in period for above equity participation from the date of incorporation

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/ 1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)

2.00.00 Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company

2.01.00 Lock in period for above equity participation from the date of incorporation

(Majority Stake Holder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.00.00 *Equity participation of Qualified Generator manufacturer in the JV Company

3.01.00 *Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later? *Yes/*No

(Qualified Generator Manufacturer to furnish a letter of undertaking as per format enclosed at Attachment 3A-10 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator Manufacturer)

4.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

4.01.00 Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

4.2.0**(b)(i) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate) is an entity other than the QSTGM and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows :

*Bidder to furnish 4.2.0**(b)(i) & (ii) only when his Associate is a JV Company of QSTGM, as per clause 1.4.1(a), Item No. 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.12	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			

4.2.0**(b)(ii)We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSTGM are an Indian Company. Our Associate's **Parent Company** M/s have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of their Parent Company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

The qualification details of the Parent Company are as follows:

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organization			

4.2.0**(b)(ii) is to be filled in only in pursuance of Note No. 6 of cl. no. 1.1.0 of Item no. 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.11	Necessary documentary evidence is support of above are attached at Annexure..... of this Attachment			
1.12	Date of Incorporation of JV Company			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.13	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			
1.14	Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later? (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A10 for equity participation of Parent Company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)	*Yes/*No	*Yes/*No	*Yes/*No

4.2.0*(c) We confirm that M/sour Associate (an Indian *Subsidiary / *JV Company) / our Associate's *Indian subsidiary / *JV Company, whose details are indicated at *4.2.0(a) / *4.2.0(b) above, have registered **another Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam turbine generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening(Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that M/s....., the manufacturing company, shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

4.2.0(c) is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.*

***Bidder to Strike off if not applicable**

Signature of Authorised Signatory.....

The details of Indian manufacturing Subsidiary Company are as follows :

- 1.00.00 Date of Incorporation of Indian Manufacturing Subsidiary Company
- 1.01.00 Equity participation of the *Indian Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity)
- 1.02.00 Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ? *Yes/*No

(Bidder to furnish a letter of undertaking as per format enclose at Attachment 3A10 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the *Indian subsidiary/* JV company)

- 2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure_____ of this Attachment
- 2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure_____of this Attachment

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

4.3.0** We confirm that M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence, as per clause 1.6.4 of item no. 4.0 of BDS, the Subsidiary Company / JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.6.4 of item no. 4.0 of BDS fully in respect of generator. The details are as follows :-

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian Subsidiary / JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian Subsidiary / JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name of the reference station and its location			
1.01.00	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.01.01	Name, address, email, Fax No. and Tel. No. of intermediary organization in case the award has been received by Qualified Generator Manufacturer from intermediary organization			
1.02.00	Name and Designation of the responsible person in Owner's organization			
1.02.01	Name and Designation of the responsible person in intermediary organization.			
1.03.00	No. of Generator Sets supplied			
1.04.00	Contract No. and Date			
1.05.00	Capacity in MW of Unit			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.06.00	Starting date of project			
1.07.00	Scheduled date of completion			
1.08.00	Actual date of completion			
1.09.00	Date of commencement of successful operation			
1.10.00	Scope of work for the aforesaid Generator Set includes the following:			
	(a) Designed	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Engineered	*Yes/*No	*Yes/*No	*Yes/*No
	(c) *Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
	(d) *Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
	(e) *Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents /Certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure..... of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.04	MW rating			
1.02.05	Rated voltage (kV)			
1.02.06	No. of phases			
1.02.07	No. of poles			
1.02.08	Mounting	*Hori- zontal/ *Vertical	*Hori- zontal/ *Vertical	*Hori- zontal/ *Vertical
1.02.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	*Yes/*No	*Yes/*No	*Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.02.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.02.13	Date of Commissioning			
1.02.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure. to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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3.00.00 Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment

4.4.0 *We confirm that M/s....., (Associate) is seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per notes No. 4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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4.4.1 Associate and their Subsidiary's(ies) Experience details in respect of the meeting requirement for **QSTGM (as per clause 1.1.1(B))**, item 4 of BDS (To be filled at page ___ of this Attachment) to ___ of

4.4.2 Details of Subsidiary Company/Joint Venture Company registered by the Associate in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS (To be filled at page ___ of this Attachment) to ___ of

4.4.3 a) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for supercritical Steam Turbine Manufacturer as per clause 1.1.0 of BDS

b) *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for Generator Manufacturer as per clause 1.1.0 of BDS

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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- 4.4.4 a) *Name, address, Telephone No.,
Fax and e-mail of subsidiary company
owning the technology for
supercritical steam turbine
- b) *Name, address, Telephone No.,
Fax and e-mail of subsidiary company
owning the technology for
generator

*We have submitted the experience details in support of Qualifying Requirement at 4.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 4.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., **(Qualified Steam Turbine Generator Manufacturer)** and above subsidiaries.

4.5.0 Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, PMO (other than the Bidder), our / our Associate's *QSTGM / Indian *Subsidiary / *JV Company (as the case may be), Other Promoter having 25% or higher Equity Participation in the *Subsidiary Company / *JV Company (as the case may be), *Qualified Generator Manufacturer, *subsidiaries of Holding Company and *the Indian Manufacturing Subsidiary Company, as per clause 1.6.3 and/or 1.6.4 and/or Note No. 4 and/or Note No. 6 and/or Note No. 8 for clause no. 1.0.0 of Item No. 4 of BDS, is enclosed at Annexure _____ to this Attachment.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

***Bidder to Strike off if not applicable**

**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

[Experience details of an Indian Steam Generator and/or Indian Steam Turbine Generator Manufacturer, as per Clause 1.7.0, Item No. 4.0 of BDS]

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan, Sector 6,
Panchkula, Haryana

1.0.0 *We, M/s....., an Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company who is a supercritical Steam Generator Manufacturer, are seeking Qualification as per clause 1.7.0, Item No. 4 of BDS.

*We, M/s..... (an "Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company", who is a supercritical Steam Turbine Generator Manufacturer, as Bidder), are associating with M/s (*Qualified Steam Generator Manufacturer /*Indian Steam Generator Manufacturer (as per clause 1.2.1 of item 4 of BDS)/ *Indian Subsidiary of a Qualified Steam Generator Manufacturer / *Indian JV Company of a Qualified Steam Generator Manufacturer/* "Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company" (as per clause 1.7.1 of item 4 of BDS)) and shall source the Steam Generator Set from M/s..... (Associate) as per clause 1.7.2 item no. 4 of BDS. The details are as follows :

1.1.0 *We confirm that *we or *our Associate have manufactured / supplied in India Eight (8) Nos. supercritical Steam Generators, which are in commercial operation (achieved COD) out of which four (4) such Steam Generators are in commercial operation for at least one year and Performance Guarantee Test have been successfully completed in any two (2) such Steam Generators prior to the date of techno-commercial bid opening, as per clause 1.7.1 of Item no. 4 of BDS. Further, *we or *our Associate confirm that we shall offer only the type of steam generator for which we or our collaborator / associate (as per clause 1.7.2 of item 4 of BDS) is qualified. We confirm that we have enclosed the 'Letter to ensure satisfactory performance of Steam Turbine Generator & Auxiliaries as per clause no. 1.7.1 of Item No. 4 of BDS as per the format enclosed in the bidding documents (Sec VII Part 3 of 3) at Annexure... to this Attachment.

The details are furnished as below :-

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
1.00.00	Name and location of the reference Station in which the unit is located								
1.1.0	Name, address, email, Tel. no. and Fax of owner of the station								
1.1.1	Name and Designation of the responsible person in owner's organisation								
1.1.2	Capacity of Steam Generator Unit in MW								
1.1.3	Contract No. & Date								
1.1.4	Starting date of project								
1.1.5	Scheduled date of Commissioning								
1.1.6	Actual date of Commissioning								
1.1.7	Date of commencement of successful operation								
1.1.8	Date of commencement of Commercial operation (COD)								
1.1.9	Whether the Steam Generator is supercritical	Yes*/No	*Yes*/No	*Yes*/No*	Yes*/No*	Yes*/No	*Yes*/No*	*Yes*/No*	*Yes*/No*

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
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2.18.00 Availabilities of steam generator for last two years

2.19.00 Maximum total NOx emission (thermal as well as fuel) from the steam generators

***2.0.0** We are associating with M/s (*Qualified Steam Generator Manufacturer / *Indian Steam Generator Manufacturer / *Indian Subsidiary of a Qualified Steam Generator Manufacturer / *Indian JV Company of a Qualified Steam Generator Manufacturer who is a supercritical Steam Generator Manufacturer and shall source the Steam Generator Set from M/s (Associate) as per clause 1.7.2 item no. 4 of BDS. The details are as follows:

2.1.0 We confirm that the QSGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of at least one (1) number of pulverised coal fired supercritical Steam Generator having rated capacity of 1500 tones of steam per hour or above. Further, such Steam generator is of the type specified, i.e. single pass (tower type) or two pass type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

* Further, we confirm that reference Steam Generator is provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Also, we confirm that offered steam generator is of the same type, having same type of water wall tubing for which reference of Steam Generator has been furnished below The details are as follows :-

Sl. No.	Item Description	Station-1	Station-2	Station-3
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1.00.00 Name, address, e-mail, Tel. No. and Fax No. of the QSGM

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.01.00	Name and Designation of the responsible person in QSGM			
1.1.0	Name of the reference station and its location			
1.1.1	Name, address, e-mail, Fax No. and Tel. No. of Owner of station			
1.1.2	Name and Designation of the responsible person in Owner's organisation			
1.2.0	Name, address, email, Fax No. and Tel. No. of intermediary organisation in case the award has been received by QSGM from intermediary organisation			
1.2.1	Name and Designation of the responsible person in intermediary organisation			
1.03.00	No. of units & capacity of each unit in MW			

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.04.00	No. of steam generator sets supplied by QSGM for the reference station			
1.05.00	Contract No. & Date			
1.06.00	Starting date of Project			
1.07.00	Scheduled date of Commissioning			
1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QSGM for the aforesaid Steam Generator includes the following :			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) *Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*

Sl. No.	Item Description	Station-1	Station-2	Station-3
d)	*Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
e)	*Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the QSGM has acted as advisor for erection / commissioning of reference Steam Generator & auxiliaries, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note 2 for clause no. 1.0.0 of item 4 of BDS)

- 2.00.00 Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)
- 2.01.00 Main Steam Temperature at SH outlet (°C)
- 2.02.00 Main Steam Pressure at SH outlet [kg/cm²(a)]

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.03.00	Reheat steam flow (T/Hr.)			
2.04.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.05.00	Whether balanced draft type or not	*Yes/No*	*Yes/No*	*Yes/No*
2.06.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*

(In case the answer to above clause (iii) is "No", in such a case, the Associate shall furnish additional data in support of requirements indicated in clause 2.5.0 to this attachment)

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.07.00	Type of circulation system (Natural or Forced/Assisted)			
2.08.00	Type of Water wall tubes [spiral wound (inclined) or vertical plain or vertical rifled] (must match with offered type)			
2.09.00	Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.10.0	Type of coal used			
	i) Max. HHV (Kcal/Kg)			
	ii) Min. HHV (Kcal/Kg)			
	iii) Max. Ash content (%)			
	iv) Max. total moisture content (%)			
	v) Volatile matter content (%)			
2.10.1	Type of oil used			
	i) HHV (Kcal/Kg)			

Sl. No.	Item Description	Station-1	Station-2	Station-3
	ii) Sulphur content (%)			
	iii) Viscosity in centistoke at 50°C (Max.°C)			
	iv) Pour point (°C)			
	v) Flash point (°C)			
2.11.0	Fuel (other than pulverised coal fired)			
2.11.1	Type of fuel used			
2.11.2	Firing rate			
2.11.3	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting	*Yes/No*	*Yes/No*	*Yes/No*

Sl. No.	Item Description	Station-1	Station-2	Station-3
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.16.0	Minimum start-up time achieved			
	i) Cold (after 72 hrs. of unit shut down)			
	ii) Warm (after 36 hrs. of unit shut down)			
	iii) Hot (after 8 hrs. of unit shut down)			
2.17.00	Availabilities of steam generator for last two years			
2.18.00	Maximum total NOx emission (thermal as well as fuel) from the steam generators			

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment			
3.02.00	Documentary evidence in case the award for reference work (steam generator set) has been received by Associate (*QSGM / Indian *Subsidiary / *JV Company of QSGM) from Owner of plant or any other intermediary organization			
(i)	Certificate from *Owner of the plant or *intermediary organisation to be furnished by Bidder on behalf of its Associate in support of the claim of meeting requirement at clause 1.1.0 item 4 of BDS as the case			

may be, enclosed at Annexure.....
to this Attachment

- (ii) Certificate from *Owner of the plant to be furnished by Bidder on behalf of its Associate for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure.to this Attachment

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.
-

- 2.2.0 *(a) We confirm that *our Associate (QSGM) have registered an Indian Subsidiary Company M/s...../ *our Associate is an Indian Subsidiary Company of M/s. (QSGM) registered in India, as per Companies Act of India, for manufacturing **supercritical Steam Generator sets** covering the type, size and rating specified. Further, the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/s..... is a subsidiary company of M/s..... (QSGM) and shall remain a subsidiary company of the QSGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows :

S.No.	Item Description
1.00.00	Date of Incorporation of Indian Subsidiary Company
1.01.00	Equity participation of QSGM in the subsidiary company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for QSGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	*Equity participation of other Promoter having Equity equal to or more than 25% in Indian Subsidiary Company
2.01.00	*Lock in period for above equity participation from the date of incorporation

S.No.	Item Description
3.00.00	Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
3.01.00	Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure _____ of this Attachment

2.2.0 *(b) We confirm that *our Associate (QSGM) have registered a Joint Venture (JV) Company M/s...../ *our Associate is a Joint Venture Company registered in India, as per Companies Act of India for manufacturing supercritical steam generator sets covering the type, size and rating specified.

The Joint Venture (JV) Company is promoted by (i) M/s., an Indian Company registered in India under the Companies Act of India and (ii) M/s....., a QSGM, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We confirm that the QSGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

Further M/s....., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows :

S.No.	Item Description
1.00.00	Date of Incorporation of JV Company
1.01.00	Equity participation of QSGM in the JV company (In percentage of the total equity)
1.02.00	Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for QSGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSGM)
2.00.00	Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company

S.No.	Item Description
2.01.00	<p>Lock in period for above equity participation from the date of incorporation</p> <p>(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for Majority Stake Holder's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)</p>
3.00.00	<p>Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment</p>
3.01.00	<p>Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment</p>
<hr/>	
2.2.0**(b)(i)	<p>We, on behalf of our Associate, confirm that M/s..... , the majority stake holder in the said JV Company (i.e. the Associate) is an entity other than the QSGM, and is an Indian Company and has executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows :</p>

S.No.	Item Description	Project#1	Project#2	Project#3
1.0	Name of the reference station & its Location			
1.1	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.2	Name and designation of the responsible person in Owner's organisation			
1.3	Contract No. & date			
1.4	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.5	Starting date of Project			
1.6	Scheduled date of Commissioning			
1.7	Actual date of Commissioning			
1.8	Date of Commencement of successful Operation			
1.9	Value of above projects (in INR Million)			

*Bidder to furnish 2.2.0**(b)(i) & (ii) only when his Associate is a JV Company of QSGM, as per clause 1.4.1(a), item no. 4 of BDS.*

S.No.	Item Description	Project#1	Project#2	Project#3
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure. ....of this Attachment			

2.2.0**(b)(ii) We, on behalf of our Associate, confirm that M/s., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSGM are an Indian Company. Our Associate's Parent Company M/s have executed, in the last 10 years, industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year as on the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of their parent company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

2.2.0**(b)(ii) is to be filled in only in pursuance of Note No. 6 of cl. no. 1.0.0 of Item no. 4 of BDS.

The qualification details of the Parent Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.0	Name of the reference station & its Location			
1.1	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.2	Name and designation of the responsible person in Owner's organisation			
1.3	Contract No. & date			
1.4	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.5	Starting date of Project			
1.6	Scheduled date of Commissioning			
1.7	Actual date of Commissioning			
1.8	Date of Commencement of successful Operation			
1.9	Value of above projects (in INR Million)			

1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure. of this Attachment			
1.13	Date of Incorporation of JV Company			
1.14	Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)			

1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later?

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for equity participation of Parent Company in the wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)

2.2.0 *(c) We confirm that M/s....., our Associate (an Indian *Subsidiary / *JV Company) / our Associate's *Indian subsidiary / *JV Company, whose details are indicated at *2.2.0(a) / *2.2.0(b) above have registered another **Indian manufacturing Subsidiary Company M/s.....**, as per Companies Act of India for manufacturing **supercritical steam generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening (Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that the Indian Manufacturing Subsidiary company shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

2.20*(c) is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.

The details of Indian manufacturing Subsidiary Company are as follows:

- 1.00.00 Date of Incorporation of Indian manufacturing Subsidiary Company
- 1.01.00 Equity participation of the *Indian subsidiary / *JV company in the Indian manufacturing subsidiary company (in percentage of the total equity)
- 1.02.00 Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian manufacturing subsidiary company or upto the end of defect liability period of the contract whichever is later ? Yes/No
- (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A-11 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Indian *Subsidiary / *JV Company)
- 2.00.00 Certificate for commencement of Business in India (if applicable)

is enclosed at Annexure _____
of this Attachment

- 2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure _____ of this Attachment.

2.3.0 *We confirm that M/s....., (Associate) is seeking qualification as holding company (singularly or collectively) with its subsidiaries (held directly or indirectly) as per notes No.4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

2.3.1 Associate and their subsidiary's (ies') Experience Details in respect of meeting requirement for QSGM (as per clause **1.1.1(A)**), item 4 of BDS

(To be filled at page _____ to _____ of this Attachment)

2.3.2 Details of Subsidiary Company/Joint Attachment) Associate in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS

(To be filled at page _____ to _____ of _____ Venture Company registered by the this

2.3.3 *Name, Address, email, Fax, Tel. No. of the Subsidiary meeting the QR for QSGM as per clause 1.1.0 of BDS

2.3.4 *Name, address & Telephone No., Fax and e-mail of subsidiary company owning the technology for supercritical steam generators

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexureof this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 2.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure..... of this Attachment establishing the relationship between M/s....., (Qualified Steam Generator Manufacturer) and above subsidiaries.

*2.4.0 We confirm that our associate i.e., M/s.....**(Indian Steam Generator Manufacturer)**, have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning at least one (1) number pulverised coal fired steam generator for a 500MW or higher size unit, which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

(A) The details of Steam Generator are furnished as below:

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.1.0	Name of the reference station and its location			
1.1.1	Name, address, e-mail ID, Fax and Tel. No. of Owner of Station			
1.1.2	Name, address, e-mail ID, Fax and Tel. No. of intermediary organisation in case the award has been received by Indian Steam Generator Manufacturer from intermediary organisation.			
1.1.3	Name and Designation of the responsible person in Owner's organisation			
1.1.4	Name and Designation of the responsible person in Intermediary organisation			
1.1.5	No. of units & capacity of each unit in MW			

1.01.06	No. of steam generator sets supplied by us for reference station			
1.01.07	Contract No. & Date			
1.01.08	Starting date of project			
1.01.09	Scheduled date of commissioning			
1.01.10	(i) Actual date of completion			
	(ii) Date of commencement of Successful operation			
1.01.11	Whether the Plant is pulverised coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.01.12	Scope of work executed by us for the aforesaid Steam Generator includes the following:			
	a) Designed	Yes*/No*	Yes*/No*	Yes*/No*
	b) Engineered	Yes*/No*	Yes*/No*	Yes*/No*
	c) Manufactured*/got manufactured*	Yes*/No*	Yes*/No*	Yes*/No*
	d) *Erection/*Supervised erection/**acted as adviser for erection	Yes*/No*	Yes*/No*	Yes*/No*

e)	*Commissioned/*Supervised commissioning/ **acted as adviser for Commissioning	Yes*/No*	Yes*/No*	Yes*/No*
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to the date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*

** Necessary Document certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure..... of this Attachment.

- 2.00.00 Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)
- 2.01.00 Main Steam Temperature at SH outlet (°C)
- 2.02.00 Main Steam Pressure at SH outlet [kg/cm² (a)]
- 2.03.00 Reheat steam flow (T/Hr.)
- 2.04.00 a) Reheater outlet pressure [kg/cm² (a)]

	b)	Reheater outlet temperature (°C)			
2.05.00		Whether balanced draft type or not			
2.6.0		Type fo Steam Generator			
	i)	Single pass (tower type) or two pass type			
	ii)	Once through type	Yes*/No*	Yes*/No*	Yes*/No*
2.07.00		Type of circulation system (Natural or Forced/Assisted)			
2.08.00		Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled)			
2.09.00		Minimum mass flow through the water wall tubes Kg/sec./m ²			
2.10.0		Type of coal used			
	i)	Max. HHV (Kcal/Kg)			

- ii) Min. HHV (Kcal/Kg)
- iii) Max. Ash content (%)
- iv) Max. total moisture content (%)
- v) Volatile matter content (%)

2.10.1 Type of oil used

- i) HHV (Kcal/Kg)
- ii) Sulphur content (%)
- iii) Viscosity in centistoke at 50°C (Max.°C)
- iv) Pour point (°C)
- v) Flash point (°C)

2.11.0 Fuel (other than pulverised coal fired)

2.11.1 Type of fuel used

2.11.2 Firing rate

2.11.3 Calorific value of fuel (Kcal/kg)

- 2.12.00 Designed Boiler efficiency and corresponding GCV
- 2.13.00 Tested boiler efficiency and corresponding GCV
- 2.14.00 Tested boiler efficiency corrected to design conditions and corresponding GCV
- 2.15.00 a) Whether used for two shifting
- b) If yes, number of such operations it has been designed for
- c) No. of actual two shifting cycles it has actually operated on till date
- 2.16.0 Minimum start-up time achieved
 - i) Cold (after 72 hrs. of unit shut down)
 - ii) Warm (after 36 hrs. of unit shut down)

iii) Hot (after 8 hrs.
of unit shut down)

- 2.17.00 Availabilities of steam generator for last two years
- 2.18.00 Maximum total NOx emission (thermal as well as fuel) from the steam generators
- 3.00.00 Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure
- 4.00.00 List of all the similar Steam Generator under execution along with the details such as order No. & date, order value and scheduled date of commissioning is enclosed separately at Annexure

4.01.00 Documentary evidence in support of QR Data is enclosed at Annexure to this Attachment

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.

(B) We confirm that our Associate i.e. M/s (Indian Steam Generator Manufacturer), have valid ongoing collaboration and technology transfer agreement including license to manufacture and supply supercritical steam generator sets covering the type, size and rating specified, in India with M/s , a Qualified Steam Generator Manufacturer meeting requirements of clause 1.1.1(A), item 4 of BDS, valid minimum up to the end of the defect liability period of the contract. **Further, we confirm that the offered Steam Generator set is of the same type (i.e. single pass (tower type) or two pass type and same type of water wall tubing) for which the collaborator (i.e. Qualified Steam Generator Manufacturer) is qualified.** The details of Qualified Steam Generator Manufacturer, meeting the requirements of clause 1.1.1(A), item 4 of BDS, are as under:

Sl. No. Item Description Station-1 Station-2 Station-3

1.00.00 Name, address, email, Tel no. and Fax no. of QSGM

1.1.0 Name and Designation of the responsible person in QSGM

1.1.1 Name of the reference station

and its location

- 1.1.2 Name, address, email, Fax No. and Tel. No. of Owner of station
- 1.1.3 Name and Designation of the responsible person in Owner's organisation
- 1.2.0 Name, address, Fax No. and Tel. No. of intermediary organisation in case the award has been received by Qualified Steam Generator Manufacturer from intermediary organisation
- 1.2.1 Name and Designation of the responsible person in intermediary organisation
- 1.03.00 No. of units & capacity of each unit in MW
- 1.04.00 No. of steam generator sets supplied by us for the reference station
- 1.05.00 Contract No. & Date
- 1.06.00 Starting date of Project
- 1.07.00 Scheduled date of Commissioning

1.08.00	Actual date of Commissioning			
1.09.00	Date of commencement of successful operation			
1.10.00	Whether the Plant is pulverised coal fired	Yes*/No*	Yes*/No*	Yes*/No*
1.11.00	Scope of work executed by QSGM for the aforesaid Steam Generator includes the following :			
a)	Designed	Yes*/No*	Yes*/No*	Yes*/No*
b)	Engineered	Yes*/No*	Yes*/No*	Yes*/No*
c)	*Manufactured/*Got manufactured	Yes*/No*	Yes*/No*	Yes*/No*
d)	*Erection/*Supervised erection/**Acted as Advisor for erection	Yes*/No*	Yes*/No*	Yes*/No*
e)	*Commissioned/*Supervised commissioning/**Acted as advisor for commissioning	Yes*/No*	Yes*/No*	Yes*/No*
f)	Whether the plant is in successful operation for a period of one (1) year (minimum) prior to the date of bid opening	Yes*/No*	Yes*/No*	Yes*/No*

(**In case the bidder has acted as advisor for erection / commissioning of reference Steam Generator, bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.....to this Attachment, pursuant to Note No. 2 for clause no. 1.0.0, Item No. 4 of BDS.)

- 2.00.00 Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)
- 2.01.00 Main Steam Temperature at SH outlet (°C)
- 2.02.00 Main Steam Pressure at SH outlet [kg/cm²(a)]
- 2.03.00 Reheat steam flow (T/Hr.)
- 2.04.00
 - a) Reheater outlet pressure [kg/cm² (a)]
 - b) Reheater outlet temperature (°C)
- 2.05.00 Whether balanced draft type or not
- 2.6.0 Type of Steam Generator
 - i) Single pass (tower type) or two pass type (must match with offered type)

- | | | | | |
|------|--|----------|----------|----------|
| ii) | Once through type | Yes*/No* | Yes*/No* | Yes*/No* |
| iii) | Evaporator designed for variable pressure operation (sub-critical and super critical pressure range) | Yes*/No* | Yes*/No* | Yes*/No* |

(In case the answer to above clause (iii) is "No", in such a case, the bidder shall furnish additional data in support of requirements indicated at Note (5) to clause 1.0.0, Item No. 4 of BDS as detailed in clause 2.5.0)

- 2.07.00 Type of circulation system
(Natural or Forced/Assisted)
- 2.08.00 Type of Water wall tubes
[spiral wound (inclined)
or vertical plain or vertical rifled]
- 2.09.00 Minimum mass flow through
the water wall tubes Kg/sec./m²
- 2.10.0 Type of coal used
 - i) Max. HHV (Kcal/Kg)
 - ii) Min. HHV (Kcal/Kg)
 - iii) Max. Ash content (%)
 - iv) Max. total moisture
content (%)

v) Volatile matter
content (%)

2.10.1 Type of oil used

i) HHV (Kcal/Kg)

ii) Sulphur content (%)

iii) Viscosity in centistoke
at 50°C (Max.°C)

iv) Pour point (°C)

v) Flash point (°C)

2.11.0 Fuel (other than pulverised coal fired)

2.11.1 Type of fuel used

2.11.2 Firing rate

2.11.3 Calorific value of fuel
(Kcal/kg)

2.12.00 Designed Boiler efficiency
and corresponding GCV

2.13.00 Tested boiler efficiency and
corresponding GCV

- 2.14.00 Tested boiler efficiency corrected to design conditions and corresponding GCV
- 2.15.00
 - a) Whether used for two shifting
 - b) If yes, number of such operations it has been designed for
 - c) No. of actual two shifting cycles it has actually operated on till date
- 2.16.0 Minimum start-up time achieved
 - i) Cold (after 72 hrs. of unit shut down)
 - ii) Warm (after 36 hrs. of unit shut down)
 - iii) Hot (after 8 hrs. of unit shut down)
- 2.17.00 Availabilities of steam generator for last two years
- 2.18.00 Maximum total NOx emission (thermal as well as fuel) from the steam generators

Sl. No.	Item Description	Station-1	Station-2	Station-3
3.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
3.01.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			
3.2.0	Documentary evidence in case the award for reference work (steam generator set) has been received by Qualified Steam Generator Manufacturer from Owner of plant or any other intermediary organization			

Sl. No.	Item Description	Station-1	Station-2	Station-3
(i)	Certificate from *Owner of the plant or *intermediary organisation to be furnished by Bidder (for Qualified Steam Generator Manufacturer) in support of the claim of meeting requirement of Note (3) of clause 1.0.0 item 4 of BDS as the case may be, enclosed at Annexure.....to this Attachment			
(ii)	Certificate from Owner of the plant to be furnished by Bidder (for Qualified Steam Generator Manufacturer) for the successful operation of the Steam Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

TO BE FILLED IN BY THE BIDDER WHOSE ASSOCIATE IS SEEKING QUALIFICATION AS PER CLAUSE 1.1.1(A), ITEM 4 OF BDS READ IN CONJUNCTION WITH NOTE 5 TO CLAUSE 1.0.0, ITEM 4 OF BDS (I.E. IF THE ANSWER TO SUB-CLAUSE 2.06.00(iii) TO CLAUSE 2.1.0 / 2.4.0 ABOVE IS "NO")

2.5.0 We, confirm that M/s _____(supercritical Steam Generator Manufacturer) meets all the requirement as per 1.1.1(A), Item 4 of BDS except that the evaporator indicated in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and is seeking qualification along with the original technology owner (Licensor) with whom he has an ongoing license agreement (which covers technology transfer), as on the date of Techno-Commercial bid opening, 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).

Further, we confirm that original technology owner (Licensor) has experience of providing variable pressure design steam generator technology for at least one (1) no. of pulverised coal fired supercritical steam generator for a 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which is/are in successful operation for a period of not less than one (1) year prior to the date of **Techno-Commercial** bid opening.

We further confirm that we have offered only the type of steam generator i.e. single pass (tower type) or two pass type for which we are qualified and have offered only the type or water wall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) for which our licensor is qualified. The details of Licensor and his experience details are as follows:-

**I. Details of Technology Owner
(Licensor)**

- 1.01.00 Name of the original technology owner (Licensor)
- 1.02.00 Address, Email ID & Tel No. & Fax
- 1.03.00 Name and Designation of the Responsible person in the Organization
- 1.04.00 Licensing agreement for max. Capacity rating of Steam Generator (in MW)
- 1.05.00 Date of Start of Licensing agreement
- 1.06.00 Date of End of Licensing agreement
- 1.07.00 Whether Scope of licensing agreement covers 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).

*Yes/*No

1.08.00 Copy of relevant portion of Licensing agreement attached at Annexure.....

II. Details of experience of Technology Owner (Licensor)

1.01.00 Name of the reference station and its location

1.02.00 Client name and its address, Fax No. & Tel. No., email ID

1.03.00 Actual date of completion/ date of commencement of Successful operation

1.04.00	Whether the Plant is in Successful operation	*Yes*/*No	*Yes*/*No	*Yes*/*No
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1.05.00 Scope of work executed for the aforesaid Steam Generator includes the following:

i)	Designed	Yes*/No*	Yes*/No*	Yes*/No*
----	----------	----------	----------	----------

ii)	Engineered	Yes*/No*	Yes*/No*	Yes*/No*
-----	------------	----------	----------	----------

	iii)	Whether the plant is in successful operation for a period of one (1) year (Minimum) prior to date of Techno-Commercial bid opening	Yes*/No*	Yes*/No*	Yes*/No*
1.06.00	i) ii)	Supercritical Steam Generator Steam Generator steam flow capacity at Superheater Outlet (T/Hr.)	Yes*/No*	Yes*/No*	Yes*/No*
1.07.00	Type of Steam Generator				
	i)	Single pass (tower type) or two pass type (must match with offered type)			
	i)	Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii)	Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.08.00	Type of Water wall tubes (Spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)				

1.09.00	Type of firing (Coal)	Yes*/No*	Yes*/No*	Yes*/No*
1.10.0	Certificate from the Owner of the reference plant that the aforesaid Steam Generator is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.11.00	Undertaking w.r.t Deed of Joint Undertaking (DJU) as per proforma enclosed at attachment-3I of Book 1 of 3, Sec-VII (Forms & Procedures) is furnished along with the bid at Annexure			

Notes :

1. Wherever the term 'coal fired' is appearing above, "coal" shall be deemed to also include bituminous Coal/Sub Bituminous Coal/Brown Coal/Lignite.
-

#2.6.0 Undertaking w.r.t Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, our Associate's *QSGM / Indian *Subsidiary Company / *JV Company (as the case may be), *Other Promoter having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (as the case may be), *subsidiaries of Holding Company (the Associate) and *the manufacturing subsidiary Company, *Technology Owner (Licensor) of supercritical steam generator, *Indian Steam Generator Manufacturing Company, *Indian Subsidiary Company/Indian JV Company/ Indian Manufacturing Company” as per clause 1.7.2 and/or applicable Notes for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure..... to this Attachment.

#2.7.0 Letter to ensure satisfactory performance of Steam Generators and/or Steam Turbine Generators (as the case may be) & Auxiliaries as per requirements of Note No. 13 for clause no. 1.0.0 of Item No. 4 of BDS as per the format enclosed in the bidding documents (Sec VII Part 3 of 3) is enclosed at Annexureto this Attachment.

Bidder to strike out whichever is not applicable.

* Bidder to strike out whichever is not applicable

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

3.0.0 *We, M/s....., an “Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company” who is a supercritical Steam Turbine Generator Manufacturer, are seeking Qualification as per clause 1.7.0, Item No. 4 of BDS.

*We, M/s. (an “Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company”, who is a supercritical Steam Generator Manufacturer, as Bidder), are associating with M/s (*Qualified Steam Turbine Generator Manufacturer /*Indian Steam Turbine Generator Manufacturer (as per clause 1.2.1 of item 4 of BDS)/ *Indian Subsidiary of a Qualified Steam Turbine Generator Manufacturer / *Indian JV Company of a Qualified Steam Turbine Generator Manufacturer/* “Indian Manufacturing company/ Indian Subsidiary Company / Indian JV Company” (as per clause 1.7.1 of item 4 of BDS)) and shall source the Steam Turbine Generator Set from M/s (Associate) as per clause 1.7.2 item no. 4 of BDS. The details are as follows :

3.1.0 *We confirm that *we or *our Associate have manufactured / supplied in India Eight (8) Nos. supercritical Steam Turbine Generators, which are in commercial operation (achieved COD) out of which four (4) such Steam Turbine Generators are in commercial operation for at least one year and Performance Guarantee Test have been successfully completed in any two (2) such Steam Turbine Generators prior to the date of techno-commercial bid opening, as per clause 1.7.1 of Item no. 4 of BDS. Further, *we or *our Associate confirm that we shall offer only the type of Steam Turbine Generator for which we or our collaborator / associate (as per clause 1.7.2 of item 4 of BDS) is qualified.

The details are furnished as below : -

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
1.00.00	Name and location of the reference Station in which the unit is located								
1.1.0	Name, address, email, Tel. no. and Fax of owner of the station								
1.1.1	Name and Designation of the responsible person in owner's organisation								
1.1.2	Capacity of Steam Turbine Generator Unit in MW								
1.1.3	Contract No. & Date								
1.1.4	Starting date of project								
1.1.5	Scheduled date of Commissioning								
1.1.6	Actual date of Commissioning								
1.1.7	Date of commencement of successful operation								
1.1.8	Date of commencement of Commercial operation (COD)								
1.1.9	Whether the Steam Turbine Generator is supercritical	Yes*/No	*Yes*/No	*Yes*/No*	Yes*/No*	Yes*/No	*Yes*/No*	*Yes*/No*	*Yes*/No*

SN.	Item Description	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5	Unit-6	Unit-7	Unit-8
2.5.0	Module Number								
	(a) HP Turbine								
	(b) IP Turbine								
	(c) Combined HP-IP turbine (if applicable)								
	(d) LP Turbine								
2.06.00	Main steam pressure (gauge)								
2.07.00	Main steam temperature (deg.C)								
2.08.00	Reheat Steam temperature (deg.C)								
2.09.00	Condensing type	Yes*/No	*Yes*/No	*Yes*/No*	Yes*/No*	Yes*/No	*Yes*/No*	*Yes*/No*	*Yes*/No*
2.10.00	Rated speed (RPM) and operating frequency range (Hz)								
2.11.00	No. of Steam Extractions								
2.12.00	Steam Turbine and Generator Directly coupled	Yes*/No*	*Yes*/No*	Yes*/No*	Yes*/No*	Yes*/No	*Yes*/No*	*Yes*/No*	*Yes*/No*

4.0.0 We are associating with M/s (*Qualified Steam Turbine Generator Manufacturer /*Indian Steam Turbine Generator Manufacturer (as per clause 1.2.1 of item 4 of BDS)/ *Indian Subsidiary of a Qualified Steam Turbine Generator Manufacturer / *Indian JV Company of a Qualified Steam Turbine Generator Manufacturer. The details are as follows:

4.1.0 We confirm that the QSTGM have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning of (i) at least one (1) number supercritical steam turbine of tandem compound, condensing, reheat type of 500 MW or above capacity with main steam pressure of 225 Kg/cm2 (gauge) or higher and main steam / reheat temperature of 565° C / 565° C or higher and (ii) at least one (1) number of generator of two pole, Thermal class 155 (F) winding insulation, hydrogen / water cooled stator and hydrogen / water cooled rotor of 500 MW or above capacity. These steam turbine and generator are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening. The details are as follows :-

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
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- 1.00.00 Name, address, e-mail, Tel. No. and Fax No. of the QSTGM
- 1.01.00 Name and Designation of the responsible person in QSTGM
- 1.1.0 Name of the reference station and its location
- 1.1.1 Name, address, Fax No., e-mail and Tel. No. of Owner of the reference station

- 1.1.2 Name, address, Fax No., e-mail and Tel. No. of intermediary organisation in case the award has been received by QSTGM from intermediary organisation
- 1.2.0 Name and Designation of the responsible person in Owner's organisation
- 1.2.1 Name and Designation of the responsible person in intermediary organisation
- 1.03.00 No. of Steam Turbine Generator Sets supplied by QSTGM for the station
- 1.04.00 Contract No. and Date
- 1.05.00 Capacity in MW of Unit
- 1.06.00 Starting date of project
- 1.07.00 Scheduled date of commissioning
- 1.08.00 Actual date of commissioning

1.09.00 Date of commencement of
successful operation

1.10.00 Scope of work executed by
QSTGM for the aforesaid Steam
Turbine Generator Set
includes the following:

- | | | | |
|-----|--|----------|----------|
| (a) | Designed | *Yes/*No | *Yes/*No |
| (b) | Engineered | *Yes/*No | *Yes/*No |
| (c) | *Manufactured /
*Got Manufactured | *Yes/*No | *Yes/*No |
| (d) | *Erected/*Supervised
Erection/**Acted as an
Advisor for Erection | *Yes/*No | *Yes/*No |
| (e) | *Commissioned/*Super
vised Commissioning/
**Acted as an Advisor
for Commissioning | *Yes/*No | *Yes/*No |

f) Whether the plant is in successful operation for a period of one (1) year (minimum) prior to date of Techno-Commercial bid opening

Yes*/No*

Yes*/No*

(**In case the QSTGM has acted as advisor for erection / commissioning of reference Steam Turbine & Generator, Bidder shall furnish necessary documents / certificate from client in support of such activity and enclose the same at Annexure.... to this Attachment, pursuant to Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS)

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Turbine

2.01.00 Steam Turbine make

2.02.00 Tandem compound *Yes/*No *Yes/*No *Yes/*No

2.03.00 No. of Reheat

- 2.4.0 (i) No. of Cylinders:
 - (a) HP
 - (b) IP
 - (c) Combined HP-IP
 - (d) LP
- (ii) Whether HP and IP cylinders are combined or separate
- 2.5.0 Module Number
 - (a) HP Turbine
 - (b) IP Turbine
 - (c) Combined HP-IP turbine (if applicable)
 - (d) LP Turbine
- 2.06.00 Main steam pressure (gauge)
- 2.7.0 Main steam temperature (deg.C)

2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			
3.04.00	MW rating			
3.05.00	Rated voltage (kV)			

3.06.00	No. of phases			
3.07.00	No. of poles			
3.08.00	Mounting	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical	* Hori- zontally/ *Vertical
3.09.00	Installation	* Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.10.00	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
3.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
3.12.0	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
3.13.00	Schedule date of Commissioning			
3.14.00	Actual date of commissioning			

- 3.15.00 Date of commencement of successful operation

- 4.0.0 Certificate(s) from the Owner of the reference Plant that the aforesaid Steam Turbine *Generator Set (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment
 - 4.01.00 Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment

 - 4.02.00 Documentary evidence in case the award for reference work (steam turbine generator set) has been received by Associate (*QSTGM / Indian *Subsidiary / *JV Company of QSTGM) from Owner of plant or any other intermediary organization
 - (i) Certificate from *Owner of the plant or *intermediary organisation to be furnished by Bidder on behalf of its Associate in support of the claim

of meeting requirement at clause 1.1.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment

- (ii) Certificate from *Owner of the plant to be furnished by Bidder on behalf of its Associate for the successful operation of the Steam Turbine Generator Set as specified at requirement stipulated at clause 1.1.0, item 4 of BDS, as the case may be, enclosed at Annexure.to this Attachment

4.2.0 *(a) We confirm that *our Associate, a QSTGM, have registered an Indian Subsidiary Company M/s..... / *our Associate is an Indian Subsidiary Company of M/s..... (QSTGM) registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator sets** covering the type, size and rating specified. Further the Indian Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial bid opening (Applicable in case the Indian Subsidiary Company is registered as a public limited Company).

We confirm that M/sis a subsidiary company of M/s..... (QSTGM) and shall remain a subsidiary company of the QSTGM for a minimum period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

*We confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS **except for Generator** and accordingly, the Indian Subsidiary Company have associated and have a technology transfer agreement with M/s.(**Qualified Generator Manufacturer**) who meets the the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s.....(Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the said Indian Subsidiary Company for a lock in period of 7 years from the date of incorporation of this Indian Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

The details of Indian Subsidiary Company are as follows :

- 1.00.00 Date of Incorporation of Indian Subsidiary Company
- 1.01.00 Equity participation of Qualified Steam Turbine Generator* manufacturer in the subsidiary company (In percentage of the total equity)
- 1.02.00 Lock in period for above equity participation from the date of incorporation (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for QSTGM's equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.2(a)/1.3.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
- 2.00.00 *Equity participation of other Promoter having Equity more than 25% in Indian Subsidiary Company
- 2.01.00 *Lock in period for above equity participation from the date of incorporation.
- 3.00.00 *Equity participation of Qualified

Generator manufacturer, in the Indian Subsidiary company.

- 3.01.00 *Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian subsidiary company or up to the end of defect liability period of the contract whichever is later? *Yes/*No

(Qualified Generator manufacturer to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for their equity participation in the Indian Subsidiary Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator manufacturer)

- 4.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

- 4.01.00 Copy of Certificate of Incorporation and Memorandum of Association of Indian subsidiary company is enclosed at Annexure _____ of this Attachment

4.2.0 *(b) We confirm that *our Associate, a QSTGM, have registered a Joint Venture (JV) Company M/s..... / *our Associate is a Joint Venture Company registered in India, as per Companies Act of India, for manufacturing **supercritical steam turbine generator set** covering the type, size and rating specified. The Joint Venture (JV) Company is promoted by (i) M/s....., an Indian Company registered in India under the Companies Act of India and (ii) M/s....., a **QSTGM**, who meets the requirement as per the details furnished in clause 1.1.0 above.

The JV Company have obtained certificate for commencement of Business in India as on the date of Techno-Commercial bid opening, (Applicable in case, the JV Company is incorporated as a public limited Company).

We further confirm that the QSTGM have minimum 26% equity participation and shall continue to maintain equity participation of minimum 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

Further M/s., one of the promoters is a majority stakeholder who have minimum 51% equity participation and shall continue to maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the defect liability period of the contract whichever is later.

*We further confirm that the QSTGM meets the requirement of clause 1.1.1(B) of Item No. 4.0 of BDS except for Generator and accordingly, the JV Company have associated and have a technology transfer agreement with M/s..... (**Qualified Generator Manufacturer**) who meets the the requirement in respect of generator as per clause 1.1.4 of Item No. 4.0 of BDS. M/s.....(Qualified Generator Manufacturer) have minimum 10% equity participation and shall continue to maintain equity participation of minimum 10% in the JV Company for a lock in period of 7 years from the date of incorporation of this JV Company or up to the end of the defect liability period of the contract whichever is later.

The details of the Joint Venture (JV) company are as follows :

- 1.00.00 Date of Incorporation of JV Company
- 1.01.00 Equity participation of **Qualified Steam Turbine Generator*** manufacturer in the JV company (In percentage of the total equity)

- 1.02.00 Lock in period for above equity participation from the date of incorporation
- (Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for QSTGM's equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/ 1.4.1(a) of item 4 of BDS supported by Board Resolution of the QSTGM)
- 2.00.00 Equity participation of the Majority Stake Holder having Equity more than 51% in JV Company
- 2.01.00 Lock in period for above equity participation from the date of incorporation
- (Majority Stake Holder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.2(b)/ 1.4.1(a) of item 4 of BDS supported by Board Resolution of the Majority Stake Holder)

3.00.00 *Equity participation of Qualified Generator manufacturer in the JV Company

3.01.00 *Whether Lock-in period for above equity participation is seven years from the date of incorporation of Indian JV company or up to the end of defect liability period of the contract whichever is later? *Yes/*No

(Qualified Generator Manufacturer to furnish a letter of undertaking as per format enclosed at Attachment 3A-11 for their equity participation in the JV Company along with lock in period of such equity in compliance to clause 1.1.4 of Item No. 4.0 of BDS supported by Board Resolution of the Qualified Generator Manufacturer)

4.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment

4.01.00 Copy of Certificate of Incorporation and Memorandum of Association of JV company is enclosed at Annexure _____ of this Attachment

4.2.0**(b)(i) We, on behalf of our Associate, confirm that M/s..... , the majority stake holder in the said JV Company (i.e. the Associate) is an entity other than the QSTGM and is an Indian Company and has executed, in the last 10 years, industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening. The details are as follows :

*Bidder to furnish 4.2.0**(b)(i) & (ii) only when his Associate is a JV Company of QSTGM, as per clause 1.4.1(a), Item No. 4 of BDS.*

S.No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.02	Name and designation of the responsible person in Owner's organisation			
1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			

S.No.	Item Description	Project#1	Project#2	Project#3
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening			
1.12	Necessary documentary evidence is support of above are attached at Annexure. of this Attachment			

4.2.0**(b)(ii) We, on behalf of our Associate, confirm that M/s....., the majority stake holder in the said JV Company (i.e. the Associate), an entity other than the QSTGM are an Indian Company. Our Associate's **Parent Company** M/s have executed, in the last 10 years, industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening.

We, on behalf of our Associate, confirm that our Associate is a wholly owned subsidiary of their Parent Company M/s..... who have 100% equity and shall continue to maintain equity participation of 100% in the Associate (wholly owned subsidiary company) for a lock in period of 7 years from the date of incorporation of the JV company or up to the end of defect liability period of the contract whichever is later.

The qualification details of the Parent Company are as follows :

S.No.	Item Description	Project#1	Project#2	Project#3
1.0	Name of the reference station & its Location			
1.1	Owner's Name and its address, Fax No., Tel. No. and e-mail			
1.2	Name and designation of the responsible person in Owner's organisation			

4.2.0**(b)(ii) is to be filled in only in pursuance of Note No. 6 of cl. no. 1.1.0 of Item no. 4 of BDS.

1.03	Contract No. & date			
1.04	(i) Nature/area of EPC Project			
	(ii) Whether Civil Works included in the scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No

-
- 1.11 Certificate from the Owner(s) that the aforesaid projects are in successful operation for a period not less than one (1) year prior to date of Techno-Commercial Bid opening
 - 1.12 Necessary documentary evidence in support of above are attached at Annexure. of this Attachment

Details of JV Company

- 1.13 Date of Incorporation of JV Company
 - 1.14 Equity participation of Parent Company in the wholly owned subsidiary company (in percentage of the total equity)
 - 1.15 Whether Lock-in period for above equity participation is seven years from the date of incorporation of JV company or up to the end of defect liability period of the contract whichever is later?

(Bidder to furnish a letter of undertaking as per format enclosed at Attachment 3A11 for equity participation of Parent Company in the
- *Yes/*No

wholly owned subsidiary company along with lock in period of such equity in compliance to note 6 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the Parent Company)

4.2.0*(c) We confirm that M/s.....our Associate (an Indian *Subsidiary / *JV Company) / our Associate's *Indian subsidiary / *JV Company, whose details are indicated at *4.2.0(a) / *4.2.0(b) above, have registered **another Indian manufacturing Subsidiary Company** M/s....., as per Companies Act of India for manufacturing **supercritical steam turbine generator sets** in India covering the type, size and rating specified. This manufacturing Subsidiary Company has obtained certificate for Commencement of Business in India as on the date of Techno-Commercial Bid Opening(Applicable in case the Indian manufacturing Subsidiary Company is registered as a public limited Company).

We confirm that M/s., the manufacturing company, shall remain a subsidiary of the Indian Subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of this Indian manufacturing Subsidiary Company or up to the end of the defect liability period of the contract whichever is later.

4.2.0*(c) is to be filled in only in pursuance of Note 8 for clause.no. 1.0.0 of Item 4 of BDS.

The details of Indian manufacturing Subsidiary Company are as follows:

- | | | |
|---------|---|----------|
| 1.00.00 | Date of Incorporation of Indian Manufacturing Subsidiary Company | |
| 1.01.00 | Equity participation of the *Indian Subsidiary / *JV company in the Indian Manufacturing Subsidiary Company (in percentage of the total equity) | |
| 1.02.00 | Whether Lock-in period for above equity participation is seven years from the date of incorporation of | *Yes/*No |

Indian manufacturing subsidiary company or up to the end of defect liability period of the contract whichever is later ?

(Bidder to furnish a letter of undertaking as per format enclose at Attachment 3A11 for the above equity participation in the Indian manufacturing Subsidiary Company along with lock in period of such equity in compliance to note 8 for clause 1.0.0 of Item No. 4.0 of BDS supported by Board Resolution of the *Indian subsidiary/*JV company)

- 2.00.00 Certificate for commencement of Business in India (if applicable) is enclosed at Annexure _____ of this Attachment
 - 2.01.00 Copy of Certificate of Incorporation and Article of Association and Memorandum of Association of Indian manufacturing subsidiary company is enclosed at Annexure_of this Attachment
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4.3.0** We confirm that Associate i.e. M/s....., **a super critical steam turbine manufacturer** meets the requirements of clause 1.1.1(B) **except for generator**. Hence, as per clause 1.7.4 of item no. 4.0 of BDS, the Subsidiary Company / JV Company (as the case may be) have associated with and have a Technology Transfer agreement with M/s., (Qualified Generator Manufacturer) meeting the requirements of clause 1.7.4 of item no. 4.0 of BDS fully in respect of generator. The details are as follows :-

The Qualified Generator Manufacturer have minimum 10% equity participation and shall continue to maintain a minimum equity participation of 10% in the Indian Subsidiary / JV Company (as the case may be), for a lock-in period of 7 years from the date of incorporation of the Indian Subsidiary / JV Company (as the case may be) or up to the end of defect liability period of the contract whichever is later.

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Name of the reference station and its location			
1.1.0	Name, address, email, Fax No. and Tel. No. of Owner of Plant			
1.1.1	Name, address, email, Fax No. and Tel. No. of intermediary organisation in case the award has been received by Qualified Generator Manufacturer from intermediary organisation			
1.2.0	Name and Designation of the responsible person in Owner's organisation			
1.2.1	Name and Designation of the responsible person in intermediary organisation.			

1.03.00 No. of Generator Sets supplied

1.04.00 Contract No. and Date

1.05.00 Capacity in MW of Unit

1.06.00 Starting date of project

1.07.00 Scheduled date of completion

1.08.00 Actual date of completion

1.09.00 Date of commencement of
successful operation

1.10.00 Scope of work for the
aforesaid Generator Set
includes the following:

(a)	Designed	*Yes/*No	*Yes/*No	*Yes/*No
(b)	Engineered	*Yes/*No	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No

(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No
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** Necessary Documents /Certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are attached at Annexure.of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

1.02.05 Rated voltage (kV)

1.02.06 No. of phases

1.02.07 No. of poles

1.02.08	Mounting	*Hori- zontal/ *Vertical	*Hori- zontal/ *Vertical	*Hori- *Vertical
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1.02.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
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1.02.10	Cylindrical rotor Type	*Yes/*No	*Yes/*No	*Yes/*No
1.02.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
1.2.12	Thermal class of Insulation			
	(a) Stator			
	(b) Rotor			
1.2.13	Date of Commissioning			
1.2.14	Date of Commencement of successful operation			
2.00.00	Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening is furnished at Annexure. ....to this Attachment			

3.00.00 Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment

4.4.0 *We confirm that M/s....., (Associate) is seeking qualification as holding company (singularly or collectively) with their subsidiaries (held directly or indirectly) as per notes No. 4 for clause no. 1.0.0, Item No. 4 of BDS. Further, the details of the subsidiaries meeting the QR are as follows :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
4.4.1	Associate and their Subsidiary's(ies') Experience details in respect of the meeting requirement for QSTGM (as per clause 1.1.1(B)) , item 4 of BDS	(To be filled at page this Attachment)	to	of
4.4.2	Details of Subsidiary Company/Joint Venture Company registered by the Associate in India meeting requirement of Clause 1.1.2(a) or 1.1.2(b), item 4 of BDS	(To be filled at page this Attachment)	to	of

- 4.4.3 a) *Name, Address, email, Fax,
Tel. No. of the Subsidiary
meeting the QR for supercritical
Steam Turbine Manufacturer as per
clause 1.1.0 of BDS
- b) *Name, Address, email, Fax,
Tel. No. of the Subsidiary
meeting the QR for Generator
Manufacturer as per clause
1.1.0 of BDS
- 4.4.4 a) *Name, address, Telephone No.,
Fax and e-mail of subsidiary company
owning the technology for
supercritical steam turbine
- b) *Name, address, Telephone No.,
Fax and e-mail of subsidiary company
owning the technology for
generator

*We have submitted the experience details in support of Qualifying Requirement at 4.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure.....of this Attachment establishing the relationship between our Associate and above subsidiaries.

*We have submitted the experience details in support of Qualifying Requirement at 4.1.0 above with reference to above subsidiary(ies). We are attaching the necessary documentary evidence as Annexure of this Attachment establishing the relationship between M/s....., (**Qualified Steam Turbine Generator Manufacturer**) and above subsidiaries.

4.5.0 We confirm that our associate i.e., M/s....., **(Indian Steam Turbine Generator Manufacturer)**, have designed, engineered, *manufactured / *got manufactured, *erected / *supervised erection, *commissioned / *supervised commissioning at least one (1) number of reheat type of steam turbine and generator set of 500MW or above capacity, which are in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening.

(A) The details of Steam Turbine Generator are furnished as below:

S.No.	Item Description	Installation No. 1	Installation No. 2	Installation No. 3
1.00.00	Name of the reference station and its location			
1.1.0	Name, address, Fax No. e-mail and Tel. No. of Owner of Station			
1.1.1	Name, address, Fax No. e-mail and Tel. No. of intermediary organisation in case the award has been received by Indian Steam Turbine Generator Manufacturer from intermediary Organisation			
1.2.0	Name and Designation of the responsible person in Owner's organisation			
1.2.1	Name and Designation of the responsible person in intermediary organisation			
1.03.00	No. of Steam Turbine Generator Sets supplied for the Station			

- 1.04.00 Contract No. and Date
- 1.05.00 Unit Capacity in MW
- 1.06.00 Starting Date of the Project
- 1.07.00 Schedule Date of Commissioning
- 1.08.00 Actual Date of Commissioning
- 1.09.00 Date of Commencement of Successful Operation
- 1.10.00 Scope of work executed for the aforesaid Steam Turbine and Generator includes the following:
 - (i) Designed *Yes/*No
 - (ii) Engineered *Yes/*No
 - (iii) Manufactured*/got manufactured* *Yes/*No
 - (iv) *Erected / *Supervised
Erection / **acted as adviser
for Erection *Yes/*No
 - (v) *Commissioned / *Supervised
Commissioning / **acted as adviser
for Commissioning *Yes/*No

** Necessary Documents/Certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure..... of this Attachment.

2.00.00 Details of Steam Turbine

2.1.1 Steam Turbine make

2.1.2 Tandem Compound / Cross
Compound

2.1.3 No. of Reheat

2.1.4 No. of Cylinders:

(i) HP

(ii) IP

(iii) Combined HP & IP

(iv) LP

2.1.5 Module Number

(i) HP Turbine

(ii) IP Turbine

(iii) LP Turbine

(iv) Combined HP & IP turbine (if applicable)

2.1.6 Main Steam Pressure (Gauge)

2.1.7 Main Steam Temperature (deg.C)

2.1.8 Reheat Steam Temperature (deg.C)

2.1.9 Exhaust Pressure (Gauge)

2.1.10	Type of Turbine	*Condensing /*Non Condensing	*Condensing /*Non Condensing	*Condensing /*Non Condensing
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2.1.11 Rated speed (RPM) and operating frequency range (Hz)

2.1.12 No. of Steam Extractions for regeneration

3.00.00 Details of Generator

3.1.1 Generator make and model No.

3.1.2 Generator MVA Rating

3.1.3 Generator MW Rating

3.1.4 Rated Power Factor

- 3.1.5 Rated voltage (kV)
- 4.00.00 Certificate from the Owner that the aforesaid Steam Turbine Generator Set is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial Bid Opening, and caused no serious problem in past, is furnished at Annexure.... to this Attachment
- 4.01.01 List of all the similar Steam Turbine Generator under execution along with the details such as order No. & date, order value and scheduled date of commissioning is enclosed separately at Annexure
- 4.02.00 Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment

(B) We, confirm that our associate i.e. M/s Indian Steam Turbine Generator Manufacturer, have 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 M/s. , a Qualified Steam Turbine Generator Manufacturer meeting requirements of clause 1.1.1(B), item 4 of BDS, valid minimum up to the end of the defect liability period of the contract. The details of Qualified Steam Turbine Generator Manufacturer, meeting the requirements of clause 1.1.1(B), item 4 of BDS, are as under :

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.00.00	Name, address, email, Tel no. and Fax no. of QSTGM		
1.1.0	Name and Designation of the responsible person in QSTGM		
1.1.1	Name of the reference station and its location		
1.1.2	Name, address, Fax No., e-mail and Tel. No. of Owner of station		
1.1.3	Name, address, Fax No., e-mail and Tel. No. of intermediary organisation in case the award has been received by Qualified Steam Turbine Generator Manufacturer from intermediary organisation		
1.02.00	Name and Designation of the responsible person in Owner's organisation		

S No.	Item Description	For Steam Turbine ----- Station-1, 2, 3	For Generator (if separate station) ----- Station-1, 2, 3
1.02.01	Name and Designation of the responsible person in intermediary organisation		
1.03.00	No. of Steam Turbine Generator Sets supplied by QSTGM for the station		
1.04.00	Contract No. and Date		
1.05.00	Capacity in MW of Unit		
1.06.00	Starting date of project		
1.07.00	Scheduled date of commissioning		
1.08.00	Actual date of commissioning		
1.09.00	Date of commencement of successful operation		
1.10.00	Scope of work executed by QSTGM for the aforesaid Steam Turbine Generator Set includes the following :		

S No.	Item Description	For Steam Turbine	For Generator (if separate station)
		----- Station-1, 2, 3	----- Station-1, 2, 3
(a)	Designed	*Yes/No	*Yes/No
(b)	Engineered	*Yes/No	*Yes/No
(c)	*Manufactured / *Got Manufactured	*Yes/No	*Yes/No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/No	*Yes/No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/No	*Yes/No

** Necessary Documents / certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure. of this Attachment.

S.No.	Item Description	Installation	Installation	Installation
		No.1	No.2	No.3

2.00.00 Details of Turbine

2.01.00 Steam Turbine make

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.00	Tandem compound	*Yes/*No	*Yes/*No	*Yes/*No
2.03.00	No. of Reheat			
2.4.0	(i) No. of Cylinders:			
	(a) HP			
	(b) IP			
	(c) Combined HP-IP			
	(d) LP			
	(ii) Whether HP and IP cylinders are combined or separate			
2.5.0	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP turbine (if applicable)			
	(d) LP Turbine			

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.06.00	Main steam pressure (gauge)			
2.07.00	Main steam temperature (deg.C)			
2.08.00	Reheat Steam temperature (deg.C)			
2.09.00	Condensing type	*Yes/*No	*Yes/*No	*Yes/*No
2.10.00	Rated speed (RPM) and operating frequency range (Hz)			
2.11.00	No. of Steam Extractions			
2.12.00	Steam Turbine and Generator Directly coupled	*Yes/*No	*Yes/*No	*Yes/*No
2.13.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
3.00.00	Generator Details			
3.01.00	Generator make and model No.			
3.02.00	Rated MVA			
3.03.00	Rated Power Factor			

3.04.00 MW rating

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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3.05.00 Rated voltage (kV)

3.06.00 No. of phases

3.07.00 No. of poles

3.08.00	Mounting	* Horizontally/*Vertical	* Horizontally/*Vertical	* Horizontally/*Vertical
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3.09.00	Installation	* Indoor/*Outdoor	*Indoor/*Outdoor	*Indoor/*Outdoor
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3.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
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3.11.00 Cooling medium

(a) Stator

(b) Rotor

3.12.0 Thermal Class of insulation

(a) Stator

(b) Rotor

3.13.00 Schedule date of Commissioning

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
3.14.00	Actual date of commissioning			
3.15.00	Date of commencement of successful operation			
4.0.0	Certificate(s) from the Owner that the aforesaid Steam Turbine Generator Set /Steam Turbine / Generator (as applicable) is in successful operation for a period of not less than one (1) year prior to date of Techno- Commercial Bid Opening, and caused no serious problem in the past, is furnished at Annexure..... to this Attachment			
4.01.00	Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment			
4.02.00	Documentary evidence in case the award for reference work (steam turbine generator set) has been received by Qualified Steam Turbine Generator Manufacturer from Owner of plant or any other intermediary organization			

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(i) Certificate from *Owner of the plant or *intermediary organisation to be furnished by bidder (for Qualified Steam Turbine Generator Manufacturer) in support of the claim of meeting requirement of Note (3) of clause 1.0.0 item 4 of BDS as the case may be, enclosed at Annexure..... to this Attachment			
	(ii) Certificate from Owner of the plant to be furnished by bidder (for Qualified Steam Turbine Generator Manufacturer) for the successful operation of the Steam Turbine Generator Set as specified at requirement stipulated at clause 1.1.0 item 4 of BDS, as the case may be, enclosed at Annexure..... to this Attachment			

(C) *M/s., a super critical steam turbine manufacturer meets the requirements of clause 1.1.1(B) of Item No. 4.0 of BDS **except for generator**. Hence, as per clause 1.2.3 of Item No. 4.0 of BDS, we have associated and have a Technology Transfer agreement with M/s....., (Qualified Generator Manufacturer) meeting the requirements of clause 1.2.3 of Item No. 4.0 of BDS fully in respect of generator. The details are as follows:-

- 1.00.00 Name, address, email, Tel no. and Fax no. of Qualified Generator Manufacturer
- 1.1.0 Name of the reference station and its location
- 1.1.1 Name, address, email, Fax No. and Tel. No. of Owner of Plant
- 1.1.2 Name, address, email, Fax No. and Tel. No. of intermediary organisation in case the award has been received by Qualified Generator Manufacturer from intermediary organisation.
- 1.2.0 Name and Designation of the responsible person in Owner's organisation
- 1.2.1 Name and Designation of the responsible person in intermediary organisation
- 1.03.00 No. of Generator Sets supplied
- 1.04.00 Contract No. and Date
- 1.05.00 Capacity in MW of Unit

1.06.00 Starting date of project

1.07.00 Scheduled date of commissioning

1.08.00 Actual date of commissioning

1.09.00 Date of commencement of
successful operation

1.10.00 Scope of work for the
aforesaid Generator Set
includes the following:

(a)	Designed	*Yes/*No	*Yes/*No	*Yes/*No
(b)	Engineered	*Yes/*No	*Yes/*No	*Yes/*No
(c)	*Manufactured / *Got Manufactured	*Yes/*No	*Yes/*No	*Yes/*No
(d)	*Erected/*Supervised Erection/**Acted as an Advisor for Erection	*Yes/*No	*Yes/*No	*Yes/*No
(e)	*Commissioned/*Supervised Commissioning/**Acted as an Advisor for Commissioning	*Yes/*No	*Yes/*No	*Yes/*No

** Necessary Documents / certificate from the client, in support of Note No. 2 for Clause no. 1.0.0 of Item No. 4.0 of BDS are Attached at Annexure. of this Attachment.

1.02.00 Details of Generator

1.02.01 Generator make and model No.

1.02.02 Rated MVA

1.02.03 Rated Power Factor

1.02.04 MW rating

1.02.05 Rated voltage (KV)

1.02.06 No. of phases

1.02.07 No. of poles

1.02.08	Mounting	*Horizontal/ *Vertical	*Horizontal/ *Vertical	*Horizontal/ *Vertical
1.02.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.02.10	Cylindrical rotor Type	* Yes/*No	* Yes/*No	* Yes/*No

- 1.2.11 Cooling medium
 - (a) Stator
 - (b) Rotor
 - 1.2.12 Thermal class of Insulation
 - (a) Stator
 - (b) Rotor
 - 1.2.13 Date of Commissioning
 - 1.2.14 Date of Commencement of successful operation
 - 2.00.00 Certificate(s) from the Owner that the aforesaid Generator Set is in successful operation for a period of not less than one (1) year prior to date of Techno-Commercial Bid Opening, and caused no serious problem in past, is furnished at Annexure. to this Attachment
 - 3.00.00 Documentary evidence in support of QR data is enclosed at Annexure. to this Attachment
-

#4.6.0 Undertaking w.r.t Deed(s) of Joint Undertaking (DJU) executed by us, our Associate, our Associate's *QSTGM / *QGM/ Indian *Subsidiary Company / *JV Company (as the case may be), *Other Promoter having 25% or higher equity participation in the Indian Subsidiary Company/JV Company (as the case may be), *subsidiaries of Holding Company (the Associate) and *the manufacturing subsidiary Company,*Technology Owner (Licensor) of supercritical steam generator, *Indian Steam Generator Manufacturing Company, *"Indian Subsidiary Company/Indian JV Company/ Indian Manufacturing Company" as per clause 1.7.2 and/or 1.7.4 and/or applicable Notes for clause no. 1.0.0 of Item No. 4 of BDS is enclosed at Annexure... to this Attachment.

#4.7.0 Letter to ensure satisfactory performance of Steam Generators and/or Steam Turbine Generators (as the case may be) & Auxiliaries as per requirements of Note No. 13 for clause no. 1.0.0 of Item No. 4 of BDS as per the format enclosed in the bidding documents (Sec VII Part 3 of 3) is enclosed at Annexureto this Attachment.

Bidder to strike out whichever is not applicable.

* Bidder to strike out whichever is not applicable

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

**(Project Management Experience as per Clause 4.0.0,
Item No. 4.0 of BDS, to be filled by all the Bidders)**

Bidder's Name & Address :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0.0 *We, M/s..... (Bidder), confirm that we have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being INR 10,000 million or more. At least one of such projects has a contract value of INR 4,000 million or more. These projects are in successful operation for a period of not less than one year prior to the date of Techno-Commercial bid opening, as per clause 4.1.0(a), Item No. 4 of BDS. The details are as follows:

S. No.	Item Description	Project#1	Project#2	Project#3
1.00	Name of the reference station & its Location			
1.01	Owner's Name and its address, email, Fax No. and Tel. No.			
1.02	Name and designation of the responsible person in Owner's organization			
1.03	Contract No. & date			
1.04	i) Nature/area of EPC Project			
	ii) Whether Civil Works included in scope	*Yes/*No	*Yes/*No	*Yes/*No
1.05	Starting date of Project			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Project#1	Project#2	Project#3
1.06	Scheduled date of Commissioning			
1.07	Actual date of Commissioning			
1.08	Date of Commencement of Successful Operation			
1.09	Value of above projects (in INR Million)			
1.10	Scope of work executed			
	(a) Engineering	*Yes/*No	*Yes/*No	*Yes/*No
	(b) Procurement	*Yes/*No	*Yes/*No	*Yes/*No
	(c) Construction	*Yes/*No	*Yes/*No	*Yes/*No
1.11	Total value of large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry	INR. Million		
1.12	Certificate from the Owner(s) that the aforesaid plants are in successful operation for a period not less than one (1) year prior to the date of Techno-Commercial Bid opening			
1.13	Necessary documentary evidence in support of above are attached at Annexure..... of this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.0.0 * We, M/s..... (Bidder), confirm that we have executed at least one (1) no. of coal / lignite fired reheat type of unit of at least 200 MW which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause no. 4.1.0(b), Item no. 4 of BDS.

*We do not meet the requirements mentioned at Clause 4.1.0(b), item 4 of BDS. We are associating with M/s....., a Project Management Organization (PMO), who have carried out Project Management work of at least one (1) no. of coal / lignite fired reheat type of unit of at least 200MW which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause 4.1.0(b), Item no. 4 of BDS.

The qualification details of *Us/ *our PMO are furnished as below :

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.00.00	Name, address, Tel. No., Fax No. and email of the Project Management Organization (PMO)			
1.01.00	Name and Designation of the responsible person in the PMO			
1.02.00	Name of the reference station and its location			
1.02.01	Name, address, email, Tel. no. and Fax of owner of the station			
1.02.02	Name and Designation of the responsible person in owner's organization			
1.02.03	No. of units & Capacity of each unit in MW			
1.02.04	Contract No. & Date			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
1.02.05	Starting date of project			
1.02.06	Scheduled date of Commissioning			
1.02.07	Actual date of Commissioning			
1.02.08	Date of commencement of successful operation			
1.02.09	Whether the Plant is coal fired or lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
1.02.10	Whether the plant is reheat type	*Yes/*No	*Yes/*No	*Yes/*No
1.02.11	Scope of work executed by *us / *PMO as detailed below :			
	a) Engineering management	Yes*/No*	*Yes/*No	*Yes/*No
	b) Procurement management	Yes*/No*	*Yes/*No	*Yes/*No
	c) Construction management	Yes*/No*	*Yes/*No	*Yes/*No
	d) *Commissioning / *Supervision of Commissioning	Yes*/No*	*Yes/*No	*Yes/*No
1.02.12	Whether the scope of work included :			
	i) Steam Generator sets along with their associated auxiliaries	Yes*/No*	*Yes/*No	*Yes/*No
	ii) Steam Turbine Generator sets along with their associated auxiliaries	Yes*/No*	*Yes/*No	*Yes/*No
	iii) Electrostatic Precipitators / Bag filters	Yes*/No*	*Yes/*No	*Yes/*No
	iv) Switchyard	Yes*/No*	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
v)	Coal Handling Plant	Yes*/No*	*Yes/*No	*Yes/*No
vi)	Ash Handling Plant	Yes*/No*	*Yes/*No	*Yes/*No
vii)	Cooling Towers	Yes*/No*	*Yes/*No	*Yes/*No
vi)	Condenser Cooling Water System	Yes*/No*	*Yes/*No	*Yes/*No

Details of Steam Generator

2.00.00	Name and Address of Steam Generator Set manufacturer			
2.01.00	Steam Generator steam flow capacity at SH outlet (T/Hr.)			
2.02.00	Main Steam Temperature at SH outlet (°C)			
2.03.00	Main Steam Pressure at SH outlet [kg/cm ² /(a)]			
2.04.00	Reheat steam flow (T/Hr.)			
2.05.00	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.06.00	Whether balanced draft type or not	Yes*/No*	*Yes/*No	*Yes/*No
2.07.00	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
2.08.00	Type of circulation system (Natural or Forced Circulation)			
2.09.00	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
2.10.00	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			
2.11.00	Type of fuel used			
2.11.01	Firing rate			
2.11.02	Calorific value of fuel (Kcal/kg)			
2.12.00	Designed Boiler efficiency and corresponding GCV			
2.13.00	Tested boiler efficiency and corresponding GCV			
2.14.00	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.15.00	a) Whether used for two shifting	Yes*/No*	*Yes/*No	*Yes/*No
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
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- 2.16.00 Minimum start-up time achieved
- i) Hot start (after shut down period less than 10 hours)
 - ii) Warm start (after shut down period between 10 hours & 72 hours)
 - iii) Cold start (after shut down period exceeding 72 hours)

2.17.00 Availabilities of steam generator for last two years

2.18.00 Maximum total NOx emission (thermal as well as fuel) from the steam generators

Details of Steam Turbine Generator

3.00.00 Name and address of steam turbine generator set manufacturer

3.01.00 No. of Steam Turbine Generator set supplied for the station

3.02.00 Capacity of Turbine Generator Set in MW of unit

3.03.00 Steam Turbine make & model

3.04.00 *Tandem Compound / *Cross Compound

3.05.00 No. of Reheat

3.06.00 No. of Cylinders

(a) HP

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
3.07.00	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
3.08.00	Main Steam Pressure (gauge)			
3.09.00	Main Steam Temperature (deg. C)			
3.10.00	Reheat Steam Temperature (deg. C)			
3.11.00	Exhaust Pressure (ata)			
3.12.00	Condensing Type			
3.13.00	Rated Speed (rpm) and Operating Frequency Range (Hz)			
3.14.00	No. of Steam extractions			
3.15.00	Steam Turbine and Generator coupled directly	Yes*/No*	*Yes/*No	*Yes/*No
3.16.00	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
4.00.00	Generator Details			
4.01.00	Generator make and model No.			
4.02.00	Rated MVA			
4.03.00	Rated Power Factor			
4.04.00	MW rating			
4.05.00	Rated voltage (kV)			
4.06.00	No. of phases			
4.07.00	No. of poles			
4.08.00	Mounting	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical
4.09.00	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
4.10.00	Cylindrical rotor type	* Yes/*No	* Yes/*No	* Yes/*No
4.11.00	Cooling medium			
	(a) Stator			
	(b) Rotor			
4.12.00	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

Sl. No.	Item Description	Station-1	Station-2	Station-3
5.00.00	List of balance power plant equipment and their manufacturers' name(s) for the referred stations is enclosed at Annexure.....			
6.00.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set with their associated auxiliaries and facilities is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
6.01.00	Documentary evidence in support of above QR data is enclosed at Annexure..... to this Attachment			
7.00.00	List of all the similar Power Plants under execution along with the details such as order no. & date, order value and scheduled date of commissioning is enclosed separately at Annexure.....			
8.00.00	List of all the similar Power Plants executed by *us / *PMO, where scope of work included Engineering management, Procurement management, Construction management and commissioning / supervision of commissioning, along with the date of commissioning is enclosed separately at Annexure.....			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

3.0.0 *Since the Project Management of the EPC package is to be carried out by a Project Management Organization (other than the Bidder), we are furnishing herewith Deed of Joint Undertaking (DJU) executed by us and the Project management Organization as per clause 4.1.0(b) of Item No. 4 of BDS, which is enclosed at Annexure _____ to this Attachment.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Engineering Experience of the Bidder / Architect Engineering Firm as per Clause
5.0.0, Item No. 4.0 of BDS, to be filled by all the Bidders)

Bidder's Name & Address : To
Chief Engineer (Projects),HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

We confirm that the Engineering of the Complete EPC Package shall be carried out
by *our self / *Architect Engineering Firm(s) M/s.....
and *M/s.....

1.0.0(a) *We, M/s..... (Bidder), confirm that we have carried out
Engineering of at least one (1) no. of pulverised coal / lignite fired reheat type
supercritical unit, with minimum unit rating of 500MW, consisting of 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, which is in
successful operation for a period of not less than one (1) year prior to the date
of Techno-Commercial bid opening, as per clause 5.1.0(a)(i), item no. 4 of BDS.

*We, M/s..... (Bidder), do not meet the above mentioned
requirement as per clause 5.1.0(a)(i), Item No. 4 of BDS but meet the requirement
as per clause 5.1.0(a)(ii). Hence, in accordance with clause 5.1.0(b), item no. 4 of
BDS, we have associated with M/s....., an Architect Engineering
Firm, who meets the requirement indicated above, as per clause 5.1.0(a)(i), Item
No. 4 of BDS. We further confirm that we shall get the engineering documents
related to Thermal Cycle, Power Cycle Piping and flash tanks/flash boxes, Steam
Generator Start-up system, Sizing of Main Plant equipment, interface between SG and
TG, unit start-up and control philosophy vetted by the Architect Engineering Firm
meeting the above requirement indicated at Clause 5.1.0(a)(i),item 4 of BDS.

*We, M/s..... (Bidder), do not meet the above mentioned requirement
as per clause 5.1.0(a)(i), Item No. 4 of BDS. Hence, in accordance with clause
5.3.0(b), item no. 4 of BDS, we have associated with M/s....., an
Architect Engineering Firm, who meets the requirement indicated above, as per
clause 5.1.0(a)(i), Item No. 4 of BDS. We further confirm that we shall get the
engineering of the Main Plant equipment / systems i.e. Steam Generator and
Steam Turbine Generator Sets alongwith their auxiliaries including mills, fans, air pre-
heaters, steam generator start-up system, re-generative heating and pumping system,
power cycle piping and flash tanks/ flash boxes and interphase between boiler and
turbine by the Architect Engineering Firm meeting the above requirement indicated at
Clause 5.1.0(a)(i), item 4 of BDS.

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

The qualification details of *Us/ *Our Architect Engineering Firm are furnished as below :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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1.00.00 Details of Architect Engineering Experience of the *Bidder / *Architect Engineering Firm

- 1.01.00 * Name of Bidder / Architect Engineering Firm
- 1.01.01 * Address of Engineering Firm including telephone no., Fax no. and e-mail
- 1.01.02 * Name and designation of responsible person in the Engineering Firm
- 1.02.00 Name of the reference station and its location
- 1.02.01 Name, address, email, Tel no. and Fax of owner of the station
- 1.02.02 Name and designation of responsible person in owner's organization including address, email, telephone no. and fax no.
- 1.02.03 No. of units & Capacity of each unit in MW
- 1.02.04 Contract No. & Date
- 1.02.05 Starting date of the project
- 1.02.06 Schedule date of Commissioning
- 1.02.07 Actual date of Commissioning

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.08	Date of commencement of successful operation			
1.02.09	Whether coal / lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
1.02.10	Whether reheat type Supercritical unit	*Yes/*No	*Yes/*No	*Yes/*No
1.02.11	Scope of work included Engineering for the following :			
	(i) Steam Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(ii) Steam Turbine Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(iii) Mills	*Yes/*No	*Yes/*No	*Yes/*No
	(iv) Fans	*Yes/*No	*Yes/*No	*Yes/*No
	(v) Air pre-heaters	*Yes/*No	*Yes/*No	*Yes/*No
	(vi) Steam generator start-up system	*Yes/*No	*Yes/*No	*Yes/*No
	(vii) Regenerative heating and pumping system	*Yes/*No	*Yes/*No	*Yes/*No
	(viii) Power cycle piping and flash tanks/flash boxes	*Yes/*No	*Yes/*No	*Yes/*No
1.03.00	Steam Generator Set			
1.03.01	Steam Generator Make & Model			
1.03.02	Steam Generator steam flow capacity at SH outlet (T/Hr.)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.03.03	Main Steam Temperature at SH outlet (°C)			
1.03.04	Main Steam Pressure at SH outlet [kg/cm ² /(a)]			
1.03.05	Reheat steam flow (T/Hr.)			
1.03.06	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
1.03.07	Whether balanced draft type or not	Yes*/No*	Yes*/No*	Yes*/No*
1.03.08	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.03.09	Type of circulation system (Natural or Forced Circulation)			
1.03.10	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.03.11	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.03.12	Type of fuel used			
1.03.13	Firing rate			
1.03.14	Calorific value of fuel (Kcal/kg)			
1.03.15	Designed Boiler efficiency and corresponding GCV			
1.03.16	Tested boiler efficiency and corresponding GCV			
1.03.17	Tested boiler efficiency corrected to design conditions and corresponding GCV			
1.03.18	a) Whether used for two shifting	Yes*/No*	Yes*/No*	Yes*/No*
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
1.03.19	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
1.03.20	Availabilities of steam generator for last two years			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.03.21	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
1.04.00	Details of Steam Turbine Generator			
1.04.01	Steam Turbine Make & Model			
1.04.02	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
1.04.03	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
1.04.04	Main Steam Pressure (gauge)			
1.04.05	Main Steam Temperature (deg C)			
1.04.06	Reheat Steam Temperature (deg C)			
1.04.07	Exhaust Pressure (ata)			
1.04.08	Condensing Type			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.04.09	Rated Speed (rpm) and Operating Frequency Range (Hz)			
1.04.10	No. of Steam extractions			
1.04.11	Steam Turbine and Generator coupled directly	Yes*/No*	Yes*/No*	Yes*/No*
1.04.12	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.05.00 Generator Details				
1.05.01	Generator make and model No.			
1.05.02	Rated MVA			
1.05.03	Rated Power Factor			
1.05.04	MW rating			
1.05.05	Rated voltage (kV)			
1.05.06	No. of phases			
1.05.07	No. of poles			
1.05.08	Mounting	*Hori- zontal / *Vertical	*Hori- zontal / *Vertical	*Hori- zontal / *Vertical
1.05.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.05.10	Cylindrical rotor type	* Yes*/No	*Yes*/No	*Yes*/No
1.05.11	Cooling medium			
	(a) Stator			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(b) Rotor			
1.05.12	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
1.06.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set along with all the auxiliaries (engineered by the *Bidder/ *Architect Engineering Firm) is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
1.07.00	List of all coal / lignite fired reheat type supercritical power plants of unit rating 500 MW and above engineered (basic & detailed engg. till commissioning) along with the date of commissioning is enclosed separately at Annexure.....			
1.08.00	List of all the Supercritical Power plants of capacity 500 MW and above which are under engineering stage along with order value and scheduled commissioning date is furnished along with bid at Annexure.....			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

1.0.0(b) We, M/s.....(Bidder), confirm that we have carried out Engineering of at least one (1) no. of pulverised coal / lignite fired reheat type unit, with minimum unit rating of 200 MW consisting of steam generator and steam turbine generator sets along with their auxiliaries including mills, fans Air pre-heaters, regenerative heating and pumping system, power cycle piping and flash tanks/flash boxes, coal handling plant, Ash handling plant, Condenser Cooling water system, Switchyard, which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause 5.1.0(a)(ii), item no. 4 of BDS.

*We, M/s..... (Bidder), do not meet the above mentioned requirement as per clause 5.1.0(a)(ii), Item No. 4 of BDS but meet the requirement as per clause 5.1.0(a)(i). Hence, in accordance with clause 5.3.0(b), item no. 4 of BDS, we have associated with M/s....., an Architect Engineering Firm, who meets the requirement indicated above, as per clause 5.1.0(a)(ii), Item No. 4 of BDS. We further confirm that we shall get the engineering of Balance of Plant including interphase between Main Plant and Balance of Plant done by the Architect Engineering Firm.

The details in fulfillment of requirement as per clause 5.1.0 (a)(ii), Item No 4 of BDS, are furnished as below :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Architect Engineering Experience of the *Bidder / *Architect Engineering Firm (Associate)

- 2.01.00 Name of Bidder / Architect Engineering Firm
- 2.01.01 Address of Engineering Firm including email, telephone no. & fax no.
- 2.01.02 Name and designation of responsible person in the Engineering Firm
- 2.02.00 Name of the reference station and its location

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.01	Name, address, email, Tel no. and Fax of owner of the station			
2.02.02	Name and designation of responsible person in owner's organization including address, email, telephone no. and fax no.			
2.02.03	No. of units & Capacity of each unit in MW			
2.02.04	Contract No. & Date			
2.02.05	Starting date of the project			
2.02.06	Schedule date of Commissioning			
2.02.07	Actual date of Commissioning			
2.02.08	Date of commencement of successful operation			
2.02.09	Whether coal / lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
2.02.10	Whether reheat type unit	*Yes/*No	*Yes/*No	*Yes/*No
2.02.10	Scope of work included Engineering for the following:			
	(i) Steam Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(ii) Steam Turbine Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(iii) Mills	*Yes/*No	*Yes/*No	*Yes/*No
	(iv) Fans	*Yes/*No	*Yes/*No	*Yes/*No
	(v) Air pre-heaters	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
(vi)	Regenerative heating and pumping system	*Yes/*No	*Yes/*No	*Yes/*No
(vii)	Power cycle piping and flash tanks / flash boxes	*Yes/*No	*Yes/*No	*Yes/*No
(viii)	Coal handling plant	*Yes/*No	*Yes/*No	*Yes/*No
(ix)	Ash handling plant	*Yes/*No	*Yes/*No	*Yes/*No
(x)	Condenser Cooling Water system	*Yes/*No	*Yes/*No	*Yes/*No
(xi)	Switchyard	*Yes/*No	*Yes/*No	*Yes/*No

* Applicant to strike out whichever is not applicable.

2.03.00 Steam Generator Set

2.03.01 Steam Generator Make & Model

2.03.02 Steam Generator steam flow capacity at SH outlet (T/Hr.)

2.03.03 Main Steam Temperature at SH outlet (°C)

2.03.04 Main Steam Pressure at SH outlet [kg/cm²/(a)]

2.03.05 Reheat steam flow (T/Hr.)

2.03.06 a) Reheater outlet pressure [kg/cm² (a)]

b) Reheater outlet temperature (°C)

2.03.07 Whether balanced draft type or not *Yes/*No *Yes/*No *Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.03.08	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
2.03.09	Type of circulation system (Natural or Forced Circulation)			
2.03.10	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
2.03.11	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			
2.03.12	Type of fuel used			
2.03.13	Firing rate			
2.03.14	Calorific value of fuel (Kcal/kg)			
2.03.15	Designed Boiler efficiency and corresponding GCV			
2.03.16	Tested boiler efficiency and corresponding GCV			
2.03.17	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.03.18	a) Whether used for two shifting	*Yes/*No	*Yes/*No	*Yes/*No
	b) If yes, number of such operations it has been designed for			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	c) No. of actual two shifting cycles it has actually operated on till date			
2.03.19	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.03.20	Availabilities of steam generator for last two years			
2.03.21	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
2.04.00	Details of Steam Turbine Generator			
2.04.01	Steam Turbine Make & Model			
2.04.02	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.04.03	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
2.04.04	Main Steam Pressure (gauge)			
2.04.05	Main Steam Temperature (deg C)			
2.04.06	Reheat Steam Temperature (deg C)			
2.04.07	Exhaust Pressure (ata)			
2.04.08	Condensing Type			
2.04.09	Rated Speed (rpm) and Operating Frequency Range (Hz)			
2.04.10	No. of Steam extractions			
2.04.11	Steam Turbine and Generator coupled directly	*Yes/*No	*Yes/*No	*Yes/*No
2.04.12	Steam Turbine Generator Set Installation	*Indoor/* *Outdoor	*Indoor/ Outdoor	*Indoor/ Outdoor
2.05.00	Generator Details			
2.05.01	Generator make and model No.			
2.05.02	Rated MVA			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S. No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.05.03	Rated Power Factor			
2.05.04	MW rating			
2.05.05	Rated voltage (kV)			
2.05.06	No. of phases			
2.05.07	No. of poles			
2.05.08	Mounting	*Hori- zontal/ *Vertical	*Hori- zontal/ *Vertical	*Hori- zontal/ *Vertical
2.05.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
2.05.10	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
2.05.11	Cooling medium			
	(a) Stator			
	(b) Rotor			
2.05.12	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.06.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set along with all the auxiliaries (engineered by *Bidder/*Architect Engineering Firm) is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
2.07.00	List of all coal / lignite fired reheat type power plants of unit rating 200 MW and above engineered (basic & detailed engg. till commissioning) along with the date of commissioning is enclosed separately at Annexure.....			
2.08.00	List of all the Power plants of capacity 200 MW and above which are under engineering stage along with order value and scheduled commissioning date is furnished along with bid at Annexure.....			

Note : In case the Bidder does not meet either the requirements as per clause 5.1.0(a)(i) & (ii) or 5.2.0(a)(i) & (ii), Item No. 4 of BDS, the Bidder shall get the complete Engineering of EPC Package done by an Architect Engineering Firm who meets the requirement indicated at clause 5.1.0(a)(i) & (ii), item no. 4 of BDS and shall furnish the required details on behalf of Architect Engineering Firm, as per Clause 1.0.0(a) & 1.0.0(b) above.

2.09.00 Deed of Joint Undertaking executed by the Bidder and the Architect Engineering Firm(s) is/are attached at Annexure.....

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.0.0(a) *We, M/s.....(Steam Generator and / or Steam Turbine Generator Manufacturer bidding under route *1.1.0 / *1.2.0, as Bidder), confirm that we *are engaged / *have completed Engineering of at least one (1) no. of pulverised *coal / *lignite fired reheat type **supercritical** unit, with minimum unit rating of 500MW, consisting of 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 (*in a single contract or *in **two separate contracts in a single unit**), which is under execution prior to the date of Techno-Commercial bid opening, as per clause 5.2.0(a)(i), item no. 4 of BDS.

The details are furnished as below :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.00.00	Details of Architect Engineering Experience of the Bidder			
1.01.00	Name of the reference station and its location			
1.01.01	Name, address, email, Tel no. and Fax of owner of the station			
1.01.02	Name and designation of responsible person in owner's organization including address, email, telephone no. and fax no.			
1.01.03	No. of units & Capacity of each unit in MW			
1.01.04	Contract No. & Date (in case of two separate contracts for a single unit, Bidder to furnish ref. nos. and details of both the contracts.)			
1.01.05	Starting date of the project			
1.01.06	Schedule date of Commissioning			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.01.07	Whether coal / lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
1.01.08	Whether reheat type Supercritical unit	*Yes/*No	*Yes/*No	*Yes/*No
1.01.09	Scope of work included Engineering for the following :			
	(i) Steam Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(ii) Steam Turbine Generator & their Auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
	(iii) Mills	*Yes/*No	*Yes/*No	*Yes/*No
	(iv) Fans	*Yes/*No	*Yes/*No	*Yes/*No
	(v) Air pre-heaters	*Yes/*No	*Yes/*No	*Yes/*No
	(vi) Steam generator start-up system	*Yes/*No	*Yes/*No	*Yes/*No
	(vii) Regenerative heating and pumping system	*Yes/*No	*Yes/*No	*Yes/*No
	(viii) Power cycle piping and flash tanks/flash boxes	*Yes/*No	*Yes/*No	*Yes/*No
	The above scope is under *single contract / *two separate contract by us in a single unit	*Yes/*No	*Yes/*No	*Yes/*No
1.02.00	Steam Generator Set			
1.02.01	Steam Generator Make & Model			
1.02.02	Steam Generator steam flow capacity at SH outlet (T/Hr.)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.03	Main Steam Temperature at SH outlet (°C)			
1.02.04	Main Steam Pressure at SH outlet [kg/cm ² /(a)]			
1.02.05	Reheat steam flow (T/Hr.)			
1.02.06	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
1.02.07	Whether balanced draft type or not	*Yes/*No	*Yes/*No	*Yes/*No
1.02.08	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
1.02.09	Type of circulation system (Natural or Forced Circulation)			
1.02.10	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
1.02.11	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.02.12	Type of fuel to be used			
1.02.13	Firing rate			
1.02.14	Calorific value of fuel (Kcal/kg)			
1.02.15	Designed Boiler efficiency and corresponding GCV			
1.02.16	Tested boiler efficiency and corresponding GCV			
1.02.17	Tested boiler efficiency corrected to design conditions and corresponding GCV			
1.02.18	a) Whether used for two shifting b) If yes, number of such operations it has been designed for c) No. of actual two shifting cycles it has actually operated on till date			
1.02.19	Minimum start-up time achieved i) Hot start (after shut down period less than 10 hours) ii) Warm start (after shut down period between 10 hours & 72 hours) iii) Cold start (after shut down period exceeding 72 hours)			
1.02.20	Availabilities of steam generator for last two years			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.03.21	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
1.03.00	Details of Steam Turbine Generator			
1.03.01	Steam Turbine Make & Model			
1.03.02	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
1.03.03	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
1.03.04	Main Steam Pressure (gauge)			
1.03.05	Main Steam Temperature (deg C)			
1.03.06	Reheat Steam Temperature (deg C)			
1.033.07	Exhaust Pressure (ata)			
1.03.08	Condensing Type			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
1.03.09	Rated Speed (rpm) and Operating Frequency Range (Hz)			
1.03.10	No. of Steam extractions			
1.03.11	Steam Turbine and Generator coupled directly	*Yes/*No	*Yes/*No	*Yes/*No
1.03.12	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.04.00 Generator Details				
1.04.01	Generator make and model No.			
1.04.02	Rated MVA			
1.04.03	Rated Power Factor			
1.04.04	MW rating			
1.04.05	Rated voltage (kV)			
1.04.06	No. of phases			
1.04.07	No. of poles			
1.04.08	Mounting	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical
1.04.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
1.04.10	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
1.04.11	Cooling medium			
	(a) Stator			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
	(b) Rotor			
1.04.12	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
1.05.00	List of all coal / lignite fired reheat type supercritical power plants of unit rating 500 MW and above engineered (basic & detailed engg. till commissioning) is enclosed separately at Annexure.....			
1.06.00	List of all the Supercritical Power Plants of capacity 500 MW and above which are under engineering stage along with order value and scheduled commissioning date is furnished along with bid at Annexure.....			
1.07.00	Certificate(s) from the Owner that the Bidder *are engaged/ *have completed Engineering prior to date of Techno-Commercial Bid Opening is furnished at Annexure..... to this Attachment			
1.08.00	Documentary evidence in support of QR data is enclosed at Annexure..... to this Attachment			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

2.0.0(b) *We, M/s.....(Steam Generator and / or Steam Turbine Generator manufacturer bidding under route 1.1.0 / 1.2.0 item no. 4 of BDS, as Bidder), confirm that we have carried out Engineering of at least one (1) no. of pulverised coal / lignite fired reheat type unit, with minimum unit rating of 500MW consisting of steam generator and steam turbine generator sets along with their auxiliaries including mills, fans Air pre-heaters, regenerative heating and pumping system, power cycle piping and flash tanks/flash boxes, coal handling plant, Ash handling plant, Condenser Cooling water system, Switchyard, which is in successful operation for a period of not less than one (1) year prior to the date of Techno-Commercial bid opening, as per clause 5.2.0(a)(ii), item no. 4 of BDS.

The details are furnished as below :

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
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2.00.00 Details of Architect Engineering Experience of the Bidder

- 2.01.00 Name of the reference station and its location
- 2.01.01 Name, address, email, Tel no. and Fax of owner of the station
- 2.01.02 Name and designation of responsible person in owner's organization including address, email, telephone no. and fax no.
- 2.01.03 No. of units & Capacity of each unit in MW
- 2.01.04 Contract No. & Date
- 2.01.05 Starting date of the project
- 2.01.06 Schedule date of Commissioning
- 2.01.07 Actual date of Commissioning
- 2.01.08 Date of commencement of successful operation

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.01.09	Whether coal / lignite fired	*Yes/*No	*Yes/*No	*Yes/*No
2.01.10	Whether reheat type unit	*Yes/*No	*Yes/*No	*Yes/*No
2.01.11	Scope of work included Engineering for the following :			
(i)	Steam Generator sets along with their auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
(ii)	Steam Turbine Generator sets along with their auxiliaries	*Yes/*No	*Yes/*No	*Yes/*No
(iii)	Mills	*Yes/*No	*Yes/*No	*Yes/*No
(iv)	Fans	*Yes/*No	*Yes/*No	*Yes/*No
(v)	Air pre-heaters	*Yes/*No	*Yes/*No	*Yes/*No
(vi)	Regenerative heating and pumping system	*Yes/*No	*Yes/*No	*Yes/*No
(vii)	Power cycle piping and flash tanks/flash boxes	*Yes/*No	*Yes/*No	*Yes/*No
(viii)	Coal handling plant	*Yes/*No	*Yes/*No	*Yes/*No
(ix)	Ash handling plant	*Yes/*No	*Yes/*No	*Yes/*No
(x)	Condenser Cooling Water system	*Yes/*No	*Yes/*No	*Yes/*No
(xi)	Switchyard	*Yes/*No	*Yes/*No	*Yes/*No

2.02.00 Steam Generator Set

2.02.01 Steam Generator Make & Model

2.02.02 Steam Generator steam flow capacity at SH outlet (T/Hr.)

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.03	Main Steam Temperature at SH outlet (°C)			
2.02.04	Main Steam Pressure at SH outlet [kg/cm ² (a)]			
2.02.05	Reheat steam flow (T/Hr.)			
2.02.06	a) Reheater outlet pressure [kg/cm ² (a)]			
	b) Reheater outlet temperature (°C)			
2.02.07	Whether balanced draft type or not	Yes*/No*	Yes*/No*	Yes*/No*
2.02.08	Type of Steam Generator			
	i) Single pass (tower type) or two pass type (must match with offered type)			
	ii) Once through type	Yes*/No*	Yes*/No*	Yes*/No*
	iii) Evaporator designed for variable pressure operation (sub-critical and super critical pressure range)	Yes*/No*	Yes*/No*	Yes*/No*
2.02.09	Type of circulation system (Natural or Forced Circulation)			
2.02.10	Type of Water wall tubes (spiral wound (inclined) or vertical plain or vertical rifled) (must match with offered type)			
2.02.11	Minimum mass flow through the water wall tubes (Kg/sec./m ²)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.12	Type of fuel used			
2.02.13	Firing rate			
2.02.14	Calorific value of fuel (Kcal/kg)			
2.02.15	Designed Boiler efficiency and corresponding GCV			
2.02.16	Tested boiler efficiency and corresponding GCV			
2.02.17	Tested boiler efficiency corrected to design conditions and corresponding GCV			
2.02.18	a) Whether used for two shifting	Yes*/No*	Yes*/No*	Yes*/No*
	b) If yes, number of such operations it has been designed for			
	c) No. of actual two shifting cycles it has actually operated on till date			
2.02.19	Minimum start-up time achieved			
	i) Hot start (after shut down period less than 10 hours)			
	ii) Warm start (after shut down period between 10 hours & 72 hours)			
	iii) Cold start (after shut down period exceeding 72 hours)			
2.02.20	Availabilities of steam generator for last two years			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.02.21	Maximum total NOx emission (thermal as well as fuel) from the steam generators			
2.03.00	Details of Steam Turbine Generator			
2.03.01	Steam Turbine Make & Model			
2.03.02	No. of Cylinders			
	(a) HP			
	(b) IP			
	(c) LP			
	(d) Whether HP & IP cylinders are combined	*Yes/*No	*Yes/*No	*Yes/*No
2.03.03	Module Number			
	(a) HP Turbine			
	(b) IP Turbine			
	(c) Combined HP-IP Turbine (if applicable)			
	(d) LP Turbine			
2.03.04	Main Steam Pressure (gauge)			
2.03.05	Main Steam Temperature (deg.C)			
2.03.06	Reheat Steam Temperature (deg.C)			
2.03.07	Exhaust Pressure (ata)			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
2.03.08	Condensing Type			
2.03.09	Rated Speed (rpm) and Operating Frequency Range (Hz)			
2.03.10	No. of Steam extractions			
2.03.11	Steam Turbine and Generator coupled directly	*Yes/*No	*Yes/*No	*Yes/*No
2.03.12	Steam Turbine Generator Set Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
2.04.00 Generator Details				
2.04.01	Generator make and model No.			
2.04.02	Rated MVA			
2.04.03	Rated Power Factor			
2.04.04	MW rating			
2.04.05	Rated voltage (kV)			
2.04.06	No. of phases			
2.04.07	No. of poles			
2.04.08	Mounting	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical	*Hori- zontally/ *Vertical
2.04.09	Installation	*Indoor/ *Outdoor	*Indoor/ *Outdoor	*Indoor/ *Outdoor
2.04.10	Cylindrical rotor type	*Yes/*No	*Yes/*No	*Yes/*No
2.04.11	Cooling medium			
	(a) Stator			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

S.No.	Item Description	Installation No.1	Installation No.2	Installation No.3
(b)	Rotor			
2.04.12	Thermal Class of insulation			
	(a) Stator			
	(b) Rotor			
2.05.00	Certificate from the Owner of the reference plant that the aforesaid Steam Generator and Steam Turbine Generator Set along with all the auxiliaries is in successful operation for a period of not less than 1 year prior to date of Techno-Commercial Bid opening and caused no serious problem in past, is furnished along with bid at Annexure			
2.06.00	List of all coal / lignite fired reheat type power plants of unit rating 500 MW and above engineered (basic & detailed engg. till commissioning) along with the date of commissioning is enclosed separately at Annexure.....			
2.07.00	List of all the Power plants of capacity 500 MW and above which are under engineering stage along with order value and scheduled commissioning date is furnished along with bid at Annexure.....			

*Bidder to Strike off if not applicable

Signature of Authorised Signatory.....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

**(Phased Manufacturing Program and Transfer of Technology
as per Clause 3.0.0 of Item No. 4.0 of BDS applicable for all Bidders)**

Bidder's Name and Address :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula
Haryana

**PROFORMA OF LETTER OF UNDERTAKING TO BE SUBMITTED BY
THE BIDDER FOR PHASED MANUFACTURING PROGRAM
ALONGWITH THE BID IS ATTACHED AT ATTACHMENT-18 TO BID
FORM (TECHNO-COMMERCIAL)**

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Proforma of Letter of Undertaking to be Submitted by the Qualified Steam Generator Manufacturer / Qualified Steam Turbine Generator Manufacturer / Qualified Generator Manufacturer / Promoter holding minimum 51% in the Joint Venture Company / Promoter holding minimum 26% equity in the Joint Venture Company / Parent company of Indian majority stake holder in JV Company / *Indian Company who holds at least 51% equity in Joint Venture Company / *Wholly owned subsidiary / *Indian Subsidiary Company / *JV Company for Phased Manufacturing Program and Transfer of Technology along with the Bid as per Note No. 9 for Clause No. 1.0.0 of Item No. 4.0 of BDS)

LETTER OF UNDERTAKING

(To be executed on Non-Judicial Stamp Paper of Requisite Value)

*1.0 We undertake that as per the requirement of Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS for Clause No. *1.1.2(a)/*1.3.1/*Note 4 of Clause 1.0.0, Item No. 4.0 of BDS, we M/s. (Name of Qualified Steam Generator Manufacturer/ Qualified Steam Turbine Generator Manufacturer) undertake that Indian Subsidiary Company M/s. shall remain our subsidiary for a lock in period of 7 years from the date of incorporation of this Indian Subsidiary Company or upto the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution(s) in support of above at Annexure- to this undertaking.

*2.0 We undertake that as per the requirement of Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS for Clause No. *1.1.2(b) / *1.4.1 / *1.5.1 / *Note 4 of Clause 1.0.0, Item No. 4.0 of BDS, we M/s. (Name of Qualified Steam Generator manufacturer/Qualified Steam Turbine Generator Manufacturer) undertake that we shall maintain minimum equity participation of 26% in the Indian JV Company M/s..... for a lock in period of 7 years from the date of incorporation of this Indian JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution(s) in support of above at Annexure- to this undertaking.

Signature of authorized signatory.....

- *3.0 We, undertake that as per the requirement of Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS for Clause No. *1.1.2 (b) / *1.4.1 / *1.5.1 / *Note 6 of Clause 1.0.0, Item No. 4.0 of BDS, we M/s. (Majority Stakeholder) undertake that we shall maintain minimum equity participation of 51% in the Indian JV Company M/s. for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution in support of above at Annexure-..... to this undertaking.

- *4.0 We undertake that as per the requirement of Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS for Clause No. 1.5.1, Item No. 4.0 of BDS, we M/s..... (Bidder as an Indian Company who holds at least 51% equity in Indian JV Company) undertake that we shall maintain minimum equity participation of 51% in the Indian JV Company M/s. for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution (s) in support of above as Annexure to this undertaking.

- *5.0 We undertake that as per the requirement of Note 6 & Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS, we M/s.....(Parent Company of the Indian majority stake holder of the Indian JV Company) undertake that M/s (Indian majority stake holder of Indian JV Company) is our wholly owned subsidiary and we shall maintain 100% equity participation in the above wholly owned subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution (s) in support of above as Annexure to this undertaking.

- *6.0 We undertake that as per the requirement of *Note 7 & Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS, we M/s. (Bidder) undertake that M/s (majority stake holder of Indian JV Company) is our wholly owned subsidiary maintaining minimum 51% equity in the Indian JV Company M/s, and we shall maintain 100% equity participation in the above wholly owned subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution (s) in support of above as Annexure to this undertaking.

Signature of authorized signatory.....

*7.0 We undertake that as per the requirement of Note 8 & Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS, we M/s. (*Indian Subsidiary Company/ *Indian JV Company) undertake that M/s (subsidiary of *Indian Subsidiary Company/*Indian JV Company registered for manufacturing Supercritical Steam Generator / Supercritical Steam Turbine Generator in India) shall remain our subsidiary with equity lock in for a minimum lock in period of 7 years from the date of incorporation of the manufacturing company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution (s) in support of above as Annexure to this undertaking.

*8.0 We undertake that as per the requirement of Note 9 to Clause No. 1.0.0, Item No. 4.0 of BDS for Clause No. *1.1.4 / *1.3.3 / *1.4.3 / *1.5.3 / *1.6.4, Item No. 4.0 of BDS, we M/s. (Name of Qualified Generator Manufacturer) undertake that we shall maintain minimum equity participation of *10% in Indian Subsidiary Company / Indian JV Company (as the case may be), M/s. for a lock in period of 7 years from the date of incorporation of *Indian Subsidiary Company / *Indian JV Company or up to the end of Defect Liability period of the contract, whichever is later.

We are enclosing the Board Resolution(s) in support of above at Annexure- to this undertaking.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

Note :

* Bidder to Strike if not applicable.

Power of Attorney of the person signing is to be furnished by bidder and to be attached along with the Undertaking.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

**(Proforma of Letter of Undertaking to be Executed by the Promoter(s)
of Indian Subsidiary Company / Indian JV Company holding equity
more than 25% to be submitted along with the Bid as per Note No.
(v) to Clause No. 2.0.0, Item No. 4.0 of BDS)**

LETTER OF UNDERTAKING

(To be executed on Non-Judicial Stamp Paper of Requisite Value)

We undertake that as per the requirement of Note (v) to Clause No. 2.0.0, Item No. 4.0 of BDS, we M/s. (Name of Promoter holding more than 25% equity in the *Indian Subsidiary Company / *Indian Joint Venture JV Company) pledge our unconditional and irrevocable financial support for execution of contract (if awarded) to M/s (Name of Bidder).

We are enclosing the Board resolution in support of above as Annexure to this undertaking.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Note :

*** Bidder to Strike if not applicable.**

Power of Attorney of the person signing is to be furnished by bidder and to be attached along with the Undertaking.

**(Details pertaining to Financial Criteria of Qualification Requirement
as per Clause 2.1.0 of Item No. 4.0 of Bid Data Sheet)**

A) To satisfy the requirements specified in Clause 2.1.0 of Item No. 4.0 of Bid Data Sheet, Section-III, We give below the following details:

a) In terms of Clause No. 2.1.1, we confirm that our average annual turnover in the preceding three financial years as on date of Techno-commercial bid opening is not less than **INR 12000 Million** (Rupees Twelve thousand Million only) or in equivalent foreign currency. In support of above, we are enclosing Audited Financial Statements.

Sl.No	Financial Year	Amount in Rs.
1.	2019-20	
2.	2020-21	
3.	2021-22	
4.	Average Annual Turnover for the preceding three (3) Financial Years as on date of Techno-Commercial Bid Opening.	
5.	We have enclosed Audited financial statements for the last 3 financial years at	Annexure to this Attachment
6.	<p>Since we are not able to furnish our audited financial statements, on standalone entity basis, we are submitting the following documents for substantiation of our Qualification :</p> <p>(a) Copies of unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of our Holding Company for the last 3 years enclosed at Annexure.....to this Attachment.</p> <p>(b) Certificate from the CEO/CFO of the Holding company stating that the unaudited unconsolidated financial statements form part of the consolidated Annual Report of the Holding Company, is enclosed as per the format at Appendix-A to this Attachment.</p>	Enclosed at Annexure
7.	<p>Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed</p> <p>In case not enclosed, financial results certified by a practicing chartered accountant enclosed</p> <p>In case financial results certified by a practicing</p>	<p>YES*/NO*</p> <p>YES*/NO*</p> <p>Enclosed at Annexure</p>

<p>chartered accountant not enclosed, then Audited financial statements for FY 2017-2018 also enclosed.</p> <p>Further, a Certificate from the CEO/CFO of the Bidder stating that the “Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial parameters is not available”, is enclosed Annexure as per the format at Appendix-C to this Attachment.</p>	<p>YES*/NO*</p> <p>Enclosed at Annexure</p>
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b) Since we do not satisfy the Financial Criteria stipulated at Clause No. 2.1.1 of Item4.0 of Bid Data Sheet, Section-III, on our Own, we give below the following details of our **Holding Company** :

1. Name and Address of the Holding Company:
2. Turnover of the Holding Company with following details:

SI.No	Financial Year	Amount in INR
a)	2019-20	.....
b)	2020-21	.....
c)	2021-22	.....
d)	Average Annual Turnover for the preceding three (3) Financial Years as on date of Techno-Commercial Bid Opening.	.....
e)	We have enclosed audited Financial Statements for the preceding three (3) Financial years	Annexure .....to this Attachment

- | SI. No | Description | As on last day of the preceding financial year |
|--------|--|--|
| 3. | Paid-up Share Capital of the Holding Company | ..... |
| 4. | Net Worth of the Holding Company | ..... |
| 5. | %age of Net worth to Paid-up Share Capital of the Holding Company | ..... |
| 6. | A Letter of Undertaking from the Holding Company, supported by Board Resolution of the Holding Company, pledging unconditional and irrevocable financial support for execution of the contract by the bidder in case of award is enclosed as per the format at Appendix-B to this Attachment. A power of attorney of the person signing on behalf of holding company is also | |

Sl. No	Description	As on last day of the preceding financial year
	enclosed at Annexure to this Attachment.	
7.	Documentary evidence like Annual Report/Audited financial statements together with relevant schedules for the preceding financial year/ certification of financial statements from a practicing Chartered Accountant etc. in respect of holding company in support of above is enclosed at Annexure..... to this Attachment.	
8.	Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed	YES*/NO*
	In case not enclosed, financial results certified by a practicing chartered accountant enclosed	YES*/NO* Enclosed at Annexure
	In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2017-2018 also enclosed. Further, a Certificate from the CEO/CFO of the Holding Company stating that the "Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial parameters is not available", is enclosed Annexure as per the format at Appendix-C to this Attachment.	YES*/NO* Enclosed at Annexure

B) To satisfy the requirements specified in Clause 2.1.2 of Item No. 4.0 of Bid Data Sheet, Section-III, We give below the following details:

- a) We hereby confirm that net worth of our company as on the last day of the preceding financial year is not less than 100% of its paid-up share capital.
The Details are as under:

Sl. No	Description	As on last day of the preceding financial year
1.	Paid-up Share Capital	
2.	Net Worth	
3.	%age of Net worth to Paid-up Share Capital	
4.	Documentary evidence like Audited financial statements for the preceding financial year* in support of above is enclosed at Annexure to this Attachment.	
5.	<p>Since we are not able to furnish our audited financial statements, on standalone entity basis, we are submitting the following documents for substantiation of our Qualification :</p> <p>(a) Copies of unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of our Holding Company for the last 3 years enclosed at Annexure to this Attachment.</p> <p>(b) Certificate from the CEO/CFO of the Holding company stating that the unaudited unconsolidated financial statements form part of the consolidated Annual Report of the Holding Company, is enclosed as per the format at Appendix-A to this Attachment.</p>	Enclosed at Annexure
6.	<p>Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed</p> <p>In case not enclosed, financial results certified by a practicing chartered accountant enclosed</p> <p>In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2021-2022 also enclosed.</p> <p>Further, a Certificate from the CEO/CFO of the Bidder stating that the "Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial is not available", is enclosed</p>	<p>YES*/NO*</p> <p>YES*/NO* Enclosed at Annexure</p> <p>YES*/NO* Enclosed at Annexure</p>

	Annexure..... as per the format at Appendix-C to this Attachment.	
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b) Since we do not satisfy the Financial Criteria stipulated at Clause No. 2.1.2 of Item 4.0 of Bid Data Sheet, Section-III, on our Own, we give below the following details of our **Holding Company and/or our subsidiary(ies) and/or subsidiaries of our Holding Company**:

Sl. No	Description	As on last day of the preceding financial year
1.	Name and Address of the Group Companies:	
	1.	
	2.	
	3.	
	
2.	Paid-up Share Capital of Group Companies	
		Y1
		Y2
		Y3
	
3.	Net Worth of the Group Companies	
	X1	
	X2	
	X3	
	
4.	%age of Net worth to Paid-up Share Capital of the Group Companies	
	X1/Y1 x100	
	X2/Y2 x100	
	X3/Y3 x100	
	
5.	Net worth (Combined)	
	(X1+X2+X3+.....)/(
	Y1+Y2+Y3+.....) X	
	100	

Sl. No	Description	As on last day of the preceding financial year
6.	<p>Audited financial statements of Group Companies for the preceding financial year in support of above is enclosed at Annexure to this Attachment.</p> <p>In case not enclosed, financial results certified by a practicing chartered accountant enclosed</p>	<p>YES*/NO*</p> <p>YES*/NO*</p> <p>Enclosed at Annexure</p>
7.	<p>In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2017-2018 also enclosed.</p> <p>Further, a Certificate from the CEO/CFO of the Company stating that "the Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial is not available", is enclosed Annexure as per the format at Appendix-C to this Attachment.</p>	<p>YES*/NO*</p> <p>Enclosed at Annexure</p> <p>YES*/NO*</p>
(i)	<p>Net worth means the sum total of the paid up share capital and free reserves. Free reserve means all reserves credited out of the profits and share premium account but does not include reserves credited out of the revaluation of the assets, write back of depreciation provision and amalgamation. Further any debit balance of Profit and Loss account and miscellaneous expenses to the extent not adjusted or written off, if any, shall be reduced from reserves and surplus.</p>	
(ii)	<p>Other income shall not be considered for arriving at annual turnover.</p>	
(iii)	<p>"Holding Company" and "Subsidiary Company" shall have the meaning ascribed to them as per Companies Act of India.</p>	
(iv)	<p>For annual Turnover indicated in foreign currency, the exchange rate as on seven (7) days prior to the date of Techno-Commercial bid opening shall be used.</p>	

**PROFORMA OF CERTIFICATE FROM THE CEO/CFO OF THE HOLDING
COMPANY IN ACCORDANCE WITH CLAUSE 2.1.3 OF ITEM NO. 4.0 OF BDS**

(To be submitted by Bidder along with the Techno-Commercial Bid)

Ref. :

Date :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana

Dear Sirs,

1.0 I, Mr.....(CEO of the Company / CFO of the Company)* declare that M/s.
..... (Name of the Holding Company) is the Holding Company of M/s.
..... (Name of the Bidder).

2.0 I hereby confirm and undertake that the unaudited unconsolidated financial statements
submitted in respect of the bidder as part of the bid reference no.....dated
.....have been considered for the purposes of the finalization of Consolidated Financial
Statements of the Holding Company as part of the Annual Reports.

3.0 I further, certify that the figures in the unaudited unconsolidated financial statements are true
and correct and same have been duly reflected in the audited consolidated financial statements and
/ or Annual Report of the Holding Company.

Yours faithfully

(Signature)

Date : (Name & Designation).....

Place : (Name of the Holding Company)

(Seal of Holding Company)

Note : *Strike off whichever is not applicable.

PROFORMA OF LETTER OF UNDERTAKING

(TO BE FURNISHED ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

(To be executed by the Holding Company Supported by
Board Resolution and submitted by the Bidder along with the Techno-Commercial Bid,
Applicable to the Bidder for meeting the stipulated Financial Qualifying
Requirement as per Clause 2.1.1 of Item No. 4.0 of Bid Data Sheet)

Ref. :

Date :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana

Dear Sirs,

1.0 We, M/s..... declare that we are the holding company of M/s
..... (Name of the Bidder) and have controlling interest therein.

M/s. (Name of the Bidder) proposes to submit the bid for the package
..... (Name of the package) for..... (Name of the Project) under bid
reference no. datedand have sought financial strength and support
from us for meeting the stipulated Financial Qualifying Requirement as per Clause 2.1.1 of Item 4.0
of Bid Data Sheet.

2.0 We hereby undertake that we hereby pledge our unconditional & irrevocable financial support
for the execution of the said package to M/s. (Name of the Bidder), in case
they are awarded the Contract for the said package, at the end of the bidding process. We further
agree that this undertaking shall be without prejudice to the various liabilities that M/s
..... (Name of Bidder) would be required to undertake in terms of the Contract
including the Performance Security as well as other obligations of the Bidder/Contractor.

3.0 This undertaking is irrevocable and unconditional, and shall remain in force till the
successful execution and performance of the entire contract and/or till it is discharged by Owner.

4.0 We are herewith enclosing a copy of the Board Resolution in support of this undertaking.

Yours faithfully

(Signature of Authorized Signatory
on behalf of the Holding Company)

Witness :

(1)

(Name & Designation).....

(Name of the Treasury Centre).....

(2)

(Seal of the Treasury Centre).....

Date:

Place:

**APPENDIX-C TO
ATTACHMENT – 3A12**

**PROFORMA OF CERTIFICATE FROM THE CEO/CFO OF THE
COMPANY IN ACCORDANCE WITH ITEM NO. 2.1.3 OF BDS**

(To be submitted by Bidder along with the Techno-Commercial Bid)

Ref. :

Date :

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

1.0 I, Mr. (CEO of the Company / CFO of the Company)* confirm and undertake that the Financial results of the company for the preceding financial year to be submitted in respect of the bidder as part of the bid reference no. dated are under audit as on the date of Techno-Commercial Bid Opening for Package for and the certificate from the practicing chartered accountant certifying the financial parameters for the preceding financial year is not available.

Yours faithfully

(Signature)

Date : (Name & Designation).....

Place : (Name of the Company)

(Seal of Company)

Note : *Strike off whichever is not applicable.

(Details pertaining to Financial Criteria of each Collaborator/Associate as per Clause 2.2.0 of Item No. 4.0 of Bid Data Sheet)

A) To satisfy the requirements specified in Clause 2.2.0 of Item No. 4.0 of Bid Data Sheet, Section-III, We give below the following details:

a) In terms of Clause No. 2.2.1, we confirm that the average annual turnover of M/s **[our Associate/ Collaborator as per applicable clause / Note**] in the preceding three financial years as on date of Techno-commercial bid opening is not less than **INR *1200 / *4600 / *1400 Million (*Strikeout whichever is not applicable)** or in equivalent foreign currency. In support of above, we are enclosing Audited Financial Statements.

Sl. No	Financial Year	Amount in Rs.
1.	2019 - 2020	
2.	2020 - 2021	
3.	2021 - 2022	
4.	Average Annual Turnover for the preceding three (3) Financial Years as on date of Techno-Commercial Bid Opening.	
5.	We have enclosed Audited financial statements for the last 3 financial years at	Annexure to this Attachment
6.	<p>Since we are not able to furnish the audited financial statements of our Collaborator / Associate on stand alone entity basis, we are submitting the following documents for substantiation of their Qualification :</p> <p>(a) Copies of unaudited unconsolidated financial statements of our Collaborator / Associate alongwith copies of the audited consolidated financial statements of the Holding Company of our Collaborator / Associate for the last 3 years enclosed at Annexure.....to this Attachment.</p> <p>(b) Certificate from the CEO/CFO of the Holding company stating that the unaudited unconsolidated financial statements form part of the consolidated Annual Report of the Holding Company, is enclosed as per the format at Appendix-A to this Attachment.</p>	Enclosed at Annexure
7.	Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed	YES*/NO*

<p>In case not enclosed, financial results certified by a practicing chartered accountant enclosed</p> <p>In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2017-2018 also enclosed.</p> <p>Further, a Certificate from the CEO/CFO of our Collaborator / Associate stating that the “Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial parameters is not available”, is enclosed Annexure as per the format at Appendix-C to this Attachment.</p>	<p>YES*/NO* Enclosed at Annexure</p> <p>YES*/NO* Enclosed at Annexure</p>
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b) Since our Collaborator / Associate do not satisfy the Financial Criteria stipulated at Clause No. 2.2.1 of Item 4.0 of Bid Data Sheet, Section-III, on their Own, we give below the following details of the **Holding Company** of our Collaborator / Associate:

1. Name and Address of the Holding Company:
2. Turnover of the Holding Company with following details:

Sl.No	Financial Year	Amount in INR
a)	2019 – 2020	.....
b)	2020 - 2021	.....
c)	2021 - 2022	.....
d)	Average Annual Turnover for the preceding three (3) Financial Years as on date of Techno-Commercial Bid Opening.	.....
e)	We have enclosed audited Financial Statements for the preceding three (3) Financial years	Annexure to this Attachment

Sl. No	Description	As on last day of the preceding financial year
3.	Paid-up Share Capital of the Holding Company	.....
4.	Net Worth of the Holding Company	.....
5.	%age of Net worth to Paid-up Share Capital of the Holding Company	.....
6.	A Letter of Undertaking from the Holding Company, supported by Board Resolution of the Holding Company, pledging unconditional and	

Sl. No	Description	As on last day of the preceding financial year
	irrevocable financial support to the Collaborator/Associate to honour the terms and conditions of the Deed of Joint Undertaking in case of award of the Contract to the Bidder with whom Collaborator/Associate is associated is enclosed as per the format at Appendix-B to this Attachment. A power of attorney of the person signing on behalf of holding company is also enclosed at Annexure to this Attachment.	
7.	Documentary evidence like Annual Report/Audited financial statements together with relevant schedules for the preceding financial year/ certification of financial statements from a practicing Chartered Accountant etc. in respect of holding company in support of above is enclosed at Annexure..... to this Attachment.	
8.	Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed	YES*/NO*
	In case not enclosed, financial results certified by a practicing chartered accountant enclosed	YES*/NO* Enclosed at Annexure
	In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2021-22 also enclosed. Further, a Certificate from the CEO/CFO of the Holding Company stating that the "Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial parameters is not available", is enclosed Annexure as per the format at Appendix-C to this Attachment.	YES*/NO* Enclosed at Annexure

B) To satisfy the requirements specified in Clause 2.2.2 of Item No. 4.0 of Bid Data Sheet, Section-III, We give below the following details:

- a) We hereby confirm that net worth of our Collaborator/Associate as on the last day of the preceding financial year is not less than 100% of its paid-up share capital.
The Details are as under:

Sl. No	Description	As on last day of the preceding financial year
1.	Paid-up Share Capital	
2.	Net Worth	
3.	%age of Net worth to Paid-up Share Capital	
4.	Documentary evidence like Audited financial statements for the preceding financial year* in support of above is enclosed at Annexure to this Attachment.	
5.	<p>Since we are not able to furnish the audited financial statements of our Collaborator / Associate on standalone entity basis, we are submitting the following documents for substantiation of their Qualification :</p> <p>(a) Copies of unaudited unconsolidated financial statements of our Collaborator / Associate along with copies of the audited consolidated financial statements of the Holding Company of our Collaborator / Associate for the last 3 years enclosed at Annexure to this Attachment.</p> <p>(b) Certificate from the CEO/CFO of the Holding company stating that the unaudited unconsolidated financial statements form part of the consolidated Annual Report of the Holding Company, is enclosed as per the format at Appendix-A to this Attachment.</p>	Enclosed at Annexure
6.	<p>Audited results for the last financial year as on the date of Techno-Commercial bid opening enclosed</p> <p>In case not enclosed, financial results certified by a practicing chartered accountant enclosed</p> <p>In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2021-22 also enclosed.</p> <p>Further, a Certificate from the CEO/CFO of our Collaborator / Associate stating that the "Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered</p>	<p>YES*/NO*</p> <p>YES*/NO* Enclosed at Annexure</p> <p>YES*/NO* Enclosed at Annexure</p>

	accountant certifying the financial is not available”, is enclosed Annexure as per the format at Appendix-C to this Attachment.	
--	---	--

b) Since our Collaborator / Associate do not satisfy the Financial Criteria stipulated at Clause No. 2.2.2 of Item 4.0 of Bid Data Sheet, Section-III, on their Own, we give below the following details of the **Holding Company and/or subsidiary(ies) and/or subsidiaries of the Holding Company** of our Collaborator / Associate:

1. Name and Address of the Group Companies:
 - 1.
 - 2.
 - 3.
 -

Sl. No	Description	As on last day of the preceding financial year
2.	Paid-up Share Capital of Group Companies Y1 Y2 Y3	
3.	Net Worth of the Group Companies X1 X2 X3	
4.	%age of Net worth to Paid-up Share Capital of the Group Companies X1/Y1 x100 X2/Y2 x100 X3/Y3 x100	
5.	Net worth (Combined) (X1+X2+X3+.....)/(Y1+Y2+Y3+.....) X 100	

Sl. No	Description	As on last day of the preceding financial year
6.	Audited financial statements of Group Companies for the preceding financial year in support of above is enclosed at Annexure to this Attachment.	YES*/NO*
	In case not enclosed, financial results certified by a practicing chartered accountant enclosed	YES*/NO* Enclosed at Annexure
7.	In case financial results certified by a practicing chartered accountant not enclosed, then Audited financial statements for FY 2021-22 also enclosed.	YES*/NO* Enclosed at Annexure
	Further, a Certificate from the CEO/CFO of the Company stating that "the Financial results of company are under audit as on the date of Techno-Commercial Bid Opening and the certificate from the practicing chartered accountant certifying the financial is not available", is enclosed Annexure as per the format at Appendix-C to this Attachment.	YES*/NO*
	(i) Net worth means the sum total of the paid up share capital and free reserves. Free reserve means all reserves credited out of the profits and share premium account but does not include reserves credited out of the revaluation of the assets, write back of depreciation provision and amalgamation. Further any debit balance of Profit and Loss account and miscellaneous expenses to the extent not adjusted or written off, if any, shall be reduced from reserves and surplus.	
	(ii) Other income shall not be considered for arriving at annual turnover.	
	(iii) "Holding Company" and "Subsidiary Company" shall have the meaning ascribed to them as per Companies Act of India.	
	(iv) For annual Turnover indicated in foreign currency, the exchange rate as on seven (7) days prior to the date of Techno-Commercial bid opening shall be used.	

**PROFORMA OF CERTIFICATE FROM THE CEO/CFO OF THE HOLDING
COMPANY IN ACCORDANCE WITH CLAUSE 2.2.3 OF ITEM NO. 4.0 OF BDS**

(To be submitted by Bidder along with the Techno-Commercial Bid)

Ref. :

Date :

To
Chief Engineer (projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana

Dear Sirs,

1.0 I, Mr. (CEO of the Company / CFO of the Company)* declare that M/s.
..... (Name of the Holding Company) is the Holding Company of M/s.
..... (Name of the Collaborator / Associate of the Bidder).

2.0 I hereby confirm and undertake that the unaudited unconsolidated financial statements submitted in respect of M/s..... (Name of the Associate/Collaborator) as part of the bid reference no. datedhave been considered for the purposes of the finalization of Consolidated Financial Statements of the Holding Company as part of the Annual Reports.

3.0 I further, certify that the figures in the unaudited unconsolidated financial statements are true and correct and same have been duly reflected in the audited consolidated financial statements and / or Annual Report of the Holding Company.

Yours faithfully

(Signature)

Date : (Name & Designation).....

Place : (Name of the Holding Company)

(Seal of Holding Company)

Note : *Strike off whichever is not applicable.

PROFORMA OF LETTER OF UNDERTAKING

(TO BE FURNISHED ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**(To be executed by the Holding Company Supported by
Board Resolution and submitted by the Bidder along with the Techno-Commercial Bid,
Applicable to the Bidder for meeting the stipulated Financial Qualifying
Requirement as per Clause 2.2.1 of Item No. 4.0 of Bid Data Sheet)**

Ref. :

Date :

To
Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

1.0 We, M/s..... declare that we are the holding company of M/s
..... (Name of the Associate/Collaborator) and have controlling interest therein.

M/s. (Name of the Bidder) proposes to submit the bid for the package
..... (Name of the package) for (Name of the Project) under
bid reference no. dated and has submitted a deed of joint
undertaking with M/s..... (Name of the Associate/Collaborator) of which we are
holding company and that M/s..... (Name of the Associate/Collaborator)
has sought financial strength and support from us for meeting the stipulated Financial Qualifying
Requirement as per Clause 2.2.1 of Item 4.0 of Bid Data Sheet.

2.0 We hereby undertake that we hereby pledge our unconditional & irrevocable financial support to
M/s (Name of the Collaborator/Associate) to honour the terms and conditions of the
Deed of Joint Undertaking in case of award of the Contract to M/s (Name of the
Bidder) with whom M/s (Name of the Collaborator/Associate) is associated. We
further agree that this undertaking shall be without prejudice to the various liabilities that M/s
..... (Name of Collaborator/Associate) would be required to undertake in terms
of the Contract including the performance Security, security for Deed of Joint Undertaking as
well as other obligations of M/s (Name of the Associate/Collaborator).

3.0 This undertaking is irrevocable and unconditional, and shall remain in force till the successful execution and performance of the entire contract and/or till it is discharged by Owner.

4.0 We are herewith enclosing a copy of the Board Resolution in support of this undertaking.

Yours faithfully

(Signature of Authorized Signatory
on behalf of the Holding Company)

Witness :

(1) (Name & Designation).....
..... (Name of the Treasury Centre).....
(2) (Seal of the Treasury Centre).....

Date:

Place:

**PROFORMA OF CERTIFICATE FROM THE CEO/CFO OF THE
COMPANY IN ACCORDANCE WITH ITEM NO. 2.2.3 OF BDS**

(To be submitted by Bidder along with the Techno-Commercial Bid)

Ref. :

Date :

To
Chief Engineer (projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana
Dear Sirs,

1.0 I, Mr. (CEO of the Company / CFO of the Company)* confirm and undertake that the Financial results of the company for the preceding financial year to be submitted in respect of M/s (Name of Collaborator/Associate) of M/s (Name of the bidder) as part of the bid reference no.....dated are under audit as on the date of Techno-Commercial Bid Opening for Package forand the certificate from the practicing chartered accountant certifying the financial parameters for the preceding financial year is not available.

Yours faithfully

(Signature)

Date : (Name & Designation).....

Place : (Name of the Company)

(Seal of Company)

Note : *Strike off whichever is not applicable.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Financial Capacity Status of Bidder and/or wherever applicable, Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/Promoters of Indian Joint Venture (JV) Company, as applicable)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

-
- A) Orders in Hand
- i) Total value of Contracts
- ii) Value of work completed
out of above value
up to March' 2023
- iii) Value of anticipated
work to be done
in the following
Financial Years :

2023- 2024

2024 - 2025

2025 - 2026

2026 – 2027

2027 - 2028

B) Bidder's assessment of maximum negative cash flow (fund requirement) at any point of time between Notification of Award and completion of Contract based on specified terms of payment and this expenditure plan for equipment being offered by bidder for this package.

	<u>Own Funds</u>	<u>Credit</u>	<u>Others</u>	<u>Total</u>
C) Arrangement to meet the above fund Requirement				

D) Gross Turnover of Company during :

Year ending - March 2018

Year ending - March 2019

Year ending - March 2020

Year ending - March 2021

Year ending - March 2022

E) Balance Sheet & Profit and Loss Account duly certified by a Chartered Accountant for the last 5 years is to be submitted

Enclosed at Annexure:-----
to this Attachment-3B

- F) Declaration by Bankers or the Chartered Accountant regarding:
- i) Line of Credit Enclosed at Annexure:-----
to this Attachment-3B
 - ii) Deferred payment limits Enclosed at Annexure:-----
to this Attachment-3B
 - iii) Fixed Deposits Enclosed at Annexure:-----
to this Attachment-3B
 - iv) Movable Property Hypothecation. Enclosed at Annexure:-----
(Please state the present to this Attachment-3B
utilization status also)
- G) Information regarding Enclosed at Annexure:-----
any current litigation to this Attachment-3B
in which the Bidder is
involved, the parties
concerned, the disputes
and the disputed amount
if any.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

- Note :** 1. The above attachment shall be filled-up by the bidder separately for **himself** and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/ Promoters of Indian Joint Venture (JV) Company, as applicable in his bid.
- 2. Continuation sheets of like size and format, may be used and annexed to this schedule if required.
 - 3. The financial details to be furnished by the bidder in this Attachment-3B shall be same as details furnished in Attachment-3A12/Attachment-3A13.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Details of Design, Engineering, Manufacturing and Testing Capabilities of Bidder and/or wherever applicable, Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/Promoters of Indian Joint Venture (JV) Company, as applicable)

Bidder's Name and Address:

To,
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

- (1) We hereby confirm that we do not anticipate any change in ownership during the proposed period of execution of work (if such a change is anticipated, the scope and effect thereof shall be defined). The relevant document for same is enclosed at Annexure ----- to the Attachment-3C.

It is clearly understood that the bid is submitted for consideration of award on the strength of the credential/experience of the bidder and executants of Deed of Joint Undertakings and Letter of Undertakings as specified in the Qualifying Requirements of the subject tender.

We confirm that in case of any change in our ownership, the new/successor entity shall honour all our obligations under the Contract for the subject package.

NOTE: The above shall be filled up and signed separately by the bidder itself and each of the executants of Deed of Joint Undertakings and Letter of Undertakings.

- (2) Furnish adequate detailed write up on

- (i) Design and Engineering Organization and Facilities/ Capabilities. : Enclosed at Annexure to this Attachment-3C
- (ii) Manufacturing & Testing Organization and Facilities available. : Enclosed at Annexure to this Attachment-3C

- (iii) Field Organization and resources for Erection, Civil and Structural works, Testing & Commissioning, etc. : Enclosed at Annexure to this Attachment-3C
- (iv) Quality Assurance Organisation and Capabilities for Construction, Engg., Manufacturing & Field Installation : Enclosed at Annexure to this Attachment-3C
- (v) Established Project Management : Enclosed at Annexure to this Attachment-3C
- (vi) Details of Man power / Division of Company : Enclosed at Annexure to this Attachment-3C
-

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

- Note : 1 The above Attachment shall be filled up by the bidder separately for **himself** and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/Promoters of Indian Joint Venture (JV) Company, as applicable, in his bid.
2. Continuation sheets of same size and format shall be added by the Bidder.

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Details of Manufacturing Capacities and Plant Loading
of the Bidder and Associate/Collaborator wherever applicable)

Bidder's Name & Address:

To

Chief Engineer (projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

We hereby furnish below the details of our installed manufacturing capacities (in MW/MT) and work in hand to establish spare capacity for completion of work under this Package.

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collaborator/ Associate's Shop	Sub Contractor's Shop	Bidder's Shop	Collaborator/ Associate's Shop	Sub Contractor's Shop	Bidder's Shop	Collaborator/ Associate's Shop	Sub Contractor's Shop	Bidder's Shop	Collaborator/ Associate's Shop	Sub Contractor's Shop	Bidder's Shop	Collaborator/ Associate's Shop	Sub Contractor's Shop

I. STEAM GENERATOR & AUXILIARIES

A. Production Capacity as installed for

1. Steam generator & auxiliaries
2. High Pressure and critical steam piping
3. Coal Pulverisers

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

4. Mill Reject Handling System

5. Other EOT Cranes & hoisting equipment

6. Passenger and goods elevators

7. Air compressors

8. Power & Control Cables

9. LT Switch-gear/MCC

10. DDCMIS and other instrumentation and control system

11. FGD Package

12. Any other item not listed above (Bidder to specify)

B Firm Orders in Hand Upto.....

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

for

1. Steam generator & auxiliaries
2. High Pressure and critical steam piping
3. Coal Pul- verisers
4. Mill Reject Handling System
5. Other EOT Cranes & hoisting equipment
6. Passenger and goods elevators
7. Air com- pressors
8. Power & Control Cables
9. LT Switch- gear/MCC
10. DDCMIS and other

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

instrumen-
tation and
control
system

11. FGD
package

12. Any other
item not
listed above
(Bidder
to specify)

**C. Balance
Capacity
Available for**

1. Steam
generator
& auxiliaries

2. High Pre-
ssure and
critical
steam piping

3. Coal Pul-
verisers

4. Mill Reject
Handling
System

5. Other EOT
Cranes &
hoisting
equipment

6. Passenger
and goods

Item	2023- 2024			2024 - 2025			2025 – 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

elevators

7. Air com-
pressors

8. Power &
Control
Cables

9. LT Switch-
gear/MCC

10. DDCMIS
and other
instrumen-
tation and
control
system

11. FGD
Package

12. Any other
item not
listed above
(Bidder
to specify)

**D. Orders
Expected for**

1. Steam
generator
& auxiliaries

2. High Pre-
ssure and
critical
steam piping

3. Coal Pul-

Item	2023- 2024			2024-2025			2025-2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

- verisers
4. Mill Reject Handling System
 5. Other EOT Cranes & hoisting equipment
 6. Passenger and goods elevators
 7. Air compressors
 8. Power & Control Cables
 9. LT Switch-gear/MCC
 10. DDCMIS and other instrumentation and control system
 11. FGD Package
 12. Any other item not listed above (Bidder to specify) changers

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

E. Works Load Expected for this Contract for

1. Steam generator & auxiliaries
2. High Pressure and critical steam piping
3. Coal Pulverisers
4. Mill Reject Handling System
5. Other EOT Cranes & hoisting equipment
6. Passenger and goods elevators
7. Air compressors
8. Power & Control Cables
9. LT Switch-

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

gear/MCC

10. DDCMIS and other instrumentation and control system

11. FGD Package

12. Any other item not listed above (Bidder to specify)

F. Shortfall, if any

1. Steam generator & auxiliaries

2. High Pressure and critical steam piping

3. Coal Pulverisers

4. Mill Reject Handling System

5. Other EOT Cranes & hoisting equipment

Item	2023- 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

6. Passenger and goods elevators

7. Air compressors

8. Power & Control Cables

9. LT Switch-gear/MCC

10. DDCMIS and other instrumentation and control system

11. FGD Package

12. Any other item not listed above (Bidder to specify)

G. Alternative arrangements to make up for this shortfall

1. Steam generator & auxiliaries

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

2. High Pressure and critical steam piping

3. Coal Pulverisers

4. Mill Reject Handling System

5. Other EOT Cranes & hoisting equipment

6. Passenger and goods elevators

7. Air compressors

8. Power & Control Cables

9. LT Switchgear/MCC

10. DDCMIS and other instrumentation and control system

11. FGD Package

12. Any other

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

item not listed above (Bidder to specify)

II. STEAM TURBINE GENERATOR & AUXILIARIES

A. Production Capacity as installed

1. Turbine
2. Generator
3. Condenser
4. CEP
5. Feed Water Heaters
6. Deaerator
7. BFP
8. HP/LP Bypass System
9. Others

B Firm Orders in Hand Upto

1. Turbine

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop
2. Generator															
3. Condenser															
4. CEP															
5. Feed Water Heaters															
6. Deaerator															
7. BFP															
8. HP - LP Bypass System															
9. Others															
C. Balance Capacity Available															
1. Turbine															
2. Generator															
3. Condenser															
4. CEP															
5. Feed Water Heaters															
6. Deaerator															
7. BFP															
8. HP/LP Bypass System															

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

9. Others

D. Orders Expected

1. Turbine

2. Generator

3. Condenser

4. CEP

5. Feed Water Heaters

6. Deaerator

7. BFP

8. HP/LP Bypass System

9. Others

E. Work Load Expected for this Contract

1. Turbine

2. Generator

3. Condenser

4. CEP

5. Feed Water

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

Heaters

- 6. Deaerator
- 7. BFP
- 8. HP/LP Bypass System
- 9. Others

F. Shortfall, if any

- 1. Turbine
- 2. Generator
- 3. Condenser
- 4. CEP
- 5. Feed Water Heaters
- 6. Deaerator
- 7. BFP
- 8. HP/LP Bypass System
- 9. Others

G. Alternative arrangements to make up for this shortfall

- 1. Turbine

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

- 2. Generator
- 3. Condenser
- 4. CEP
- 5. Feed Water Heaters
- 6. Deaerator
- 7. BFP
- 8. HP/LP Bypass System
- 9. Others

III. WATER SYSTEM
(Cooling Towers, CW Pumps, PT, DM, CPU & RO Plant)

- A. Production Capacity as installed**
- B Firm Orders in Hand Upto**
- C. Balance Capacity Available**
- D. Orders Expected**
- E. Work Load Expected for this Contract**
- F. Shortfall, if any**

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

G. Alternative arrangements to make up for this shortfall

IV. PLANT UTILITIES (Compressed Air System, A/C and Ventilation System, Fire Detection & Protection System and H2 Plant)

A. Production Capacity as installed

B. Firm Orders in Hand Upto

C. Balance Capacity Available

D. Orders Expected

E. Work Load Expected for this Contract

F. Shortfall, if any

G. Alternative arrangements to make up for this shortfall

(Above items A to G, are to filled separately for each equipment / system covered under Plant utilities mentioned

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

above)

V. ASH HANDLING PLANT

- A. Production Capacity as installed**
- B Firm Orders in Hand Upto.....**
- C. Balance Capacity Available**
- D. Orders Expected**
- E. Work Load Expected for this Contract**
- F. Shortfall, if any**
- G. Alternative arrange- ments to make up for this shortfall**

VI. COAL HANDLING PLANT

- A. Production Capacity as installed**
- B Firm Orders in Hand Upto**
- C. Balance Capacity Available**
- D. Orders Expected**
- E. Work Load Expected**

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop

- for this Contract**
- F. Shortfall, if any**
 - G. Alternative arrangements to make up for this shortfall**
- VII. FUEL OIL HANLDING PLANT**
- A. Production Capacity as installed**
 - B Firm Orders in Hand Upto.....**
 - C. Balance Capacity Available**
 - D. Orders Expected**
 - E. Work Load Expected for this Contract**
 - F. Shortfall, if any**
 - G. Alternative arrangements to make up for this shortfall**
- VIII. MILL REJECT HANDLING SYSTEM**
- A. Production Capacity as installed**
 - B Firm Orders in**

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub Con- trac- tor's Shop

- Hand Upto.....**
- C. Balance Capacity Available**
 - D. Orders Expected**
 - E. Work Load Expected for this Contract**
 - F. Shortfall, if any**
 - G. Alternative arrangements to make up for this shortfall**
- IX. POWER CYCLE PIPING SYSTEM**
- A. Production Capacity as installed**
 - B Firm Orders in Hand Upto.....**
 - C. Balance Capacity Available**
 - D. Orders Expected**
 - E. Work Load Expected for this Contract**
 - F. Shortfall, if any**
 - G. Alternative arrangements to make up for this shortfall**

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

X. ELECTRICAL

A. Production Capacity as installed

B Firm Orders in Hand Upto.....

C. Balance Capacity Available

D. Orders Expected

E. Work Load Expected for this Contract

F. Shortfall, if any

G. Alternative arrange- ments to make up for this shortfall

XI. STATION CONTROL & INSTRUMENTATION

A. Production Capacity as installed

B Firm Orders in Hand Upto.....

C. Balance Capacity Available

D. Orders Expected

E. Work Load Expected

Item	2023 - 2024			2024 - 2025			2025 - 2026			2026-2027			2027-2028		
	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop	Bidder's Shop	Collabo- rator/ Asso- ciate's Shop	Sub- Con- trac- tor's Shop

for this Contract

F. Shortfall, if any

G. Alternative arrangements to make up for this shortfall

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common Seal).....

Note : Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Present Order Book Position)

Bidder's Name & Address:

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Sl. No.	Client	Order Value	No. of Units & Unit size	Date of Order	Present Status		% work completed	Completion of Supply		Completion of Erection, Testing & Commissioning		Reasons for Delay (if any)
					Sch- edule	Actual/ Expec- ted		Sch- edule	Actual/ Expec- ted	Sch- edule	Actual/ Expected	

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

- Note :**
- The above attachment shall be filled up by the bidder separately for **himself** and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/Promoters of Indian Joint Venture (JV) Company, as applicable, in his bid.
 - Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

**ATTACHMENT - 3F
Page 1 of 1**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Past Performance Data)

Bidder's Name & Address:

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Details of Similar Plant & Equipment (Steam Generator & Auxiliaries and/or Steam Turbine Generator & Auxiliaries)/ Units Supplied/Commissioned in last ten years/ Projects executed on EPC basis in last ten years

Sl. No.	Client Name & Address	Date of Order	Unit Size & No. of Units	Date of Completion of Supply		Date of Completion of Erection, Testing & Commissioning		Order Value	Reasons for Delay (if applicable)
				Schedule	Actual	Schedule	Actual		

Date : (Signature).....
Place : (Printed Name).....
(Designation).....

(Common Seal).....

- Note : 1. The above Attachment shall be filled up by the bidder separately for himself and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/ Promoters of Indian Joint Venture (JV) Company, as applicable, in his bid.
2. Continuation sheets of like size & format may be used if required and annexed to this Attachment

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW
(Data regarding Key Construction Personnel)

Bidder's Name & Address:

To
Chief Engineer (Projects), HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

The qualification and experience of key constructional personnel proposed for administration and execution of the Contract at site are as follows:

Sl.No.	Name	Qualification	Position/Designation	Experience
--------	------	---------------	----------------------	------------

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

- Note : 1. The above Attachment shall be filled up by the bidder separately for himself and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/ Promoters of Indian Joint Venture (JV) Company, as applicable, in his bid.
2. Continuation sheets of like size & format may be used if required and annexed to this Attachment

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
 DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
 YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Manpower Loading Data)

Bidder's Name & Address:

To
 Chief Engineer (Projects), HPGCL
 C-7, Urja Bhawan
 Sector-6, Panchkula, Haryana

We declare that our manpower loading during execution of the Contract will be as follows :

No. of months from the date of Letter of Intent	1	2	3	4	5	6	7	8	9	10.....	60
---	---	---	---	---	---	---	---	---	---	---------	----

Labour (Category)

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common Seal).....

- Note : 1. The above Attachment shall be filled up by the bidder separately for himself and Qualified Steam Generator Manufacturer, Qualified Steam Turbine Generator Manufacturer, Promoters of Indian Subsidiary Company/Promoters of Indian Joint Venture (JV) Company, as applicable, in his bid.
- 2. Continuation sheets of like size & format may be used if required and annexed to this Attachment
 - 3. List of Category of Labour will be given by the Bidder.

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Deed of Joint Undertaking)

Bidder's Name and Address :

To
Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

- 1.0 We confirm having enclosed at Annexure to this Attachment-3I, the requisite Deed(s) of Joint Undertakings.
- 2.0 Further, we confirm that in case of Award of Contract, our Promoter(s)/Collaborator(s)/ other executants of aforesaid Deed(s) of Joint Undertaking will furnish the requisite Bank Guarantee(s) as mentioned in the respective Deed(s) of Joint Undertaking.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(DETAILS REGARDING PROJECT MANAGEMENT ORGANIZATION)

Bidder's Name and Address :

To
Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

1.0 In line with Clause No. ITB 8.1.2 (a), we furnish below the brief write up in support of our established project management organization

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

* Bidder to use their own format for above details.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

Bidder's Name and Address:

Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Bidder to attach documentary evidence establishing in accordance with Clause No. 2.0 (d) of Bid Form that the Facilities offered are eligible Facilities and conform to the Bidding Documents.

Date :

(Signature).....

Place :

(Printed Name).....

(Designation).....

(Common Seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(List of Special Maintenance Tools & Tackles)

Bidder's Name and Address: Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sir,

We are furnishing below the list of special maintenance tools & tackles for various system/equipment for Steam Generator & Auxiliaries, Steam Turbine Generator & Auxiliaries and all other systems as per the Scope of Work of the subject package. The prices for these tools & tackles shall be included in the lump sum bid price quoted in Part-II (Price) Bid. We further confirm that the list of special maintenance tools & tackles includes all the items specifically mentioned in scope of supply & services covered in Section-V, ECC and Technical Specifications Vol.II to VII of bidding documents.

Notwithstanding what is stated above we further confirm that any additional special maintenance tools and tackles, required for the equipment under this package shall be furnished by us at no extra cost to the Owner.

S. No.	Description of each System/Equipment	Description of Tools & Tackles	Unit	Qty.
--------	--------------------------------------	--------------------------------	------	------

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Note : Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

Owner may add some more items to the proposed list of maintenance tools and tackles during award of contract without additional cost to Owner.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Details of Proposed Sub-contractors/Sub-Vendors)

Bidder's Name and Address:

Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

The details of all items of services or supply which we propose subletting giving details of the name and nationality of the proposed Sub-Contractor/Sub Vendor for each item (system-wise) are given below

S.No.	Supply/Service Item-wise (for each system)	Unit	Qty.	Name, Address & Nationality of proposed Sub-Contractor/ Sub-Vendor
-------	--	------	------	--

Date: (Signature).....

Place: (Printed Name).....

(Designation).....

(Common Seal)

Note: Continuation sheets of like size and format may be used as per Bidder's requirement and shall be annexed to this Attachment.

The above vendor list is indicative only. Bidder after LOI shall submit the detailed list of sub contractors/sub vendors along with their credentials for Owner's approval.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(No Deviation Certificate)

(TO BE SUBMITTED IN A SEPARATE SEALED ENVELOPE ALONWITH THE BID)

Name and Address:

To,
Chief Engineer (Projects)
HPGCL,
Urja Bhawan, Sector-6,
Panchkula- Haryana 134109

- 1.0** With reference to our Bid Proposal No.dated. for EPC Package For 1X800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana (Bidding Document No. **03/HPGCL/DCRTPP/EPC/800MW**), we hereby confirm that all the provisions of Bidding Documents read in conjunction with Amendment (s) / Clarification(s) / Addenda / Errata (if any) issued by the owner prior to opening of Techno-Commercial Bids and the same has been taken into consideration while making our Techno-Commercial Bid & Price Bid and we declare that we have not taken any deviation in this regard.
- 2.0** We further confirm that any deviation / variation / additional conditions etc., or any mention, contrary to Bidding Documents read in conjunction with Amendment (s) /Clarification(s) / Addenda / Errata as mentioned at 1.0 above found anywhere in our Techno-Commercial Bid and/or Price Bid, implicit or explicit, shall stand unconditionally withdrawn, without any cost implication whatsoever to Owner ,failing which the Bid Security shall be forfeited.

Date: (Signature)

(Printed Name)

(Designation)

(Common Seal)

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Details in respect of Local Agent)

Bidder's Name and Address:

Chief Engineer (Projects),
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

DELETED

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Demonstration Parameters/Capabilities)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL,
C-7, Urja Bhawan,
Sector-6, Panchkula, Haryana

Dear Sir,

We declare that the ratings, capacities and performance figures of the equipment/system furnished by us under this package are to be demonstrated by us. We further declare that in the event of any deficiencies in meeting the above parameters in respect of the characteristics mentioned below as established after conducting the guarantee test, you may at your discretion reject the equipment/system and recover payment already made or accept it after assessing the deficiency and effecting recovery from the contract price as specified in Chapter 8 Volume II of bidding document.

I. Steam Generator and Auxiliaries

- (i) Coal Pulverizer capacities in T/hr. with specified design coal at rated fineness
 - (a) At 100% mill loading with new..... T/hr. set of grinding elements
 - (b) Capacity at originally installed..... T/hr. grinding elements in nearly worn out condition or at the end of guaranteed wear life (whichever is earlier) at 100% mill loading (with value not less than 90% of value indicated at (a) above
- (ii) Maximum Furnace exit gas temperature (degree Celsius) (MHVT Value)
- (iii) Run back capability

- (iv) Air heater air-in leakage and max. drift in Air leakage (% of gas flow at AH inlet),
 - a) Primary APH/Trisector APH
 - b) Secondary APH/Trisector APH
- (v) Power Cycle Piping
Actual hanger readings under cold and hot condition (at rated parameters) to match those of design cold and hot hanger readings for MS/CRH/HRH/ HP & LP bypass piping system to be demonstrated
- (vi) Auxiliary water system guarantees
- (vii) Air Compressors and Air drying plant guarantees

II. NOx Control System

- (i) SCR System Efficiency for control of NOx emission %
- (ii) NOx emission at SCR inlet mg/Nm³
- (iii) Ammonia Slip ppm
- (iv) SO₂ to SO₃ Conversion Rate..... %
- (v) Pressure drop across SCR and Cyclone separator as per mmwc
- (vi) Cyclone Separator Efficiency %

III. Flue Gas Desulphurization System

- (i) Wet ball mill capacity at rated fineness T/hr
- (ii) Wet ball mill wear parts guarantee hours

- (iii) Wet ball mill ball consumption grams /ton of ground limestone
- (iv) Pressure drop across FGDmmwc
- (v) Vacuum Belt Filter Capacity T/hr
- (vi) Gypsum purity
 - a) Gypsum purity..... %
 - b) Chloride content..... ppm
 - c) Moisture content %
- (vii) Maximum purge flow rate to waste water treatment systemm³/s
- (viii) Mist eliminator outlet droplet contentmg/Nm³

IV. Turbine Generator

(i) Turbine hall and other EOT Crane :

Over load test, travel & hoist speed checks etc., shall be demonstrated as per IS:3177 (latest edition)

(ii) Noise

All the plant, equipment and systems covered under this specification shall perform continuously without exceeding the noise level over the entire range of output and operating frequency specified in General Technical Requirement Part-C of Section-VI of the Technical Specifications.

Noise level measurement shall be carried out using applicable and internationally acceptable standards. The measurement shall be carried out with a calibrated integrating sound level meter meeting the requirement of IEC 651 or BS:5969 or IS:9779.

Sound pressure shall be measured all around the equipment at a distance of 1.0m horizontally from the nearest surface of any equipment/machine and at a height of 1.5m above the floor level in elevation.

A minimum of 6 points around each equipment shall be covered for measurement. Additional measurement points shall be considered based on the applicable standards and the size of the equipment. The measurement shall be done with slow response on the A-weighting scale. The average of A-weighted sound pressure level measurements expressed in decibels to a reference of 0.0002 micro bar shall not exceed the guaranteed value.

Corrections for background noise shall be considered in line with the applicable standards. All the necessary data for determining these corrections, in line with the applicable standards, shall be collected during the tests.

.....

V. DMCW Water System

DM Cooling Water System
 Guarantees

.....Yes/No.....

VI. Condensate Polishing Plant

Condensate Polishing Plant Guarantees

.....Yes/No.....

VII. CW/ACW Chemical Treatment Plant

CW/ACW Chemical Treatment Plant Guarantees

.....Yes/No.....

VIII. EOT, Underslung Cranes & Monorail Hoists:

Over load tests, travel and hoist speed checks as per relevant Indian Standard IS (Latest Edition)

IX. Fuel Oil Handling Plant

(a) Capacity, total dynamic head either in isolation or during parallel operation of:

m³/hr

MLC

- (i) LDO transfer pump
- (ii) LDO pressuring pump
- (iii) Drain oil pump
- (iv) Dirty oil pump

- (b) LDO Day Storage tank capacityKL
- (c) Entire piping and supports for Smooth operation Yes

X. Coal Handling Plant, Limestone Handling Plant & Gypsum Handling Plant

A. Capacity in T/Hr (equivalent to 100% of rated) of conveyor system including the intermediate equipment for each of the two parallel conveyor streams separately or any combination thereof to be tested in the following flow path operations.

(i) Flow Path IA (Direct Stream) :

Apron feeders 1/2 taking feed of incoming coal from Wagon Tipplers 1/2 discharging crushed coal into last bunker of 800 MW Unit through traveling tripper mounted on Bunker Conveyor including all intermediate Conveyors and equipment. MTPH

Flow Path IIA (Stacking Stream)

Apron feeders 1/2/ taking feed of incoming coal from wagon tippler WT 1/2 and stacking crushed coal in stockyard using yard conveyor with stacker/ reclaimer station farthest from yard conveyor tail end and boom conveyor at highest angle including all intermediate equipment..... MTPH

Flow path IIB (ERH Reclaiming Stream)

Feeding crushed coal from stockpile to ERH with the help of dozers and discharge crushed coal into last bunker of the Unit through traveling tripper mounted on Bunker Conveyor including all intermediate Conveyors and equipment.....MTPH

(ii) Flow Path III (Reclaiming Stream)

Reclaiming coal from stockyard using yard conveyor with stacker- reclaimer at farthest position from stacker conveyor head end, with the boom conveyor at its lowest position and feeding last bunker of 800 MW Unit through travelling tripper on bunker conveyor including all intermediate equipment.....MTPH

(iii) Further for the purpose of Guarantee tests all left out Conveyors not appearing above along with all associated equipment shall also be considered.

Lime stone unloading stream: Flow Path iv (a):

Feeding limestone into surface feeder/
truck unloader through trucks and pay
loaders and conveying crushed limestone
to the lime silo through series of conveyors.MTPH

(iv) Gypsum flow path :

Gypsum conveyor taking feed from
gypsum dewatering unit and feeding
to gypsum storage shed through Travelling
tripper provided on last conveyor ----- MTPH

(B) Guaranteed capacity of the following in T/Hr

- (i) Apron Feeders MTPH
- (ii) Crushers MTPH
- (iii) Stacker ReclaimerMTPH
- (iv) Wagon Tippler with side arm charger MTPH
- (v) Vibrating Screening Feeders MTPH
- (vi) Travelling Tippler..... MTPH

Other performance tests and the
procedure for performance testing
of complete coal handling plant, Limestone
Handling plant and Gypsum Handling plant
shall be as given in Technical Specification.

XI. Mill Reject System

- (i) Guaranteed mill rejects system
(TPH) Capacity TPH
- (ii) Rated capacity and rated..... Cu.M/hr
discharge pressure of each
air compressor (if applicable)..... bar(g)

XII. Ash Handling System

Guaranteed Parameters

	Nos. working	Nos. standby	Capacity, each (m ³ /hr)	Head, each (MWC)
(A) Guaranteed Capacity/Head				
(a) BA Water pumps
(b) FA water pumps

(c)	LP water pumps	.....	.....	.....	.....
(d)	Economizer water pumps	.....	.....	.....	.....
(e)	Ash Conditioner water pumps	.....	.....	.....	.....
(f)	BA Overflow pumps	.....	.....	.....	.....
(g)	Vacuum Pumps				
(h)	Conveying air blower	.....	.....	.....	.....
(i)	Instrument air compressors				
	– FA Silo area	.....	.....	.....	.....
	– Main plant area	.....	.....	.....	.....
(j)					
(k)	ESP Fluidizing blower	.....	.....	.....	.....
(l)	Silo fluidizing blower	.....	.....	.....	.....
(m)	Drain Pumps – Slurry sump	.....	.....	.....	.....
(n)	- FA silo area	.....	.....	.....	.....
(o)	- ESP area	.....	.....	.....	.....

(B) Equipment Parameters

- a) Bottom ash system. _____TPH for each jet pump
- b) Bottom Ash Clinker grinders _____ TPH for each crusher
- c)
 - i) Dry Fly Ash conveying up to buffer hoppers _____ TPH
 - ii) Dry Fly Ash transportation from buffer hoppers to storage silos _____ TPH

- d) Air drying plant for conveying air compressor
- Dew point at outlet of ADP _____ deg. C at 1 ata pressure
 - Handling rate of air
at Inlet conditions _____ m³/hr. at _____ kg/cm² (g)
inlet pressure pressure and _____ deg.C inlet temp.
at out conditions _____ m³/hr. at _____ kg/cm² (g)
inlet pressure pressure and _____ deg.C inlet temp.
 - (iii) Tonnage of refrigeration (TR) rating of each ADP _____ TR
- e) Air drying plant for conveying air compressor
- Dew point at outlet of ADP (-)_____ deg./c at 1 ata pressure
 - Handling rate of air
Inlet conditions _____ m³/hr. at _____ kg/cm² (g)
inlet pressure pressure and _____ deg.C inlet temp.
Outlet conditions _____ m³/hr. at _____ kg/cm² (g)
inlet pressure pressure and _____ deg.C inlet temp.
 - Tonnage of refrigeration (TR) _____ TR
- f) Air drying plant for instrument air compressor
- Dew point at outlet of ADP (-)_____ deg./c at 1ata pressure
 - Handling rate of air _____ m³/hr. at _____ kg/cm² (g)
inlet pressure pressure and _____ deg.C inlet temp.
 - Capacity & head of reactivation air blower _____ m³/hr. at _____ MWC
- g) Buffer hopper aeration blower heater _____ deg. C temperature rise corresponding to 3 deg. C of inlet air temperature to blower & _____ deg. C of outlet temperature of blower

h) Storage Silo Blower heater _____deg. C temperature rise corresponding to 3 deg. C of inlet air temperature to blower & _____deg. C of outlet temperature of blower

XIII. PASSENGER/GOODS LIFT FOR VARIOUS AREAS

- i) Capacity.....kgs.
- ii) Travel speedm/min.
- iii) Overload Test..... Kgs.
- iv) Other performance tests shall be as given in technical specification

XIV. WATER TREATMENT PLANT

1.00 PRE-TREATMENT PLANT

Pre-Treatment Plant guaranteesYES/NO.....

2.00 DM PLANT: ION EXCHANGE [BIDDER TO TICK] () DM PLANT / UF+RO+MB PLANT

2.01. DM PLANT (ION EXCHANGE DEMINERALISATION PLANT)

DM Plant (ION EXCHANGE DM PLANT) GuaranteesYES/NO

XV. DDCMIS

Demonstration parameters YES/NO

XVI. FULL SCOPE REPLICA SIMULATOR

Demonstration parameters YES/NO

XVII. WATER SYSTEMS

S.N.	Drives	Nos Working	Nos Standby	Guaranteed Parameters of each equipment	
				Capacity (m ³ /hr)	Head (MWC)

- 1. CW Pumps
- 2. ACW Pumps
- 3. DMCW Pumps

- | | | |
|-----|--|--------|
| 4. | Makeup(Filtered water) Pumps | |
| 5. | Raw Water Pumps | |
| 6. | Ash Handling makeup Pumps | |
| 7. | AC & Ventilation System Makeup Pumps | |
| 8. | DM Water Makeup Pumps | |
| 9. | Boiler Fill Pumps | |
| 10. | Service Water Pumps | |
| 11. | Potable Water Pumps | |
| 12. | Condensate Transfer Pumps | |
| 13. | APH Wash Water Pumps | |
| 14. | Filtered water feed pumps for DM plant | |
| 15. | Degassed water pump (if applicable) | |
| 16. | High pressure pumps for RO for ETP | |
| 17. | UF feed pumps for RO for ETP | |
| 18. | FGD Process water pumps | |
| 19. | CT Make up Pumps | |
| 20. | Parallel Operation (if applicable), Noise & Vibration of each of these pumps shall be demonstrated as specified in Functional Guarantees | YES/NO |
| 21. | Capacity and Cold Water Outlet Temperature of CT to be demonstrated as specified | YES/NO |
| 22. | Overload Test, Travel & Hoist Speed | |
| | Tests of EOT Cranes to be demonstrated as per relevant Indian Standards | YES/NO |

We confirm that the demonstration parameters/capabilities of other equipment shall be as per specification requirement.

XVIII. Fire Detection & Protection system

We confirm Guarantee in accordance with Technical Specification.

XIX. Air Conditioning and Ventilation System

We confirm Guarantee in accordance with Technical Specification.

XX. Hydrogen Generation Plant

We confirm Guarantee in accordance with Technical Specification.

XXI. Air Compressor System

We confirm Guarantee in accordance with Technical Specification.

XXII. Generator and its Auxiliaries

We confirm Guarantee in accordance with Technical Specification.

XXIII. Sub Station Automation System

We confirm Guarantee in accordance with Technical Specification.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Schedule of Construction and Erection Tools & Tackles)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

I. ERECTION TOOLS & EQUIPMENT

We indicate herein below the minimum T & P we have in our/our associate's/sub vendor's possession and the equipment we propose to bring to the Site required for entire EPC Package, in case the contract is awarded to us.

Sl. No.	Type and Description of the Equipment	Indicative minimum Quantity of major T&P to be deployed	Number the Bidder has in possession	Number the Bidder proposes to bring to Site
(1)	(2)	(3)	(4)	(5)

We hereby confirm that the quantity and type of Certain tools and equipment, we will deploy for construction/erection, will not be less than those listed above and agree to bring more equipment, if so warranted, in the opinion of the Project Manager. Our proposed construction/erection equipment utilization plan indicating utilization dates and time duration of all major erection and construction equipment placed on site, is enclosed at Annexure..... to this Attachment-9.

We have enclosed construction and erection philosophy including sequence of erection and construction, implementation methodology, deployment schedule of tools and plant to be brought to site for construction/ erection work under the subject package at Annexure..... to Attachment-14 of Techno- Commercial Bid, linked with major milestone and intermediate milestone for Main Plant and Balance of Plant. We have also enclosed network showing interlinkage between major milestones, tool and plants deployed and sequential supply of material for the subject package.

Note: Bidder's attention is drawn to the provision of Clause No. 9 of BDS regarding deployment of T&Ps as per suggestive list of T&Ps for SG, TG and Civil Works enclosed at Annexure-A, B & C to BDS, Section-III to Bidding Documents. Bidder will deploy T&P for construction/erection not less than those listed in suggestive list of T&Ps for SG & Auxiliaries, TG & Auxiliaries and Civil Works enclosed at Annexure- A, B & C to BDS and agree to bring more equipment, if so warranted, in the opinion of the Project Manager.

II. Safety Equipment & Safety Personal Protective Equipment

The list of minimum suggestive **Safety Equipment & Safety Personal Protective Equipment** we propose to bring to the Site, in case the contract is awarded to us is indicated below:

Sl. No.	Minimum Suggested List of Safety Equipment and Safety Personal Protective Equipment	Minimum Quantity
1.	<p>Safety Net (Conforming IS 11057:1984)</p> <p>Safety Net (Net Size: 10m x 5m, Mesh Size: 25 mm, Mesh Rope: 2mm double cord, Border/Tie Cord: 12mm diameter polypropylene rope (tested as per IS: 5175). Two metres length shall be provided at all four corners.</p>	240 Nos.
2.	<p>Fall Arrestor 'Rope grab fall arrestor' & anchorage line.</p> <p>Anchorage Line: 14mm- 16 mm diameter, three strand twisted Polyamide rope.</p> <p>Rope Grab fall arrestor: Openable & Guided type Fall Arrestor (on flexible line) conforming EN 353-2 & works on 14-16 mm diameter polyamide rope. material: Nickel Chrome plated Steel Connector: Karbiner conforming to EN 362 (Minimum Strength 22 KN), material: Steel</p>	<p>200 nos. of Rope Grab Fall arrestor' and Karbiner each.</p> <p>90 nos. anchorage line, 30 metre long each,</p> <p>30 nos. anchorage line, 40 metre long each</p>
3.	<p>Horizontal life line</p> <p>Stainless Steel Wire rope of 8mm diameter. Minimum six nos. of steel U-bolt clips are required for clamping each wire rope to a rigid support (03 nos. of U-bolt clips at each end).</p>	<p>40 nos. of wire rope, each 40 metre long</p> <p>90 nos. of wire rope, each 25 metre long.</p>
4.	<p>Ladders on column</p> <p>The minimum design live load on metallic ladder shall be a single concentrated load of 100 kilo grams. All rungs shall have a minimum diameter of 1.90 centimeters, and minimum clear length of rungs shall be 40.6 centimeters. The distance between rungs shall not exceed 30.5 centimeters. Each ladder shall have maximum height of 9.0 metre.</p> <p>The ladder shall have proper fastenings for attaching it to a column using positive means such as bolt, weld or other type of fasteners.</p>	cumulative length of ladders is 1200 metres
5.	<p>Safety PPEs (Industrial Safety helmet & Industrial Safety Shoes)</p> <p>Industrial Safety Helmet (IS:2925-1984 marked). Industrial Safety/Electrical Shoes (IS:15298-2002 marked). Full body Safety Harness (conforming IS:3521)</p>	<p>1575 nos.</p> <p>1575 nos.</p> <p>395 nos.</p>

We hereby confirm that the quantity and type of equipment, we will employ for construction/erection, will not be less than those listed above and agree to bring more equipment, if so warranted, in the opinion of the Project Manager.

Note : Continuation sheets of like size and format may be used as per Bidder's requirements and shall be annexed to this Attachment.

Date : (Signature)

Place : (Printed Name)

(Designation)

(Common Seal)

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Technical Data Sheets)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Attachment 10 is separately bound book entitled "Technical Data Sheet" enclosed as, Part B, Volume II of Technical Specification. Bidder is required to fill in the same and submit along with techno-commercial bid as Attachment - 10.

**EPC PACKAGE FOR
DCR THERMAL POWER PROJECT (1X800 MW), YAMUNANAGAR
BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW**

(Declaration of Performance Guarantee)

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana

Dear Sir,

We declare that the ratings, capacities and performance figures of the equipment furnished by us under the package are guaranteed. We further declare that in the event of any deficiencies in meeting the guaranteed figures indicated below as established after conducting the guarantee tests, you may at your discretion accept the equipment/system after assessing the liquidated damages as specified in Clause 3.2 Chapter 8, Volume-II of the Bidding Documents, or reject the equipment/system and recover payments already made.

S. No.	Guaranteed Parameters	Guaranteed Figures
1	Turbine Heat rate in Kcal/KW hr at 440 MW (i.e. 55% of rated load)	Yes
2	Turbine Heat rate in Kcal/KW hr at 800 MW Unit Load (i.e. 100% of rated load)	Yes
3	Steam Generator efficiency in % at 105% TMCR (840MW)	Yes
4	Steam Generator efficiency at 100% TMCR (800MW)	Yes
5	Continuous TG output in MW at rated load	Yes
6	Condenser Pressure in mm Hg (abs) at rated output of 100% TMCR (800MW)	Yes
7	Steam Generating Capacity: Steam generating capacity (in T/hr) at rated steam parameters at super heater outlet and rated steam parameters at re-heater outlet (with any combination of mills working as Owner's discretion) with the coal being fired from within the range specified in	Yes

8	Minimum sustained efficiency of Electrostatic Precipitator to limit the outlet dust burden to 17mg/Nm ³ under guarantee point condition.	Yes
9	Unit Auxiliary Power Consumption Unit Auxiliary Power Consumption (unit auxiliaries and station auxiliaries) required for continuous unit operation at 100% TMCR i.e. 800 MW unit load	Yes
10	SCR Efficiency for control of No x emission in %	Yes
11	Catalyst life in hours	Yes
12	Ammonia consumption rate in Kg/hr @ 99.95 Wt %	Yes
13	FGD SO ₂ Removal Efficiency to achieve SO ₂ emission in the chimney to less than 80 mg/Nm ³ (6% O ₂ dry basis)	Yes
14	Limestone consumption rate in Kg/hr	Yes
15	Cooling Tower - The cold-water temperature of 33 ⁰ C shall be guaranteed for the design conditions	Yes
16	Transformer Losses in Kw for transformers as per list indicated in Clause 3.2, Chapter-8, volume-II	Yes
<p>Note: By submitting the Attachment-11, Bidder declares/guarantees that it meets the requirements specified at S. No. 1 to 16.</p>		

Date:

(Signature) -----

Place:

(Printed Name) -----

(Designation) -----

(Common Seal) -----

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Information regarding Quality Assurance Program)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

We hereby provide the necessary information on Quality Assurance Program containing the overall Quality Management and procedures, which we propose to follow during various phases of execution of the Contract.

Date : (Signature)

Place : (Printed Name)

(Designation)

(Common Seal)

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Additional Information included with the proposal)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

Sl. No.	Description of Information	Reference to Bidding Document	Reference to Bid Proposal
---------	----------------------------	-------------------------------	---------------------------

Date : (Signature)

Place : (Printed Name)

(Designation)

(Common Seal)

Note : 1. Continuation sheets of like size and format may be used as per Bidder's requirements and annexed to this Attachment.

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Milestone Schedule)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

- 1.0 We declare that the program of furnishing, erecting, testing, commissioning and completion of facilities identifying the key phases in various areas of work like design, procurement, manufacture, field activities including civil construction works as per requirement of Item No. 9 of BDS shall be as per master network (PERT network - L1 Schedule) enclosed as Annexure-I to this Attachment-14.

We, further declare that the completion schedule as per this Master Network shall be followed by us in furnishing and installing the equipment and in furnishing the spares under the Package. As per this Master Network the key milestone dates are as under. The period is commencing from the date of Letter of Intent.

Major Activity / Milestone Chart

1.0 Readiness of Site Leveling and Basic Infrastructure

Sl. No.	Activities	Schedule (Month from LOI)
1.	Mobilization of site leveling agency at site and start of leveling works	Within 1-2 months
2.	Completion of Site Leveling of Main Plant (SG, TG, ESP and Chimney & other priority areas)	Progressively from 04 to 06 months as per priority to be given by Owner
3.	Readiness of Main Trunk Roads including Drains	Progressively from 05 to 12 months
4.	Readiness of External Drain for evacuation of plant area drainage	Within 10 months
5.	Readiness of area lighting in	Progressively from 4

	Plant (lighting mast)	to 8 months
6.	Readiness of Site office of months EPC agency	Within 03
7.	Readiness of construction from offices of HPGCL, Construction stores, Steel Yard	Progressively 3 to 5 Months

2.0 Milestones for Civil Works of SG, TG and Offsite area

The EPC contractor shall ensure the completion of various equipment foundations, structures, buildings and facilities etc to achieve the milestone for SG & auxiliaries, TG & auxiliaries and BoPs as per schedule specified. The chimney concrete shell for Unit#1 to be made ready by 19 months from EPC award. The bidder has to submit a detail work schedule in their bids capturing the readiness of civil inputs/foundation for all major works along with list of major T&Ps, under the scope of EPC contract. The same shall be discussed during finalization of L2 schedule.

3.0 Milestones Schedule for Steam Generator & Auxiliaries:

S. No	Milestones	Schedule (Month from LOI)	
		Start	Finish
1.	Completion of Basic engineering	01	06
2.	Completion of detailed engineering	03	24
3.	Commencement of manufacturing	08	-
4.	Completion of Ordering of Major BOIs.	06	12
5.	Completion of Ordering of Balance BOIs.	-	20
6.	Establishment of Stores/ Pre-assembly yard	04	08
7.	Supply of foundation materials For Boiler and Bunker Structures	-	10
8.	Commencement of supplies of Main equipment	9	-
9.	Start of Boiler erection	12	-
10.	Supply of critical piping	18	32
11.	Pre-Assembly/ Erection of Critical piping	20	38
12.	Supply of Mills RHS&LHS	20	32

13.	Boiler Hydraulic Test	-	36
14.	Completion of all Supplies	-	37
15.	Boiler light up & Chemical Cleaning completion	-	41
16.	Erection of mill & bunker structures Including coal bunkers	18	36
17.	Completion of erection of tripper Floors & boiler area TPs	-	37
18.	Commissioning of milling system For coal firing	22	40
19.	Completion of ducting, insulations Etc., for coal firing	-	40
20.	Steam blowing completion and coal firing	-	43
21.	Completion of site delivery Of Mandatory Spares.	-	40
22.	Synchronization on coal with FGD	-	45
23.	Full Load Operation	-	46
24.	Trial operation completion including 72 hours full load operation	-	48
25.	PG Test	-	50
26.	Completion of all outstanding works and Punch Points	-	51
27.	Final Taking Over	-	52

3.1 All supply means receipt of material at site.

3.2 The deployment program shall be discussed during the pre-award discussion based on the construction methodology & erection strategy, to be submitted by the bidders in the bid documents. In the erection strategy the main bidder shall furnish details about major deployment schedule and utilization of major T&Ps. Furthermore, a suggested list of Tools & Plants is enclosed in Annexure. Based on the proposed erection strategy of the vendor, the details of T&Ps and their deployment schedule shall be firmed up with the EPC agency during post bid discussions. However the deployment of T&Ps shall be ensured by the agency as per actual requirement to meet the project implementation schedule.

3.3 The bidder has to indicate about readiness of storage yard for proper storage and pre-assembly yard along with hard crusting with drainage system with cranes, hydra and other material handling T&P etc. And approach road to main plant work area from Storage yard at least from two sides. Agency shall barricade storage area with gate and watch cabin and yard management for proper record of material entry and exit to storage yard to be followed.

3.4 The bidder has to deploy 2 no. rack & pinion construction lift in each boiler before commencement of pressure parts erection.

4.0 **Milestone Schedule for Turbine Generator:**

S. No	Milestones	Schedule (Month from LOI)	
		Start	Finish
1.	Basic Engineering	01	06
2.	Completion of Detailed Engineering	03	18
3.	Commencement of Mfg.	08	-
4.	Completion of Ordering of Major BOI (Bought out items)	-	12
5.	Completion of Ordering Balance BOI (Bought out items)	-	20
6.	Establishment of Storage Facilities, lay down area etc.	08	12
7.	Supply of Condenser, TG And other auxiliaries items	24	36
8.	Erection and commissioning Of EOT crane	21	23
9.	Start of TG Erection	26	
10.	Supply of Power Cycle Piping	24	32
11.	Erection of Power Cycle Piping	26	38
12.	Completion of Major Supplies		32
13.	Completion of Balance Supplies		34
14.	TG Box up		36
15.	Completion of TG Oil Flushing		38
16.	TG on Barring Gear		41
17.	Completion of site delivery of all Mandatory spares		40
18.	Turbine rolling & Synchronization		45
19.	Full Load operation		46
20.	Trial operation completion including 72 hours full load operation	-	48
21.	PG Test	-	50
22.	Completion of all outstanding works and Punch Points	-	51

23. Final Taking Over - 52

- a. Months indicated are end of the month for the respective activities.
- b. All supply means receipt of materials at site.
- c. The deployment program shall be discussed during the pre-award discussion based on the construction methodology & erection strategy, to be submitted by the bidders in the bid documents. In the erection strategy the main bidder shall furnish details about major deployment schedule and utilization of major T&Ps. Furthermore, a suggested list of Tools & Plants is enclosed in Annexure. Based on the proposed erection strategy of the vendor, the details of T&Ps and their deployment schedule shall be firmed up with the EPC agency during post bid discussion. However the deployment of T&Ps shall be ensured by the agency as per actual requirement to meet the project implementation schedule.

5.0 Deleted

6.0 Milestone Schedule for Balance of Plant (BOP) Systems

- A The bidders shall have the overall responsibility to complete readiness of various necessary sub systems/critical milestones to meet overall commissioning programs (Boiler Hydro Test, BLU, Steam blowing, TG box up, TG on barring gear, unit synchronization, full load etc.) and shall submit detail area wise work program in the bid inter-alia taking into consideration the milestones to be considered for progressive payment.
- B As site leveling, shrub cutting & clearing of site infrastructure like construction power, construction offices, construction stores, steel yard etc., (as specified in scope) and SG/TG/ chimney civil works etc., are included in scope of EPC contract, it is assumed that the prospective bidders will be required to tie up with sub/agency/ sources during bidding stage, so that the award for such work is finalized/placed in the 1st month on award of EPC contract.
- C. The following schedule is suggested for award of various major Balance of Plant packages:

S. No.	Systems/Packages from LOI	Sch. in months
1	Electrostatic Precipitators	03
2	Ash Handling System	10-
3	Pre treatment Plant	03
4	DM Plant and Chemical Treatment Plant	03
5	Coal Handling Plant	08
6	Fire Detection & Protection System, Fire tender and Fire Station Equipment	08
7	Station Piping	08
8	Make-up water pipes	10

9	Air Conditioning System & Ventilation System	10
10	Switchyard	08
11	*Site leveling, SG area and off site area Civil works & TG and chimney civil works	01
12	CW System and Make-up Water System Civil works	06
13	Station Control & Instrumentation(C&I)	08
14	Electrical system packages (as per Spec.) And Instrumentation Cables	10
15	SCR and FGD systems	12
16	Any Other specified BoP packages (In the scope of EPC Contract)	08-12

-
- The prospective bidders should tie up with sub/agency/sources for * marked packages during bidding stage so that the award is placed for such work in 1st month itself.
 - The broad milestones for all major balance of plant systems are indicated below

6.2 **Coal Handling System**

S No.	Systems/Packages	Sch. in months From LOI
1	Commissioning of Coal Handling system facilitating coal unloading, stacking, conveying etc., for achieving Coal Firing	40
2	Completion of works	46

6.3 **Ash Handling System**

S. No.	Activities	Sch. in months from LOI
1.	Readiness of complete Ash Handling System	42
2.	Commissioning of BA & fly ash evacuation conveying/transportation/storage etc	43
3.	Completion of works	46

6.4 Flue Gas Desulphurization System

S. No.	Activities	Sch. in months from EPC LOI
1.	Readiness of FGD system for coal firing	40
2.	Commissioning of FGD system	42
3.	Completion of works	44

6.5 Make up water system & PT Plant:

S. No.	Activities	Sch. in months from EPC LOI
1	Readiness of Raw Water System including Raw water reservoir (Optional), laying of raw water pipe line & system erection & commissioning.	28
2	Commissioning of 1 st clarifier & Filter water System or DM system	30
3	Commissioning of Potable water system	32
4	Completion of 2 nd Clarifier & Associated systems	34
5	Commissioning of Service water system	34
6	Commissioning of DM Plant- 1st Stream along with associated auxiliaries & Charging of DM Fill System with DM water	30
7	Completion of DM plant balance systems.	36
8	Commissioning of balance systems & associated equipment	40
9	Completion of works	42

6.6 Switch Yard, Station C&I and other Electrical Systems

6.6.1 The bidders shall have the overall responsibility to complete readiness of following critical milestones to meet unit wise overall commissioning programs and shall submit detail work program in the bid inter-alia taking into consideration the milestones to be considered for progressive payment.

6.6.2 Milestones for Switchyard

S. No.	Activities	Sch. in months from LOI
1	Construction power ring mains readiness & commissioning	By 8 th month
2	Readiness & commissioning of Priority bays for charging station transformer and common	30

	systems (Startup Power)	
3	Equipment/system required for commissioning of line bays & generator transformer bay & coupler bays, transfer bays etc., with common facilities like control rooms, bay facilities required for commissioning & operation of switch yard.	40
4	Balance Completion	40

6.6.3 **Station C&I**

Activities **Schedule**
Months from LOI

1	Readiness & commissioning of DDCMIS For Water System	30
2	Readiness & commissioning of DDCMIS Systems required for Boiler Light Up.	38
3	Readiness & commissioning of DDCMIS For Main Plant & Standalone Common System	40
4	Readiness & commissioning of DDCMIS for AHP & CHP and other balance works	42
5	Completion of works	44

6.6.3 **Other Electrical System Packages:**

For other Electrical packages the bidder has to furnish detail work program including important milestones like NIT, OBD, Award, Mobilization & commencement of work for balance scope of work included in "Electrical System" i.e., EHV & Other Aux. transformers, Indoor Transformers, Gen', MV Bus Duct, LT Switch gear, cabling, station lighting, DG sets etc (Covered in scope of EPC work). Further the readiness of each of above system to be linked with readiness of drives/systems required for Start Up Power, Boiler Hydro Test, Boiler Light up, Unit Synchronization, Commissioning (Full load) requirement. The bidder should submit the detail work program in their bid which linking the same with major Main Plant, Project milestones. Detailed discussions will be held during Pre- Award discussions for HPGCL acceptance.

6.7 **Other balance systems like SCR etc., as per scope of EPC work (mentioned in bid documents):**

For such systems/ packages, the bidder has to furnish detail work program including important milestones like NIT, Award, Mobilization & commencement of work, intermediate milestones and completion program etc., linking with major project milestones i.e., Boiler Hydro Test, Boiler Light up, Steam Blowing, TG barring gear, Unit Synchronization, Commissioning (Full load) requirement etc. Detailed program submitted by the bidder shall be discussed & finalized during L2 finalization.

7.0 **Integrated Network:**

The bidder shall be required to submit a brief integrated network (L1 schedule) in line with the major milestone chart given above. The network shall be prepared and submitted in Primavera I MS Project format showing all inter activity relationships. A soft copy of the same also may be furnished. Further, the L 1 schedule shall, inter-alia, include at least following activities for each systems listed below, showing their inter-relationships between engineering, supply and site execution:

Milestones to be incorporated in L-1 network to be submitted with bid

1. Start & Completion of survey work, plant area leveling,
2. Ordering on sub-vendor (wherever applicable)
3. Start of Engineering
4. Completion of Engineering
5. Start of Manufacturing /Fabrication
6. Completion of Manufacturing /Fabrication
7. Release schedule of piling and Civil Foundations
8. Completion/attainment of milestones considered for progressive payment (as per bid documents).
9. Trestle/Gallery readiness
10. Main Power House Readiness
11. Commencement of sequential dispatch
12. Completion of dispatch
13. Start of erection
14. Completion of erection activities with milestones
15. Commissioning of the system

We confirm that we have enclosed project management plan along with this attachment as per requirement of Item 8 of BDS.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

- DELETED -

I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or credit is not affected at all for reasons of incomplete or incorrect information, I/We would not hold the Owner responsible. We have enclosed document as mentioned at Sl. No. 4(F) and 5 above.

DATE

--	--	--	--	--	--

SIGNATURE

(AUTHORISED SIGNATORY)

Name:

--	--	--	--	--	--	--	--	--	--

OFFICIAL STAMP

BANK CERTIFICATION:

It is certified that above mentioned beneficiary holds a bank account no.
with our branch and the Bank particulars mentioned above are correct.

DATE

--	--	--	--	--	--

SIGNATURE

(AUTHORISED SIGNATORY)

Authorization No. :

Name:

--	--	--	--	--	--	--	--	--	--

OFFICIAL STAMP

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(FORM OF ACCEPTANCE OF FRAUD PREVENTION POLICY)

Bidder's Name and Address:

Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula,
Haryana

Dear Sirs,

We have read the contents of the Fraud Prevention Policy of HPGCL displayed on its tender website <http://www.....com> and undertake that we along with our associate / promoters to Indian subsidiary company / promoters to Indian Joint Venture (JV) Company/ Indian Company who holds 51% equity in Joint Venture (JV) Company / Parent Company of Indian Majority Stake Holder of JV Company / Subsidiary Company of Indian Manufacturing Company/ Wholly Owned Subsidiary Company of majority stake holder in JV Company, subcontractors / sub vendors / consultants / service providers shall strictly abide by the provisions of the said Fraud Prevention Policy of HPGCL.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(DECLARATION ON BANNING POLICY)

Bidder's Name and Address: Chief Engineer (Projects0
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

- 1) We have read the contents of the Banning Policy of HPGCL attached with this Bidding document and agree to abide by this policy. Further, in terms of requirement under Banning policy we hereby declare the following:
- a) We have not been Banned/Blacklisted as on date of submission of bid by Ministry of Power or Government of India.
 - b) We have not employed any public servant dismissed/removed or person convicted for an offence involving corruption or abetment of such offences.
 - c) Our Director(s)/Owner(s)/Proprietor/Partner(s) have not been convicted by any court of law for offences involving corrupt and fraudulent practices including moral turpitude in relation to business dealings with Government of India or HPGCL or HPGCL's group companies during the last five years.

2) We further declare as under:

that if at any point subsequent to award of Contract, the declarations given above are found to be incorrect, Owner shall have the full right to terminate the Contract and take any action as per applicable laws for breach of contract including forfeiture of Bid Security/Performance Bank Guarantee.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**(FORMS OF LETTER OF UNDERTAKING TO BE SUBMITTED
BY THE BIDDER/ASSOCIATE IN COMPLIANCE TO THE
REQUIREMENTS OF CLAUSE 1.0.0 AND 3.0.0, ITEM 4 OF
BID DATA SHEET AS PER FORMATS ENCLOSED)**

Signature of authorized signatory.....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**(FORM OF LETTER OF UNDERTAKING TO BE SUBMITTED
BY THE BIDDER AND *ASSOCIATE (AS APPLICABLE) IN COMPLIANCE
TO THE REQUIREMENTS OF
CLAUSE 1.1.1(A) AND 3.0.0, ITEM 4 OF BID DATA SHEET)**

**LETTER OF UNDERTAKING FOR
SUPER CRITICAL STEAM GENERATOR SETS TOWARDS
PHASED MANUFACTURING PROGRAM
(ON NON JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

1.0 We, M/s..... (Bidder) is submitting our proposal in response to the Invitation for Bid by the Owner for EPC Package for 1 x 800 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 we are associating with M/s(the Associate) for manufacturing of supercritical Steam Generator sets in India.

*2.0 We, M/s_____ (Bidder), hereby undertake that in accordance with the requirement of clause 1.1.1(A) and 3.0.0 of item no. 4.0 of BDS, we have registered in India under the Companies Act, our company (i.e. M/s.....) / our Subsidiary Company (i.e M/s....., where we are a promotor with.....% equity participation) / our Joint Venture (JV) Company (i.e. M/s....., where we are a promotor with% equity participation) (hereinafter called the "Indian Manufacturing Company") for manufacturing of super critical Steam Generator sets in a phased manner as per the Phased Manufacturing Program elaborated in the bidding document.

*Further our subsidiary company/JV company has registered another manufacturing subsidiary company M/s..... (hereinafter called "Indian

Signature of authorized signatory.....

Manufacturing Subsidiary Company") in India under companies act for manufacturing of supercritical Steam Generators in India, in a phased manner as per the Phased Manufacturing Program elaborated in the bidding documents.

We are enclosing the copy of Board Resolution in this regard at Annexure..... to this Attachment.

*2.0 We, M/s_____ (Associate), hereby undertake that in accordance with the requirement of clause 1.1.1(A) and 3.0.0 of item no. 4.0 of BDS, we have registered in India under the Companies Act, our company (i.e. M/s.....) / our Subsidiary Company (i.e M/s....., where we are a promotor with% equity participation) / our Joint Venture (JV) Company (i.e. M/s....., where we are a promotor with% equity participation) (hereinafter called the "Indian Manufacturer Company") for manufacturing of super critical Steam Generator sets in a phased manner as per the Phased Manufacturing Program elaborated in the bidding document.

*Further our subsidiary company/JV company has registered another manufacturing subsidiary company M/s..... (hereinafter called "Indian Manufacturing Subsidiary Company") in India under companies act for manufacturing of supercritical Steam Generators in India, in a phased manner as per the Phased Manufacturing Program elaborated in the bidding documents.

We are enclosing the copy of Board Resolution in this regard at Annexure..... to this Attachment.

2.1 We M/s..... (Bidder) undertake that we shall submit an **on demand Bank Guarantee of INR 900 Million** as security for any default against meeting the specified Phase Manufacturing Program (PMP) (in case of award). We understand that in case we do not implement the PMP even by the overall completion date stated in the bidding documents, the Owner may in his discretion invoke the above Bank Guarantee.

OR

We confirm that we have already given commitments for PMP and submitted bank guarantee(s) for security for default against specified PMP for Steam Generators to following Central/ State sector Power generating Company for supercritical projects as per following details*:

- i)
- ii)

(* Continuation Sheets of like size may be used and shall be annexed to this Attachment.)

3.0 We *and Our Associate, undertake that a valid Technology transfer agreement including license to manufacture and supply in India between M/s_____, a Qualified Steam Generator Manufacturer or M/s_____their technology provider (if any), and M/s_____, the Indian Manufacturing Company, is in place covering the type, size and rating of the Steam Generator sets specified, valid minimum up to the end of the defect liability period of the Contract. The signatory of the technology transfer agreement with the Indian Manufacturing Company owns the technology / have authorization to use and further license the technology

The documentary evidence in support of above is enclosed at Annexure..... to this Attachment.

Signature of authorized signatory.....

3.1 We *and Our Associate, undertake that the technology transfer agreement as above covers transfer of technological know-how for super critical Steam 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 M/s _____. We *and Our Associate, further undertake that the above technology transfer agreement has the provision that the transfer of technology to the Indian Manufacturing Company shall be completed by the time last 660 MW unit is supplied by us under this tender.

4.0 *We *and Our Associate, undertake that major part i.e. _____ % of the land required for setting up manufacturing facility in India is in possession with clear title in the name of M/s _____, the Indian manufacturing Company or M/s _____, its Indian promoter (but pledged/leased to M/s _____, the *Subsidiary Company/*JV Company).

OR

*We *and Our Associate, undertake that we are augmenting our already existing manufacturing facility in India for Manufacturing of Super critical Steam Generator Sets, for which we confirm that major part i.e. _____ % of the additional land required is in our possession with clear title for augmenting the existing facilities.

Necessary documents confirming the same are enclosed at Annexure _____ of Attachment.

5.0 We *and Our Associate, undertake that the subscribed and paid up share capital or Networth of promoters in the Indian Manufacturing Company is INR..... Million as per details hereunder:

Sl.No.	Name of Promoter	*Paid up share capital / *Networth
1		
2		

The undertaking of promoters to enhance the subscribed and paid up share capital or Networth to Rs. 1000 Million prior to the date of award, (in case of award) is attached as Appendix.....

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

WITNESS :

1.:
2.
(Official Address)

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

Company).....

For M/s.....

* (Associate)

WITNESS :

1.:

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

2.
(Official Address)

Name.....

(Designation).....

(Common Seal of the
Company).....

Note :

1. * Strike out whichever is not applicable.
2. Bidder shall necessarily enclose the documentary evidence establishing that the signatory of the technology transfer agreement with Indian Manufacturing Company own the technology or have the authorization to use and further license the technology.
3. The certificates from a practicing Chartered Accountant shall be submitted by the bidder certifying the amount of subscribed and paid up share capital, or net worth as the case may be as on a date not earlier than 15 days from the date of techno-commercial bid opening / award date as applicable.
4. The undertaking shall be furnished by the Bidder in case the Bidder is meeting requirement of clause 1.1.1(A), on its own. In case of Associate, the undertaking shall necessarily be furnished by the Bidder along with his Associate.

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**(FORM OF LETTER OF UNDERTAKING TO BE SUBMITTED
BY THE BIDDER AND *ASSOCIATE (AS APPLICABLE) IN COMPLIANCE
TO THE REQUIREMENTS OF
CLAUSE 1.1.1(B) AND 3.0.0, ITEM 4 OF BID DATA SHEET)**

**LETTER OF UNDERTAKING FOR
SUPER CRITICAL STEAM TURBINE GENERATOR SETS TOWARDS
PHASED MANUFACTURING PROGRAM**

(ON NON JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

1.0 We, M/s..... (Bidder) is submitting our proposal in response to the Invitation for Bid by the Owner for EPC Package for 1 x 800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna nagar) against the Owner's Bidding Document No.

*And Whereas we are associating with M/s(the Associate) for manufacturing of supercritical Steam Turbine Generator sets in India.

*2.0 We M/s. _____ (Bidder) hereby undertake that in accordance with the requirement of clause 1.1.1(B) and 3.0.0 of item no. 4.0 of BDS we have registered in India under the Companies Act, our Company (i.e. M/s. _____) / our Subsidiary Company (i.e. M/s. _____, where we are a promoter with _____% equity participation) / our JV Company (i.e. M/s. _____, where we are a promoter / *our wholly owned subsidiary is a promoter with _____% equity participation) (herein after called the "Indian Manufacturing Company") for manufacturing of super critical Steam Turbine Generator sets in a phased manner as per the Phased Manufacturing Program elaborated in the bidding document.

Signature of authorized signatory.....

*Further our subsidiary company/JV company has registered another manufacturing subsidiary company M/s..... (hereinafter called "Indian Manufacturing Subsidiary Company") in India under companies act for manufacturing of supercritical Steam Turbine Generators in India, in a phased manner as per the Phased Manufacturing Program elaborated in the bidding documents.

We are enclosing the copy of Board Resolution in this regard at Annexure..... to this Attachment.

*2.0 We M/s. _____ (Associate) hereby undertake that in accordance with the requirement of clause 1.1.1(B) and 3.0.0 of item no. 4.0 of BDS we have registered in India under the Companies Act, our Company (i.e. M/s. _____) / our Subsidiary Company (i.e. M/s. _____, where we are a promoter with ___% equity participation) / our JV Company (i.e. M/s _____, where we are a promoter / *our wholly owned subsidiary is a promoter with ___% equity participation) (herein after called the "Indian Manufacturing Company") for manufacturing of super critical Steam Turbine Generator sets in a phased manner as per the Phased Manufacturing Program elaborated in the bidding document.

*Further our subsidiary company/JV company has registered another manufacturing subsidiary company M/s..... (hereinafter called "Indian Manufacturing Subsidiary Company") in India under companies act for manufacturing of supercritical Steam Turbine Generators in India, in a phased manner as per the Phased Manufacturing Program elaborated in the bidding documents.

We are enclosing the copy of Board Resolution in this regard at Annexure..... to this Attachment.

2.1 We M/s _____, undertake that we shall submit an **on demand Bank Guarantee of INR 650 Million** as security for any default against meeting the specified Phase Manufacturing Program (PMP) (in case of award). We understand that in case we do not implement the PMP even by the overall completion date stated in the bidding documents, the Owner may in his discretion invoke the above Bank Guarantee.

OR

We confirm that we have already given commitments for PMP and submitted bank guarantee(s) for security for default against specified PMP for Steam Turbine Generators to following Central/ State sector Power generating Company for supercritical projects as per following details*:

- i)
- ii)

(* Continuation Sheets of like size may be used and shall be annexed to this Attachment.)

3.0 We *and our Associate, undertake that a valid Technology transfer agreement including license to manufacture and supply in India between M/s _____, a Qualified Steam Turbine Generator Manufacturer or M/s _____ their technology providers (if any), M/s _____ Qualified Generator Manufacturer (in case of separate Generator Manufacturer) or M/s _____ their technology providers (if any) and M/s _____, the Indian Manufacturing Company is in place, covering the

Signature of authorized signatory.....

ATTACHMENT-18 (TG)

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 signatory of the technology transfer agreement with the Indian Manufacturing Company owns the technology / have authorization to use and further license the technology.

The documentary evidence in support of above is enclosed at Annexure..... to this Attachment.

3.1 We *and our Associate undertaken that the technology transfer agreement as above covers transfer of technological know-how for super critical Steam Turbine Generator/ Steam Turbine and Generator (in case of separate Generator Manufacturer) 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 M/s_____. We *and our Associate further undertake that, the above technology transfer agreement has the provision that the transfer of technology to the Indian Manufacturing Company shall be completed by the time last 660 MW unit is supplied by us under this tender.

4.0 *We *and our Associate undertake that major part i.e._____% of the land required for setting up manufacturing facility in India is in possession with clear title in the name of M/s _____, an Indian manufacturing Company or M/s _____, its Indian promoter (but pledged/leased to the M/s _____, the *Subsidiary Company/*JV Company).

OR

*We *and our Associate undertake that we are augmenting our already existing manufacturing facility in India for Manufacturing of Super critical Steam Turbine Generator Sets, for which we confirm that major part i.e._____% of the additional land required is in our possession with clear title for augmenting the existing facilities.

Necessary documents confirming the same is enclosed at Annexure ____ to this Attachment.

5.0 We undertake that the subscribed and paid up share capital or Networth of promoters in the Indian Manufacturing Company is INR.....Million as per details hereunder:

Sl.No.	Name of Promoter	*Paid up share capital / *Networth
1		
2		

Signature of authorized signatory.....

The undertaking of promoters to enhance the subscribed and paid up share capital or Networth to `1000 Million prior to the date of award, (in case of award) is attached as Appendix..... .

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

WITNESS :

1.:
2.
(Official Address)

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

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

For M/s.....
*(Associate)

WITNESS :

1.:
2.
(Official Address)

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

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

Note :

1. * Strike out whichever is not applicable.
2. Bidder shall necessarily enclose the documentary evidence establishing that the signatory of the technology transfer agreement with Indian Manufacturing Company own the technology or have the authorization to use and further license the technology.
3. The certificates from a practicing Chartered Accountant shall be submitted by the bidder certifying the amount of subscribed and paid up share capital, or net worth as the case may be as on a date not earlier than 15 days from the date of techno-commercial bid opening / award date as applicable.
4. **The undertaking shall be furnished by the Bidder in case the Bidder is meeting requirement of clause 1.1.1(B), on its own. In case of Associate, the undertaking shall necessarily be furnished by the Bidder along with his Associate.**

Signature of authorized signatory.....

**EPC PACKAGE FOR 1 X 800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Major Milestone Schedule of Phased Manufacturing Program)

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
C-7, Urja Bhawan
Sector-6, Panchkula, Haryana

Dear Sirs,

We declare that various major milestone schedules of phased manufacturing program and their completion schedule shall be as given here under.

(A) For Steam Generator & Auxiliaries

Sl. No.	Equipment	Indicative Facilities Requirement	To be established latest by (Month from Date of Award)
1.	Pressure Parts (straight water wall & spiral water wall)	<ul style="list-style-type: none"> * Straight tube butt welding facility * Automatic welding facility for panel processing * NDT facilities * Hydro testing * Continuous heat treatment furnace * Gang/panel bending facility (for straight water wall & spiral water wall tube panels) 	36
2.	Pressure Parts (economiser, super heater and reheater coils and panels)	<ul style="list-style-type: none"> * System bend facility * Welding facility for coils * NDT facilities * Hydro testing * Continuous heat treatment furnace * Jigs & fixtures for assembly and layout checking facility * Portable equipment for material/grade identification 	42

Sl. No.	Equipment	Indicative Facilities Requirement	To be established latest by (Month from Date of Award)
3.	Pressure Parts (headers)	<ul style="list-style-type: none"> * Welding * Machining & drilling * Heat treatment * Hydraulic testing * NDT facilities * Pressing facility for end caps & tees * Material identification facility * Facility for high alloy (P5 and above) continuous welding 	42
4.	Separator (shell and dished ends)	<ul style="list-style-type: none"> * Rolling facility/pressing facility * Machining & drilling * Welding * Heat treatment * Hydraulic testing * NDT facilities * Pressing arrangements for dished ends 	48

(B) For Steam Turbine Generator & Auxiliaries

Sl.No.	Equipment	Indicative Facilities Requirement	To be established latest by (Month from Date of Award)
1.	Turbine Casings and Valves machining	<ul style="list-style-type: none"> * LP outer Casing fabrication * HP/IP/LP Casing Machining & blading * Heat Treatment/Stress Relieving * Turbine valve machining & assembly testing 	36
2.	Turbine Rotor machining	<ul style="list-style-type: none"> * Rotor machining including grooves & Fir Tree machining * Rotor assembly and balancing * Turbine assembly 	42
3.	Rotating blades machining	<ul style="list-style-type: none"> * Rotating Blade machining & finishing 	52

Sl.No.	Equipment	Indicative Facilities Requirement	To be established latest by (Month from Date of Award)
4.	Generator Core and stator manufacturing	<ul style="list-style-type: none"> * Core stamping, fabrication facility Heat Treatment/Stress Relieving * Generator Stator Fabrication and core building facility * Stator bar manufacturing and heavy machining facility for fabricated Items. 	40
5.	Generator Rotor	<ul style="list-style-type: none"> * Rotor machining including slotting * Rotor assembly and balancing * Exciter manufacturing & testing * Rotor winding facility 	42
6.	Generator Assembly	* Generator assembly and testing	48

Date : (Signature)

Place : (Printed Name)

(Designation)

(Common Seal)

**EPC Package for
“1X800 MW SUPERCRITICAL EXPANSION UNIT,
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT,
YAMUNA NAGAR” Haryana,**

Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

To
Chief Engineer/ Projects
C-7, Urja Bhawan,
Sector-6,
Panchkula, Haryana

Price Adjustment Data

Bidder's Name and Address: _____ To _____

We hereby furnish the relevant details pertaining to the price adjustment provisions in your bidding documents.

1. Ex-Works Price of Equipment (Excluding Spares and Type Test Charges)

*Name of Currency of Bid Price:

Sl. No.	Item	Value of Co-efficient	Name of Published Index and its origin	Value of Indices (as on 30 days prior to date set for Opening of Price Bids).
Material				
1.	.....#.....	a =	.....	.....
2.	.....#.....	b =	.....	.....
3.	.....#.....	c =	.....	.....

	Labour	Lb =		.....
	Fixed Component	F = 0.15		

Sum of all material coefficients, i.e. a+b+c+..... etc. indicated above shall be 0.60.

To be specified by Bidder.

The labour co-efficient shall be between 0.25.

Sum of all material coefficients and labour coefficient shall be 0.85.

Sum of all material coefficients, labour coefficient and fixed component should be 1.0

2. Installation Price Component

S.No.	Item	Value of Coefficient	Name of published index and its origin	Value of Base Date Indices (as on 30 days prior to date of opening of Price bids)
-------	------	----------------------	--	---

Fixed Portion F = 0.15

Indian Field

labour **0.85**

$$L = L_b = 0.5 \times 0.85 L_1/L_o + 0.5 \times 0.85 W_1/W_o$$

“Lb” shall be co-efficient for labour component for Installation works.

L shall be one of the labour indices, namely, Consumer Price Index for Industrial Workers (Gen.) applicable to “All India” as published by Labour Bureau, Shimla of the Govt. of India.

W shall be one of the labour index, which is the Arithmetical average of Minimum Wages for Unskilled, Skilled, Semi-skilled and Highly skilled workers notified by the Central Government for the particular classified Area in which the project site is located or notified by the State Government of the state in which the project site is located, whichever is higher.

C. Civil Works Price Component*

Item	Index	Value of Coefficients	Name of published index and its origin	Value of Base date Indices (as on 7 days) prior to date of opening of Price Bids
------	-------	-----------------------	--	--

Fixed Portion F = 0.20

1.	Labour			
(a)	Lb= 0.5x0.25 Lb1/Lbo		Consumer price index for industrial workers (All India general) as published by Labour bureau Shimla	
(ii)	Labour (W) 0.5x0.25 W1/Wo		Arithmetical Average of Minimum Wages for Unskilled Skilled, Semi-skilled and highly Skilled Workers notified by the Central Government for the particular classified area in which the Project site is located or notified by the State Government of the State in which the project site is located whichever is higher.	
2.	Material m=0.15 (excluding cement & steel)		Index no. of wholesale price under group “All Commodities” as published by Ministry of Commerce and Industry, Gol	
3	High Speed Diesel d=0.05		Price of high speed diesel oil per Speed diesel per litre at the Indian Oil Corpn. Outlet nearest to the project (selling price inclusive of taxes & duties, if any)	

4	Steel s=0.25	Index for " MS Wire Rods" under sub-group of "Mild Steel Long Products" under Group of "Manufacture of Basic Metals" as published by Ministry of Commerce and Industry, GOI
5	Cement c=0.10	Index for "Puzzolona Cement" under sub-group of "Cement, Plaster & Lime" under Group of "Manufacture of Non-Metallic Mineral Products" as published by Ministry of Commerce and Industry, GOI.

D Site Fabricated Structural Works Price Component*

Item	Coefficient	Value of Coefficients	Name of published index and its origin	Value of Base date Indices (as on 7 days) prior to date of opening of Price Bids
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Material :

Hot Rolled Coils & Sheet	(a)	0.50	Index for "Hot Rolled(HR) Coils & Sheets, including Narrow Strip" under subgroup of Mild steel-Flat Products under group of Manufacture of Basic Metals as Published by Ministry of Commerce and Industry, Gol
Manufacture of Fabricated Metal Products-Structural Metal Product	(b)	0.15	Index for Manufacture of structural metal products under group of manufacture of fabricated metal products except machinery & Equipment as published by Ministry of Commerce & Industry, Gol
Labour :	Lb/W	0.15	$0.5 \times 0.15 \times Lb1 / Lbo + 05 \times 0.15 \times W1 / Wo$
Fixed Component:	F_s	0.20	

We agree to provide you with a complete break-up of our Bid Price to enable operation of Price adjustment Clause for afore said all price components.

* Continuation sheets of like size & format shall be used, if required, in case number of currencies are more.

Date: (Signature).....
 Place: (Printed Name).....
 (Designation).....
 (Common Seal).....

Note : Bidder shall note that it is mandatory to furnish the values of various coefficients and name, source & origin of the published indices and its base values in this Attachment-20 to Bid. Bidder is also required to mention whether the indices are monthly average, weekly average or as applicable.

**EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(CERTIFICATE OF COMPLIANCE ON QUALIFYING REQUIREMENTS)

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula – Haryana 134109

Dear Sirs,

- 1.0 With reference to our bid proposal no.....dated for EPC Package for 1X800 MW Super Critical Expansion Unit, Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna nagar, Haryana, Bid Document No. **03/HPGCL/DCRTPP/EPC/800MW**, we hereby confirm that the number of reference plants quoted by us in Attachment 3A in the bid, for establishing compliance to the specified qualifying requirement (QR), are not more than three times the number of plants/works as specified in the qualifying requirements.
- 2.0 We also confirm that the reference plants declared more than the number of plants as above, shall not be considered for evaluation/establishing compliance to Qualifying Requirement (QR).
- 3.0 We further confirm that no change or substitution in respect of reference plant (as declared in our bid) by new/additional plant for meeting the specified Qualifying Requirement (QR) shall be offered by us.

Date :
Place :

(Signature)
(Printed Name)
(Designation)
(Common Seal)

Note : Continuation sheets of like size and format, may be used as per Bidder's requirement and shall be annexed to this Attachment.

**EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

**[DECLARATION REGARDING CAPACITY & CAPABILITY
OF ASSOCIATE/ COLLABORATOR (if applicable)]
(To be submitted by the Bidder)**

Name and Address:

To,
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula- Haryana 134109

Dear Sir,

We, M/s (Name of the Bidder) has submitted our Bid along with M/s. our Associate/Collaborator for EPC Package for 1X800 MW Super Critical Expansion Unit, Deen Bandhu Chhotu Ram Thermal Power Plant, Yamunanagar, Haryana, Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW as per the provisions of the Bidding Documents.

We hereby confirm that we have carried out a comprehensive assessment of the capacity and capability of our following Associate(s)/Collaborator(s) for EPC Package for 1X800 MW Super Critical Expansion Unit, Deen Bandhu Chhotu Ram Thermal Power Plant, Yamunanagar, Haryana.

1)

2)

We confirm that our aforesaid Associate(s)/Collaborator(s) have sufficient capacity and capability to execute their respective scopes of work as per the provisions of the Bidding Documents/Contract.

Yours faithfully,

Date :
Place :

(Signature)
(Printed Name)
(Designation)
(Common Seal)

*** Bidder to necessarily fill and submit the above Declaration for the QR Route through which the Bidder is getting qualified (as applicable).**

**EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(DECLARATION ON LOCAL CONTENT)

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula - Haryana 134109

Dear Sirs,

***1.0** In order to avail **purchase preference**, we confirm that we are a '**Class-I local supplier**' as per details given below:

S.N	Description of Goods & Services	Details of the Location(s) at which local value addition is made

OR

***1.0** We confirm that we are not a '**Class-I local supplier**'.

***Bidder to Strike off, whichever is not applicable.**

- 1.1 We confirm that we are a Class-I local supplier for Item(s) mentioned at clause no. 28.1.0(b) of ITB, as applicable. We further confirm that in case of bought-out items, same shall be sourced from Class-I local supplier only.
- 1.2 We undertake that a certificate from the statutory auditor or cost auditor (in the case the bidder is a company) or from a practicing cost accountant or practicing chartered accountant (in respect of bidders other than companies) certifying the percentage of local content shall be submitted by us prior to submission of our last bill for payment.
- 2.0 Further, we hereby confirm that we are presently not debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP).

3.0 We agree to furnish any information as a proof of the above to your satisfaction as and when required.

Date: (Signature).....
Place: (Printed Name).....

(Designation)
(Common Seal)

- Note :**
- 1)** Continuation sheets of like size and format, may be used as per Bidder's requirement and shall be annexed to this Attachment.
 - 2)** In case a Bidder has been banned/debarred by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPPMII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP), the same may be declared by Bidder by striking off para 2.0 above and declaring the details of banning using additional sheets which shall be annexed to this Attachment.

**EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Declaration on exemption from meeting the Local Content)

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula - Haryana 134109

Dear Sirs,

We have read the provisions of "Preference to Make In India and Eligibility for Evaluation/granting of purchase preference to local suppliers" enclosed with the Bid Data Sheets. In terms of the requirement of the aforesaid provisions, we hereby declare the following:

- 1.0 In order to avail exemption from meeting stipulated Local Content requirement to categorize a Bidder/Supplier as 'Class-I local supplier' for Item(s) for complete scope of work, we confirm that we are manufacturing the item(s) in India under a license from a foreign manufacturer who holds intellectual property rights and there is a technology collaboration agreement / transfer of technology agreement between the technology owner and us for indigenous manufacturing of the item(s) as per details below:

Sl. No.	Description of Goods	Licensing Organization/Technology Owner	Details of the location(s) at which the local manufacturing is done

- 2.0 Further, we hereby confirm the following:

Whether the bidder is presently debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make In India), Order 2017' (PPP-MII Order) dated 15.06.2017 and its subsequent revisions / amendments issued by Department of Industrial Policy and Promotion (DIPP)	Yes* / No*
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* **Strike off, whichever is not applicable**

3.0 We agree to furnish any information as a proof of the above to your satisfaction as and when required.

Date: (Signature).....
Place: (Printed Name).....
(Designation)
(Common Seal)

Note : 1) Continuation sheets of like size and format, may be used as per Bidder's requirement and shall be annexed to this Attachment.

**EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Declaration regarding Restrictions on procurement from a Bidder of a country which shares a land border with India)

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula – Haryana 134109

Dear Sirs,

We confirm that we have read and understood the ITB Clause-44 regarding "**Restrictions on procurement from a Bidder of a country which shares a land border with India**" and certify our compliance to this clause.

We further declare that if it is established that we have provided any false information in pursuance of the aforesaid ITB Clause, while competing for this contract, then our bid shall be rejected and bid security shall be forfeited. Further, if at any point subsequent to award of Contract it is established that we have not complied with terms of aforesaid ITB clause, during execution of contract, this would be a sufficient ground for immediate termination of the contract as per GCC Clause 24.1 titled 'Termination with cause' for Contractor's Default and shall be dealt accordingly.

Date: (Signature).....

Place: (Printed Name).....

(Designation)

(Common Seal)

**EPC PACKAGE
FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

Bidder's Name and Address:

To
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula – Haryana 134109

Dear Sirs,

With reference to the subject package and as per Clause 5.2, Sec-II, ITB regarding site visit by bidder, we confirm that we have visited and examined the DCR Thermal Power Project site where the facilities are to be installed and its surroundings, on the date mentioned below:

Date:.....

(Bidder)

(HPGCL Official)

(Signature).....

(Signature)

(Printed Name).....

(Printed Name)

(Designation)

(Designation)

(Common Seal)

(Common Seal)

EPC PACKAGE FOR
1X800 MW SUPER CRITICAL EXPANSION UNIT
DEEN BANDHU CHHOTU RAM THERMAL POWER PLANT
YAMUNA NAGAR, HARYANA

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

Name and Address:

To,
Chief Engineer (Projects)
HPGCL
Urja Bhawan, Sector-6,
Panchkula- Haryana 134109

Check List of documents for Envelope-I (Techno-Commercial) Bid

S No	Details of Checks No.	Enclosed : Yes/No
1.	Bid Form Envelope-I (Techno-Commercial) BID	.....
2.	Attachment-1 : Bid Security (enclosed in a separate sealed Envelope)	.....
3.	Attachment-2 : Power of Attorney	.....
4.	(i) Attachment-3 (Qualification Data along with Qualification Route Details & Deed(s) of Joint Undertaking, as applicable)	.....
5.	i) Attachment-4 : Eligibility of Facilities	.....
	(ii) Attachment-4A : List of Special Maintenance Tools & Tackles	.....
6.	Attachment-5 : Details of Proposed Sub-Contractors / Sub-Vendors:	.....
7.	Attachment-6 : No Deviations Schedule	.....
8.	Attachment-7 Details in respect of Local Agent (Without Fees)	Deleted
9.	Attachment-8 (Declaration on Demonstration Parameters)	.....
10.	Attachment-9 Schedule of Erection Tools & Equipment	.....

- 11. Attachment-10: Technical Data Sheets
- 12. Attachment-11: Guarantee Declaration
- 13. Attachment-12 : Information regarding Quality Assurance Program
- 14. Attachment-13 : Additional information
- 15. Attachment-14 : Detailed Work Schedule /
Brief Integrated Network (L1 Schedule)
- 16. Attachment-15DELETED
- 17. Attachment-16 : Electronic Fund Transfer Authorization Form
- 18. Attachment-17 : Form of Acceptance of Fraud Prevention Policy
- 19. Attachment-17A : Declaration on Banning Policy
- 20. Attachment-18 letter of Undertaking towards super critical Steam Generator Sets and super critical Steam Turbine Generator Sets towards Phased Manufacturing Program
- 21. Attachment-19 Major Milestone Schedule of Phased Manufacturing Program
- 22. Attachment-20 : Price Adjustment Data
- 23. Attachment-21: Certificate of Compliance Qualifying Requirements
- 24. Attachment-21A: Check List
- 25. Attachment -21B: Declaration Regarding Capacity & Capability of Associate/Collaborator
- 26. Attachment -22
- 27. Attachment-23
- 28. Attachment-24
- 29. Attachment-25

Date : (Signature)
Place : (Printed Name)
(Designation)
(Common Seal)

HARYANA POWER GENERATION CORPORATION LIMITED

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

EPC PACKAGE TENDER SPECIFICATION

VOLUME I: FORMS & PROCEDURES

Section –VII

Book 1 of 3 (Part 2)

ATTACHMENT-3K

PROVENNESS CRITERIA

Bidder shall submit the list of proposed sub-vendors/sub-contractors along with their credentials as per format of Attachment-3K duly filled for each equipment and system proposed for the EPC package for consideration/approval of the Owner within 90 days from issue of Letter of Intent.

**EPC Package for 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar**

BIDDING DOCUMENT NO. : 03/HPGCL/DCRTPP/EPC/800MW

(Experience Details - Applicable to all the Bidders)

Bidder's Name & Address : _____ To _____

Summary of B T G Critical Equipment indicated under clause 4.3, Chapter 04, "Provenness", Volume II

Equipment Name	Sub-Vendor Name	Collaborator's Name, if applicable	Seeking Qualification as per clause..... Chapter 04, Volume II
PA Fans			*4.3.1/*4.3.2/*4.3.3
ID Fans			*4.3.1/*4.3.2/*4.3.3
FD Fans			*4.3.1/*4.3.2/*4.3.3
Coal Pulverisers			*4.3.1/*4.3.2/*4.3.3
Raw Coal Feeders			*4.3.1/*4.3.2/*4.3.3
Boiler Start up drain recirculation pumps			*4.3.1/*4.3.2/*4.3.3
Air preheater*			*4.3.1/*4.3.2/*4.3.3
Condenser			*4.3.1/*4.3.2/*4.3.3
Condensate Extraction Pumps (Cep)			*4.3.1/*4.3.2/*4.3.3
Condenser Air Evacuation Pumps			*4.3.1/*4.3.2/*4.3.3
Feed Water Low Pressure Heaters			*4.3.1/*4.3.2/*4.3.3
Feed Water High Pressure Heaters			*4.3.1/*4.3.2/*4.3.3
Deaerator			*4.3.1/*4.3.2/*4.3.3
Boiler Feed Pumps			*4.3.1/*4.3.2/*4.3.3
HP Bypass System			*4.3.1/*4.3.2/*4.3.3
LP Bypass System			*4.3.1/*4.3.2/*4.3.3

1. If qualification is sought as per clause 4.3.1 then details of the sub vendor shall be filled at A to G.
2. If qualification is sought as per clause 4.3.2, then details (as per 1.00.00 below) of the proposed sub-vendor is to be filled individually for each equipment / sub-vendor and collaborator (i.e. manufacturer of proven equipment) data shall be filled at A to G.
3. If qualification is sought as per clause 4.3.3, then details (as per 2.00.00 below) of the proposed sub-vendor is to be filled individually for each equipment and collaborator (i.e. manufacturer of proven equipment) data shall be filled at A to G.

* strike out whichever is not applicable.

S. No.	Item Description	Station-I
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1.00.00 (Applicable for Bidder/his sub vendors seeking qualification as per clause no. 3.1, Chapter 04, "Provenness", Volume II. Bidder shall furnish the required data only for those equipment/auxiliaries which are proposed to be sourced under this route.)

We, hereby furnish the data on provenness criteria for critical equipment, auxiliaries, systems and Bought Out Items such as PA, ID and FD Fans, Coal Pulverisers, Raw Coal feeders, Boiler Start up drain recirculation pumps, Air pre-heaters, Condenser, CEP, Condenser Air Evacuation Pump, Feed Water Low Pressure Heaters, Feed Water High Pressure Heaters, deaerator, Boiler Feed Pumps (BFP), HP Bypass System, LP Bypass System which have been designed (either by self or under Collaboration Licencing Agreement manufactured/ got manufactured and supplied by us (or manufactured/ got manufactured & supplied by our proposed sub-vendors) and these are in successful operation in at least one (1) plant for a period not less than one year on date of techno-commercial bid opening. The details of type and minimum equipment rating of such equipment are given below :

S. No.	Item Description	Station-I
--------	------------------	-----------

A PA FAN

- (i) Name of the station and location
- (ii) Details of units
 - (a) Capacity of each unit (MW)
 - (b) No. of fans per unit
- (iii) Client name and its address,
 - Fax No. & Tel. No.
 - e-mail id
 - website address
- (iv) Name of the manufacturer & address
- (v) Date of commissioning of the fans

S. No.	Item Description	Station-I
(vi)	Brief Technical particulars of the fans	
(a)	Type (Axial)	*Yes/*No
(b)	Make & Model	
(c)	No. of Stages	
(d)	Capacity	
	(i) Flow (M ³ /Sec.)	
	(ii) Head (mmwc)	
(e)	Speed of fan (rpm)	
(f)	Flow control device (variable blade pitch control as applicable)	
(g)	Bidder to enclosed flow Vs head curve of PA Fan for the reference plant	
(vii)	Whether the PA Fan have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No

B. ID FAN

- (i) Name of the station and location
- (ii) Details of units
 - (a) Capacity of each unit (MW)
 - (b) No. of fans per unit

S. No.	Item Description	Station-I
(iii)	Client name and its address, <ul style="list-style-type: none"> - Fax No. & Tel. No. - e-mail id - website address 	
(iv)	Name of the manufacturer & address	
(v)	Date of commissioning of the fans	
(vi)	Brief Technical particulars of the fans	
(a)	Type (axial)	*Yes/*No
(b)	Make & Model	
(c)	No. of stages	
(d)	Capacity <ul style="list-style-type: none"> (i) Flow (M³/Sec.) (ii) Head (mmwc) 	
(e)	Speed of fan (rpm)	
(f)	Flow control device (Variable blade pitch control as applicable)	
(g)	Bidder to furnish flow Vs Head curves of the ID fans for the reference plant	

S. No.	Item Description	Station-I
(vii)	Whether the ID fans have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No

C. FD FAN

- (i) Name of the station and location
- (ii) Details of units
 - (a) Capacity of each unit (MW)
 - (b) No. of fans per unit
- (iii) Client name and its address,
 - Fax No. & Tel. No.
 - e-mail id
 - website address
- (iv) Name of the manufacturer & address
- (v) Date of commissioning of the fans
- (vi) Brief Technical particulars of the fans
 - (a) Type (Axial) *Yes/*No
 - (b) Make & Model
 - (c) No. of stages
 - (d) Capacity
 - (i) Flow (M³/Sec.)
 - (ii) Head (mmwc)

S. No.	Item Description	Station-I
	(e) Speed of fan (rpm)	
	(f) Flow control device (variable blade pitch control as applicable)	
	(g) Bidder to enclose flow vs head curve of FD fan for the reference plant	
(vii)	Whether the FD fans have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No

D. COAL PULVERISERS

- (i) Name of the Station and location
- (ii) Client Name and Its Address. and Fax No.
 - email id
 - website address
- (iii) Name of the manufacturer & address
- (iv) Date of commission of the Coal Pulverisers
 - (a)
 - (b)
 - (c)

S. No.	Item Description	Station-I
(v)	Details of Units	
	(a) Capacity of each unit (MW)	
	(b) No. of Pulverisers per Unit	
(vi)	Brief Technical particulars of the Coal Pulverisers	
	(a) Type	
	(b) Size & Model no.	
	(c) Capacity (Tonnes/hr.)	
	(i) Capacity of coal pulveriser for the reference plant (Tonnes/hr.) under following associated conditions : (bidder to fill in below)	
	(a) Coal fineness	(..... % through mesh)
	(b) Coal input size	(upto mm)
	(c) Total moisture in coal	(..... %)
	(d) HGI of input coal feed	(.....)
	(ii) Capacity of coal pulverisers for the reference plant (Tonne/hr.) with following associated conditions	
	(a) Coal fineness 70% through 200 mesh	
	(b) Coal input size up to 50 mm	
	(c) Total moisture in input coal 12%	
	(d) HGI of Coal 55	

S. No.	Item Description	Station-I
	(iii) Bidder to enclose all relevant correction curve for variation in the pulveriser capacity of the reference plant w.r.t parameters indicated at (ii) above	
d)	<p>Details of materials for pulveriser component for the reference plant</p> <p>Material & wear Life of wear parts</p> <p>Material</p> <ul style="list-style-type: none"> – material of liners – material of rolls/tyres/balls – material of ring segments – wear life of liners – wear life or rolls/tyres/balls – wear life of ring segments 	
(e)	<p>Details of coal quality for the project</p> <ol style="list-style-type: none"> 1) HHV (kcal/hr) 2) Ash (%) 3) Moisture (%) 4) YGP Abrasiveness index of coal 5) Hard Grove Grindability Index (HGI) 	

S. No.	Item Description	Station-I
(vii)	Whether the coal pulverisers have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No

E. RAW COAL FEEDER

- (i) Name of the station and location
- (ii) Client name and his address and Fax No.
 - email id
 - website address
- (iii) Name of the manufacturer & address
- (iv) Date of commissioning of Raw Coal feeder
 - (a)
 - (b)
- (v) Details of units
 - (a) Capacity of each unit (MW)
 - (b) No. of Raw Coal feeder per unit
- (vi) Type & Rating
- (vii) Feeder size and Model no.
- (viii) Normal capacity (tonnes/hr)
- (ix) Maximum capacity (tonnes/hr)

S. No.	Item Description	Station-I
(x)	Method of output control	
(xi)	Feeder belt width (mm)	
(xii)	Motor Rating & Auxiliary Power consumption (KW)	
(xiii)	Raw coal weighers -	
	- Method	
	- Range of measurement	
(xiv)	Whether the raw coal feeder have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No

F. BOILER STARTUP DRAIN RE-CIRCULATION PUMPS

- (i) Name of the station and its location
- (ii) No. of units & capacity in MW of each Unit
- (iii) No. of pumps per unit
- (iv) Client name and its address,
 - Fax No. & Tel. No.
 - e-mail id
 - website address
- (v) Name and Designation of the responsible person in client's organisation

S. No.	Item Description	Station-I
(vi)	Name of the manufacturer & address	
(vii)	Contract No. & Date	
(viii)	Starting date of work	
(ix)	Scheduled date of completion	
(x)	Actual date of completion	
(xi)	Date of Commissioning of system/Package	
(xii)	Whether the Boiler Startup drain Recirculation pumps have been in successful operation for a period not less than one (1) year as on date of techno-commercial bid opening	*Yes/*No
(xiii)	Brief Technical Particulars of the pump	
	- Type & Model	
	- Gland less pump with submerged type wet under with external high pressure cooler	*Yes/*No
	- Capacity, head & duty conditions	

G AIR PREHEATER

- (i) Name of the station and location
- (ii) Details of units
 - (a) Capacity of each unit (MW)
 - (b) No. of Primary Air preheaters per unit

S. No.	Item Description	Station-I
(iii)	Client name and its address, <ul style="list-style-type: none"> - Fax No. & Tel. No. - e-mail id - website address 	
(iv)	Name of the manufacturer & address	
(v)	Date of commissioning of the Primary Air preheater	
(vi)	Brief Technical particulars of the Primary Air preheater <ul style="list-style-type: none"> (a) Type (b) Model (c) Size (d) Air quantity entering Primary Air preheater (T/hr.) (e) Gas quantity entering Primary Air preheater (T/hr.) 	
(vii)	Whether the Primary Air Preheater have been in successful operation for a period not less than one (1) year as on date of bid techno-commercial opening	*Yes/*No

S. No.	Item Description	Station-I
--------	------------------	-----------

H Condenser

- (i) Name of the station and location
- (ii) Capacity of each unit (MW) and no. of units
- (iii) Client name and its address,
 - Fax No. & Tel. No.
 - e-mail id
 - website address
- (iv) Name of the manufacturer & address
- (v) Date of commissioning of condenser
- (vi) Brief Technical particulars of the Secondary Air preheater
 - (a) Designed by
 - (b) Manufactured by
 - (c) Type : Water Cooled Surface Condenser or any other type & nos. per TG unit
 - (d) Design Standard & No. of passes
 - (e) Rated Heat Load (G Kcal/ hr)
 - (f) Design CW inlet Temp (Deg C)
 - (g) Overall Heat Transfer Coefficient (Kcal/hr sq.m. deg.C)
 - (h) Surface Area (sq.m.)

S. No.	Item Description	Station-I
	(i) Tube Material	
	(j) Make	
	(k) Tube type	
	(l) Type of condenser support	
	(m) Condenser water box pressure	
(vi)	Is these condenser(s) are running with steam turbine generator sets	Yes/No

H Condensate Extraction Pumps (CEP)

- (i) Name Address & Telephone no. of manufacturer
- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.
- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date or Order
- (viii) (Scheduled Date of Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of System/Package
- (xi) Whether the System/ Equipment are in

S. No.	Item Description	Station-I
	successful operation for a minimum period of one (1) year (Yes/No)	
(xii)	Date of Commencement of Successful Operation	
(xiii)	Brief Scope of Work	
(xiv)	Brief Technical Particulars of the System/ Package/Equipment	
(a)	Designed by	
(b)	Manufactured by	
(c)	Make/ Model No.	
(d)	Rated Flow (T/Hr)	
(e)	Rated Head (Kg/cm ² abs)	
(f)	Rated Speed (rpm)	
(g)	KW rating of motor	
(h)	No. of CEP(s) per unit	
(i)	Pump efficiency (%)	
(j)	Type <ul style="list-style-type: none"> - Vertical/ Horizontal - Cannister with double suction first stage impeller 	
(xv)	Are these CEPs running with Steam Turbine Generator Sets	

I Condenser Air Evacuation Pumps

- (i) Name Address & Telephone no. of manufacturer

S. No.	Item Description	Station-I
(ii)	Name of the Station and its Location	
(iii)	Client Name and its Address, Fax No. & Tel. Nos.	
(iv)	Name and Designation of the responsible person in Client's Organisation	
(v)	Contract No. & Date	
(vi)	Capacity of each unit (MW) and no. of units	
(vii)	Starting Date of Work/Date or Order	
(viii)	(Scheduled Date of Completion	
(ix)	Actual Date of Completion	
(x)	Date of Commissioning of System/Package	
(xi)	Whether the System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)	
(xii)	Date of Commencement of Successful Operation	
(xiii)	Brief Scope of Work	
(xiv)	Brief Technical Particulars of the System/ Package/ Equipment	
(a)	Designed by	
(b)	Manufactured by	
(c)	Type (liquid ring type/ or any other type)	

S. No.	Item Description	Station-I
	(d) Make/ Model no.	
	(e) Number per TG Unit	
	(f) Rated free Dry Air Capacity in SCFM [at 25.4 mm Hg (abs) Suction Pressure at 21.1°C] of each Pump Flow (T/Hr)	
	(g) Hogging Capacity of each Pump (at 254mmHg (abs) Suction Pressure in SCFM	
	(h) I T D (Deg C)	
	(i) Temp. of Cooling Water to Vacuum Pump Heat Exchanger (deg.C)	
	(j) Type of Heat Exchanger (Shell & Tube Type/Plate Type)	
	(k) No. of Stages	
	(l) Whether Air Ejector is provided or not	
	(m) Impeller Material	
	(n) Casing material	
(xv)	Are these Condenser Air Evacuation Pumps running with Steam Turbine Generator Sets (Yes/No)	

J. FEED WATER HEATERS (LOW PRESSURE HEATERS HIGH PRESSURE HEATERS AND DEAERATOR)

1. HP Heaters

- (i) Name Address & Telephone no. of manufacturer
- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.
- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date or Order
- (viii) Scheduled Date of Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of System/Package
- (xi) Whether the System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)
- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/Package/ Equipment

- (a) Designed by
- (b) Manufactured by
- (c) No. of HP Heaters.
- (d) Type of HP Heaters
 - Horizontal/ Vertical
 - U tube/ Straight Tube/ Spiral
 - Tube Material
 - Type of tube (Seamless/ Welded)
 - Whether Integral Desuperheating, Condensing and Drain Cooling Zones are provided (Yes/ No)
 - Whether 50% or 100% HP Heaters
- (xv) (Rated Feed Water Flow for each string (T/hr) (Indicate for each HP heater)
- (xvi) Tube Side Design and Operating Pressure (ata)
- (xvii) Make
- (xviii) Whether the heaters are operating for Steam Turbine Generator Sets (Yes/No)

2. LP Heaters

- (i) Name Address & Telephone no. of manufacturer
- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.

- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date of Order
- (viii) (Scheduled Date of Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of System/Package
- (xi) Whether the System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)
- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/Package/Equipment
 - (a) Designed by
 - (b) Manufactured by
 - (c) No. of HP Heaters.
 - (d) Type of HP Heaters
 - Horizontal/ Vertical
 - U tube/ Straight Tube/ Spiral
 - Tube Material
 - Type of tube

- (Seamless/ Welded)
- Whether Integral Desuperheating, Condensing and Drain Cooling Zones are provided (Yes/ No)
- (xv) (Rated Feed Water Flow for each string (T/hr) (Indicate for each LP heater)
- (xvi) Tube Side Design and Operating Pressure (ata)
- (xvii) Make
- (xviii) Whether the heaters are operating for Steam Turbine Generator Sets (Yes/No)

3. DEAERATOR

- (i) Name Address & Telephone no. of manufacturer
- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.
- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date of Order
- (viii) (Scheduled Date of Completion
- (ix) Actual Date of Completion

- (x) Date of Commissioning of System/Package
- (xi) Whether the System/ Equipment are in successful operation for a minimum period of one (1) year (Yes/No)
- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/Package/Equipment
 - (a) Designed by
 - (b) Manufactured by
 - (c) Type of Deaerator
 - Whether direct contact type (Yes/ No)
 - Horizontal/ Vertical
- (xv) Spray Type/ Spray Cum Tray Type
- (xvi) Oxygen level at Deaerator outlet (cc/litre)
- (xvii) Feed Water flow from Deaerator (T/hr)
- (xviii) Storage Capacity (cum)
- (xix) Design Pressure (kg/cm²g)
- (xx) Is this deaerator running with Steam Turbine Generator Sets (Yes/No)

4. BOILER FEED PUMP

- (i) Name Address & Telephone no. of manufacturer

- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.
- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date or Order
- (viii) (Scheduled Date of Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of System/Package
- (xi) Whether the System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)
- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/ Package/ Equipment
 - (a) Designed by
 - (b) Manufactured by
 - (c) Make/Model No.
 - (d) No. of TDBFP's/

MDBFP per unit

- (e) Rated Flow (T/hr)
 - (f) Rated TDH (kg/cm²g)
 - (g) Speed (rpm)
 - (h) KW rating of motor
 - (i) Pump Efficiency
 - (l) Head develop per stage
 - (m) Type
 - Horizontal
 - Centrifugal
 - Multistage
 - Outer casing barrel type Horizontal/ Vertical
- (xv) Are the BFPs running with supercritical Steam Turbine Generator Sets (Yes/No)

5. HP BYPASS SYSTEM

- (i) Name Address & Telephone no. of manufacturer
- (ii) Name of the Station and its Location
- (iii) Client Name and its Address, Fax No. & Tel. Nos.
- (iv) Name and Designation of the responsible person in Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit (MW) and no. of units
- (vii) Starting Date of Work/Date or Order

- (viii) Scheduled Date of Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of System/Package
- (xi) Whether the System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)
- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/Package/Equipment
 - (a) Designed by
 - (b) Manufactured by
 - (c) BMCR of boiler (T/Hr)
 - (d) No. of TDBFP's/ MDBFP per unit
 - (e) No. of Valves per unit
 - (f) Type/ size
 - (g) Rated Steam Flow through each HP Bypass Valve (T/hr)
 - (h) Type
 - Steam pressure at inlet/ outlet (kg/cm² g)
 - Steam inlet/ outlet temp (Deg C)
- (xv) Design spray water flow (T/hr)

- (xvi) Spray Water Press/Temp.
(ata/deg.)
- (xvii) Type of Actuator
- (xviii) Control System designed
by and manufactured by
- (xix) Location of Valves
- (xx) Make/ Model No.
- (i) Is this HP Bypass System
running with supercritical
Steam Turbine Generator
Sets (Yes/No)

6. LP BYPASS SYSTEM

- (i) Name Address & Telephone
no. of manufacturer
- (ii) Name of the Station and
its Location
- (iii) Client Name and its
Address, Fax No. & Tel.
Nos.
- (iv) Name and Designation of
the responsible person in
Client's Organisation
- (v) Contract No. & Date
- (vi) Capacity of each unit
(MW) and no. of units
- (vii) Starting Date of
Work/Date or Order
- (viii) (Scheduled Date of
Completion
- (ix) Actual Date of Completion
- (x) Date of Commissioning of
System/Package
- (xi) Whether the

System/Equipment are in successful operation for a minimum period of one (1) year (Yes/No)

- (xii) Date of Commencement of Successful Operation
- (xiii) Brief Scope of Work
- (xiv) Brief Technical Particulars of the System/Package/ Equipment
 - (a) Designed by
 - (b) Manufactured by
 - (c) BMCR of boiler (T/Hr)
 - (d) No. of TDBFP's/ MDBFP per unit
 - (e) No. of Valves per unit
 - (f) Type/ size
 - (g) Rated Steam Flow through each LP Bypass Valve (T/hr)
 - (h) Type
 - Steam pressure at inlet/ outlet ($\text{kg/cm}^2 \text{ g}$)
 - Steam inlet/ outlet temp (Deg C)
- (xv) Design spray water flow (T/hr)
- (xvi) Spray Water Press/Temp. (ata/deg.)
- (xvii) Whether actuation is by Governing Oil System or not
- (xviii) Control System designed by and manufactured by

- (xix) Location of Valves
- (xx) Make/ Model No.
- (xxi) Is this LP Bypass System running with supercritical Steam Turbine Generator Sets (Yes/No)

2.01.00 We, hereby confirm that we/our sub-vendors are a regular manufacturer of equipment (PA, ID and FD Fans, Coal Pulverisers, Raw Coal feeders, Boiler Start up drain recirculation pumps, Air pre-heaters, Condenser, CEP, Condenser Air Evacuation Pumps, feed Water LP Heaters, Feed Water HP Heaters, Deaerator, BFP, HP Bypass & LP Bypass System for units of at least 200MW rating and the details in this regard on provenness criteria as per clause 4.3.1, Chapter 04, "Provenness", Volume II are hereby furnished below:

***Bidder to strike off whichever is not applicable. (Data to be furnished in line with format given at 1.00.00 of this Attachment))**

2.02.00 We further confirm that details in respect of collaboration/ valid licencing agreement for the aforesaid equipment as per 2.01.00 above who meets the requirement stipulated at clause 4.3.1, Chapter 04, "Provenness", Volume II are enclosed as per Annexure-I to this Attachment. The data in respect of provenness criteria for these equipment which are in successful operation in at least one (1) plant for a period not less than one year on date of techno commercial bid opening are furnished below. We further confirm that we/ our sub vendor(s) have created manufacturing and testing facilities at our/ their works as per collaborator's/ Licensor's design, manufacturing & quality control system for these equipment(s)/ Auxiliary(ies).

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

***3.00.00 Applicable for JV Company/Subsidiary Company/ promoter of JV Company meeting provenness criteria as per clause no. 4.3.3, Chapter 04, "Provenness", Volume II.**

3.01.00 We, hereby confirm that JV company/ Subsidiary company (Strike off whichever is not applicable) formed for manufacturing and supply of equipment (s)PA, ID and FD Fans, Coal Pulverisers, Raw Coal feeders, Boiler Start up drain recirculation pumps, Air pre-heaters, Auxiliary Boiler has a valid collaboration or licencing agreement for design, engineering, manufacturing of such equipment(s) in India with a qualified equipment manufacturer who meets the requirements stipulated at clause 4.3.1 of Chapter 04, "Provenness", Volume II of bidding documents (or the technology provider of the qualified equipment manufacturer). Further, in such a case, such qualified equipment manufacturers is having, directly or indirectly through its holding company/subsidiary company, at least 26% equity participation in the Indian Joint Venture Company/subsidiary company, which shall be maintained for a lock-in period of seven (7) years from the date of

incorporation of such Joint Venture / Subsidiary or upto the end of defect liability period of the contract, whichever is later. In addition, the sub-vendor along with the Indian Joint Venture Company/ Subsidiary Company, qualified equipment manufacturers and its holding/subsidiary company, as applicable, shall furnish DJU for each equipment in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed at Annexure-III of Attachment-3K.

4.0.0 ELECTROSTATIC PRECIPITATOR

(A) FOR BIDDER/HIS SUBVENDOR SEEKING QUALIFICATIONS AS PER CLAUSE 4.4.4.1 OF THE CHAPTER 04, "PROVENNESS" , VOLUME II.

We / proposed sub-vendor meet the requirement of Clause 4.4.4.1 of the Chapter 04, "Provenness" , Volume II and to satisfy this requirement, we declare the following :

We / proposed sub-vendor have designed, supplied, erected/supervised erection and commissioned/supervised commissioning rigid discharge framework Electrostatic Precipitators (of the type offered), having a designed efficiency of not less than 99%, operating in conjunction with pulverized coal fired steam generating units, rated for a minimum of 500 MW unit size or minimum 1500T/hr steaming capacity, which are in successful operation in at least one installation for a period not less than One (1) year prior to the date of Tech-commercial bid opening. The details of above are as under :

S. No.	Item Description	Station-I
1.	Name of Client with full address, Fax No. & Tel. No.	
2.	Name of station & its location	
3.	Name of Package/Contract	
4.	Name of the Contractor on whom the order for executing the reference plant (Electrostatic Precipitator) was placed by the Owner of the reference plant.	
5.	In case the Bidder/ his sub-vendor is not the Contractor at S No. 4, Name of the Organisation which placed order for reference plant (Electrostatic Precipitator) on the Bidder	
6.	Detail of Steam Generator/Unit for which Electrostatic Precipitator supplied.	
	(a) Unit Rating (MW)	

S. No.	Item Description	Station-I
	(b) Whether pulverised coal fired steam generator	Yes/No
	(c) Steaming capacity of steam generator	
7.	Date of Order	
8.	Date of Commissioning	
9.	Type of Electrostatic Precipitator (Whether rigid discharge frame work now being offered)	Yes/No
10.	Design Efficiency of ESP	%
11.	Scope of Work included	
	(a) Design	Yes/No
	(b) Supply	Yes/No
	(c) Erection/Supervised Erection	Yes/No
	(d) Commissioning/Supervised Commissioning	Yes/No
12.	No. of years in successful operation as on date of Tech-commercial Bid opening	
13.	Certificate from client in support of queries of Sl. No. 1 to 12 enclosed as Annex.....	Yes/No
14.	Certificate from Owner of the Plant (in case the Order is received from intermediary organization)	Yes/No

-
 (Signature).....
 (Printed Name).....
 (Designation).....
 (Common Seal).....

Note: Wherever the term 'Coal Fired' is appearing above, "Coal" shall be deemed to also include bituminous Coal/Brown Coal/lignite.

B. FOR BIDDER/ HIS SUB-VENDOR SEEKING QUALIFICATIONS AS PER CLAUSE 4.4.1.2 OF THE CHAPTER 04, "PROVENNESS" , VOLUME II.

Note : BIDDER IS REQUIRED TO FILL EITHER REQUIREMENT UNDER CLAUSE A(I) OR CLAUSE A(II) BELOW, WHICHEVER IS APPLICABLE ALONGWITH CLAUSE (B).

(I)(A) We / proposed sub-vendor meet the requirement of Clause 4.4.1.2(a)(i) of the Chapter 04, "Provenness" , Volume II and to satisfy this requirement, we declare the following :

We / sub-vendor are an Engineering, Procurement and Construction (EPC) organization executing contracts for setting up of Coal fired power plants and have experience of supplying at least one (1) coal fired power plant of 200 MW capacity or above comprising of Electrostatic Precipitators, which is in successful operation for a period of not less than One (1) year prior to date of Techno-commercial bid opening. The details of above are as follows :

S. No.	Item Description	Station-I
1.	Name of Client with full address Fax No. & Tel No.	
2.	Name of station & its location	
3.	Name of Package/Contract	
4.	Name of the Contractor on whom the order for executing the reference plant was placed	
5.	In case the Bidder/ his sub-vendor is not the Contractor as per SI.No.4 above, the name of organisation which has placed the order for reference plant (Electrostatic precipitator) on the Bidder.	
6.	Details of Steam Generating Unit	
	(a) Unit Rating (MW)	
	(b) Whether Pulverised coal fired	Yes/No

S. No.	Item Description	Station-I
7.	Scope of Work	
8.	Whether scope of work included supply of Electrostatic Precipitator	Yes/No
9.	Date of Commissioning	
10.	No. of years in successful operation as on date of Techno-commercial Bid opening.	
11.	Certificate from client in support of queries of Sl.No. 1 to 10 above is enclosed as Annex.....	Yes/No

(I) (B) We / proposed sub-vendor meet the requirement of Clause 4.4.1.2(a)(ii) of Chapter 04, "Provenness" , Volume II, and to satisfy this requirement, we declare the following:

We / proposed sub-vendor are an Engineering, Procurement and Construction (EPC) organization and have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being Rs.5,000 million or more. At least one of such projects have a contract value of Rs.2,000 million or more. These projects are in successful operation for a period of not less than One (1) year prior to the date of Techno-commercial bid opening.:

S No.	Item Description	Plant#1	Plant#2	Plant#3
1.	Name of Client with full address Fax No. & Tel No.			
2.	Name of station & its location			
3.	Name of the responsible person in Owner's organisation			
4.	Contract No. & Date			
5.	Nature/area of EPC Project (Power/Steel/Oil & Gas / Petrochemical/fertilizer/other process industry) (please specify)			
6.	Scope of Work (Please also specify whether civil work is included)			
7.	Date of Commissioning			
8.	No. of years in successful operation as on date of Techno-commercial bid opening.			
9.	Contract value of project			
10.	Necessary documents/certificate is support of above are attached at Annexure..... of this Attachment.			

(II) In order to meet the requirement of Clause 4.4.1.2(b) of Chapter 04, Provenness” Volume II, we further declare the following :

We / proposed sub-vendor have associated/collaborated with M/s..... whose address is and who have designed, supplied, erected/ supervised erection and commissioned/supervised commissioning rigid discharge framework Electrostatic Precipitators (of the type offered), having a designed efficiency of not less than 99%, operating in conjunction with pulverized coal fired steam generating units, rated for a minimum of 500 MW unit size or minimum 1500 T/hr steaming capacity, which are in successful operation in at least one installation for a period of not less than One (1) year prior to the date of bid opening. The details of above are as under :

S No.	Item Description	Station - I
1.	Name of Client with full address Fax No. & Tel. No.	
2.	Name of station & its location	
3.	Name of Package/Contract	
4.	Name of the Contractor on whom the order for executing the reference plant (Electrostatic Precipitator) was placed by the Owner of the reference plant.	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name of the Organisation which placed order for reference plant (Electrostatic Precipitator) on the Bidder.	
6.	Detail of Steam Generator/Unit for which Electrostatic Precipitator supplied	
	(a) Unit Rating (MW)	
	(b) Whether pulverised coal fired steam generator	Yes/No
	(c) Steaming capacity of steam generator	
7.	Date of Order	

S No.	Item Description	Station - I
8.	Date of Commissioning	
9.	Type of Electrostatic Precipitator (Whether rigid discharge frame work now being offered)	Yes/No
10.	Design Efficiency of ESP	%
11.	Scope of Work included	
	(a) Design	Yes/No
	(b) Supply	Yes/No
	(c) Erection/Supervised Erection	Yes/No
	(d) Commissioning/Supervised Commissioning	Yes/No
12.	No. of years in successful operation as on date of Techno- commercial Bid opening.	
13.	Certificate from client in support of queries of Sl.No. 1 to 12 above is enclosed as Annex.....	Yes/No
14.	Deed of Joint Undertaking as per format enclosed in Annexure I of Attachment-3K Bidding Documents	Yes/No
15.	Copy of Collaboration Agreement/ Technology licensing Agreement enclosed	Yes/No

(Signature).....
 (Printed Name).....
 (Designation).....
 (Common Seal).....

(C). FOR BIDDER/HIS SUB VENDOR SEEKING QUALIFICATIONS AS PER CLAUSE 4.4.1.3 (a) OF CHAPTER 04, "PROVENNESS" , VOLUME II

(i) We/proposed sub-vendor meet the requirement of Clause 4.4.1.3 (a) of Chapter 04, "Provenness" , Volume II, and to satisfy this requirement, we declare the following :

We/proposed sub-vendor have designed, supplied, erected/supervised erection and commissioned/supervised commissioning rigid discharge frame work Electrostatic Precipitators (of the type offered), having a designed efficiency of not less than 99%, operating in conjunction with pulverised coal fired steam generating units, in at least One (1) installation rated for a minimum of 600 MW unit size or minimum 1800 T/hr steaming capacity, which are in successful operation for a period not less than One (1) year prior to the date of bid opening. The details of above are as follows:

S No.	Item Description	Plant
1.	Name of Client with full address Fax No. & Tel No.	
2.	Name of station & its location	
3.	Name of Package/Contract	
4.	Name of the Contractor on whom the order for executing the reference plant was placed	
5.	In case the Bidder is not the Contractor as per SI.No.4 above, the name of organisation which has placed the order for reference plant (Electrostatic precipitator) on the Bidder.	
6.	Detail of Steam Generator/Unit for which Electrostatic Precipitator supplied.	
	(a) Unit Rating (MW)	
	(b) Whether pulverised coal fired steam generator	Yes/No

S No.	Item Description	Station-I
	(c) Steaming capacity of steam generator	
7.	Date of Order	
8.	Date of Commissioning	
9.	Type of Electrostatic Precipitator (Whether rigid discharge frame work now being offered)	Yes/No
10.	Design Efficiency of ESP	
11.	Scope of Work included	
	(a) Design	Yes/No
	(b) Supply	Yes/No
	(c) Erection	Yes/No
	(d) Commissioning	Yes/No
12.	No. of years in successful operation as on date of Techno-commercial Bid opening.	
13.	Certificate from client in support of queries of Sl.No. 1 to 12 enclosed as Annex.....	Yes/No

(ii) In order to meet the requirement of Clause 4.4.1.3(b) of Chapter 04, "Provenness" , Volume II, we further declare the following :

We / proposed sub-vendor have an ongoing collaboration agreement/ Technology Licensing Agreement prior to the date of submission of proposal of sub-vendor with M/s..... whose address is and who have designed, supplied, erected/supervised erection and commissioned / supervised commissioning rigid discharge framework Electrostatic Precipitators (of the type offered), having a designed efficiency of not less than 99%, operating in conjunction with pulverized coal fired steam generating units, rated for a minimum of 500 MW unit size or

minimum 1500 T/hr steaming capacity, which are in successful operation in at least one installation for a period of not less than one (1) year prior to the date of bid opening. The details of above are as under :

S No.	Item Description	Station-I
1.	Name of Client with full address Fax No. & Tel. No.	
2.	Name of station & its location	
3.	Name of Package/Contract	
4.	Name of the Contractor on whom the order for executing the reference plant (Electrostatic Precipitator) was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name of the Organisation which placed order for reference plant (Electrostatic Precipitator) on the Bidder	
6.	Detail of Steam Generator/Unit for which Electrostatic Precipitator supplied	
	(a) Unit Rating (MW)	
	(b) Whether pulverised coal fired steam generator	Yes/No
	(c) Steaming capacity of steam generator	

S No.	Item Description	Station-I
7.	Date of Order	
8.	Date of Commissioning	
9.	Type of Electrostatic Precipitator (Whether rigid discharge frame work now being offered)	Yes/No
10.	Design Efficiency of ESP	
11.	Scope of Work included	
	(a) Design	Yes/No
	(b) Supply	Yes/No
	(c) Erection/Supervised Erection	Yes/No
	(d) Commissioning/Supervised Commissioning	Yes/No
12.	No. of years in successful operation as on date of Techno- commercial Bid opening.	
13.	Certificate from client in support of quarries of Sl.No. 1 to 12 above is enclosed as Annex.....	Yes/No
14.	Copy of collaboration agreement/ Technology licensing agreement	Yes/No
15.	Deed of Joint Undertaking as per format enclosed in Annexure II of Attachment-3K	Yes/No

(Signature).....
(Printed Name).....
(Designation).....
(Common Seal).....

**FORM OF DEED OF JOINT UNDERTAKING TO BE PROVIDED ALONGWITH
ELECTROSTATIC PRECIPITATOR MANUFACTURER
AS PER CLAUSE 4.4.1.2(B) OF CHAPTER 04, "PROVENNESS" , VOLUME-II**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY CONTRACTOR *AND *HIS SUB-VENDOR MEETING THE REQUIREMENTS SPECIFIED AT CLAUSE NO. 4.4.1.2(a)(i) or 4.4.1.2(a)(ii) OF CHAPTER 04, "PROVENNESS" , VOLUME II ALONGWITH THE ASSOCIATE/COLLABORATOR (ELECTROSTATIC PRECIPITATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 4.4.1.1 OF CHAPTER 04, "PROVENNESS" , VOLUME II ON HIS OWN) FOR SUCCESSFUL PERFORMANCE OF ELECTROSTATIC PRECIPITATOR, IN WHICH THE ASSOCIATE/COLLABORATOR AND THE CONTRACTOR *AND *HIS SUB-VENDOR ARE JOINTLY AND SEVERALLY LIABLE TO THE OWNER TO PERFORM ALL THE CONTRACTUAL OBLIGATIONS INCLUDING THE TECHNICAL GUARANTEES FOR COMPLETE ELECTROSTATIC PRECIPITATOR

The DEED OF UNDERTAKING executed thisday ofTwo thousandby M/sa Company incorporated underhaving its Registered Office at(hereinafter called the "Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/sa Company incorporated underhaving its Registered Office at(hereinafter called the "SUB-VENDOR", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/sa Company registered under thehaving its Registered Office at(hereinafter called the "Associate/Collaborator", which expression shall include its successors, administrators, executors and permitted assigns), in favour HPGCL, a Government of Haryana incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "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** (hereinafter referred to as "Plant") vide its Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS vide clause 4.4.1.2(b) of Chapter 04, "Provenness" , Volume II of bidding documents, it has been specified that bidder/his sub-vendor who meets the required experience as per clause 4.4.1.2(a)(i) or 4.4.1.2(a)(ii) of Chapter 04, "Provenness" , Volume II

shall Associates/Collaborate with a Electrostatic Manufacturer who meets the requirements of Clause 4.4.1.1 of Chapter 04, "Provenness", Volume II on his own. In such case bidder/his sub-vendor shall either source the Electrostatic Precipitator from such Associate/Collaborator or Manufacture the Electrostatic Precipitator as per the design & manufacturing drawings of such Associate/Collaborator under an ongoing Collaboration Agreement/Technology Licensing Agreement and furnish a Deed of Joint Undertaking as per the requirement of clause no. 4.4.1.2(b) of Chapter 04, "Provenness", Volume II.

WHEREAS M/s (Contractor) has submitted its proposal in response to the aforesaid Invitation for Bid by the Owner bearing No. dated..... for the EPC Package for **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar** against the Owner's Bidding Documents.

AND WHEREAS M/s (*Contractor/*his sub-vendor) is an Engineering, Procurement and Construction (EPC) Organisation and meets the requirement specified at clause no. *4.4.1.2(a)(i) *or *44..1.2(a)(ii) of Chapter 04, "Provenness", Volume II and for executing the contract desire to associate/collaborate with M/s (hereinafter referred to as Associate/Collaborator) who is a Electrostatic Precipitator manufacturer and meets the requirements as specified in clause no.4.4.1.1 of Chapter 04, "Provenness", Volume II on its own, for *sourcing the Electrostatic Precipitator from the above Associate/Collaborator or *Manufacturing the Electrostatic Precipitator as per the design and manufacturing drawings of above Associate/Collaborator under an ongoing Collaboration Agreement/Technology Licensing Agreement. The Contractor, his sub-vendor (if applicable) and the Associate/Collaborator 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 successful performance of the Electrostatic Precipitator and be jointly and severally liable to perform all contractual obligations for the Electrostatic Precipitator for the EPC Package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar meeting the stipulated technical requirements, guaranteed parameters and characteristics for the Electrostatic Precipitator as per the Bidding Documents in the event the bid is accepted by the Owner resulting into a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. We the Associate/Collaborator and the Contractor *and *his Sub-Vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the complete Electrostatic Precipitator and all the contractual obligations including the technical guarantees for the complete Electrostatic Precipitator.
2. In case of any breach of the Contract committed by the Contractor *and *his Sub-Vendor, we the Associate/Collaborator do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Electrostatic Precipitator and undertake to all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations stipulated under the Contract. Further, if the Owner sustains any loss or damage

on account of any breach of the Contract for the Electrostatic Precipitator, we the Associate/Collaborator and Contractor *and *his Sub-Vendor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, Contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor/ his Sub-Vendor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor/ *his Sub-Vendor before proceeding against the Associate/Collaborator 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 Contractor.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:

- (a) We the Associate/Collaborator shall be fully responsible for complete design, manufacture, supply, installation so as to ensure satisfactory, reliable, safe and trouble free performance of Electrostatic Precipitator.

Further, the Associate/Collaborator shall depute their technical experts from time to time to the Contractor's/his sub-vendor's /Owner's project site as required by the Owner and agreed to by Contractor *and *his Sub-Vendor/ Collaborator/Associate to facilitate the successful performance of the Electrostatic Precipitator as stipulated in the aforesaid Contract.

Further, the Associate/Collaborator shall ensure proper design, manufacture, installation, testing and successful performance of the Electrostatic Precipitator under the said Contract in accordance with stipulations of Bidding Documents and if necessary, the Associate/Collaborator shall advise the Contractor/ *his Sub-Vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

- (b) In the event the Associate/Collaborator and the Contractor *and *his Sub-Vendor fail to demonstrate that the Electrostatic Precipitator meets the guaranteed parameters and demonstration parameters as specified in the contract, the Associate/Collaborator and the Contractor and *and *his Sub-Vendor shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Owner.
- (c) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the Electrostatic Precipitator and payment of financial liabilities and penalties and fulfilment of all other contractual obligations as provided under the contract shall be the joint and severally responsibility of the Contractor *and *his Sub-Vendor and Associate/ Collaborator.

4. We, the Contractor *and *his Sub-Vendor and the Associate/Collaborator do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days of satisfactory completion of such defect liability period. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 *his Sub-Vendor and Associate/Collaborator 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 Contract.
6. In case of Award, in addition to the Contract Performance Security furnished by the Contractor, the Associate/Collaborator *and *Contractor's Sub-Vendor shall each 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 equal to INR 12 Million (Rupees Twelve 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 valid till ninety (90) days beyond the end of defect liability period of the last 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 the period of such delay. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
8. We, the Associate/Collaborator and the Contractor *and *his Sub-Vendor agree that this Undertaking shall form an integral part of the Contracts from the date of signing of this Deed of Joint Undertaking. We further agree that this Undertaking shall continue to be enforceable till its validity.

9. That this Deed of Joint Undertaking shall be operative from the effective date of signing of this Deed of Joint Undertaking.

IN WITNESS WHEREOF, the Associate/Collaborator and the Contractor *and *his Sub-Vendor 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
(Contractor)

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

.....
(Official Address) Name.....

Designation.....

Common Seal of the Company.....

1. WITNESS For M/s.....
(*Contractor's Sub-Vendor)

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

.....
(Official Address) Name.....

Designation.....

Common Seal of the Company.....

1.

WITNESS

For M/s
(Associate/Collaborator)

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Associate/Collaborator and Bidder is to be furnished by Bidder.

* Contractor shall strike out, whichever is not applicable.

**FORM OF DEED OF JOINT UNDERTAKING TO BE PROVIDED
ALONGWITH ELECTROSTATIC PRECIPITATOR MANUFACTURER
AS PER CLAUSE 4.4.3(B) OF CHAPTER 04, "PROVENNESS" , VOLUME II**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY CONTRACTOR, *HIS *SUB-VENDOR MEETING THE REQUIREMENTS SPECIFIED AT CLAUSE NO. 4.4.1.3 (A) OF CHAPTER 04, "PROVENNESS" , VOLUME II ALONGWITH THE COLLABORATOR/ TECHNOLOGY LICENSOR (ELECTROSTATIC PRECIPITATOR MANUFACTURER MEETING THE REQUIREMENTS AS PER CLAUSE 4.4.1.1 OF CHAPTER 04, "PROVENNESS", VOLUME II) FOR SUCCESSFUL PERFORMANCE OF ELECTROSTATIC PRECIPITATORS, IN WHICH THE COLLABORATOR/TECHNOLOGY LICENSER AND THE BIDDER ARE JOINTLY AND SEVERALLY LIABLE TO THE OWNER TO PERFORM ALL THE CONTRACTUAL OBLIGATIONS INCLUDING THE TECHNICAL GUARANTEES FOR COMPLETE ELECTROSTATIC PRECIPITATOR

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

*M/sa Company incorporated underhaving its Registered Office at(hereinafter called the "Sub-Vendor", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/sa Company registered under thehaving its Registered Office at(hereinafter called the "**Holding*/Subsidiary Company of Qualified Equipment Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour in favour HPGCL, a Government of Haryana undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for design, engineering, manufacture, supply, transportation to site, 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" (hereinafter referred to as "Plant") vide its Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS vide clause 4.4.1.3 (b) of Chapter 04, "Provenness" , Volume II of bidding documents, it has been specified that bidder who meets the required experience as per clause 4.4.1.3 (a) shall also have an ongoing Collaboration agreement / Technology Licensing agreement as on the date of bid opening with a Electrostatic Precipitator Manufacturer, who meets the requirement of clause 4.4.1.1 of Chapter 04, "Provenness" , Volume II and furnish a Deed of Joint Undertaking as per the requirement of clause no. 4.4.1.3 (b) of Chapter 04, "Provenness" , Volume II

WHEREAS M/s (Contractor) has submitted its proposal in response to the aforesaid Invitation for Bid by the Owner bearing No. dated for EPC Package for “1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar” against the Owner's Bidding Documents.

AND WHEREAS M/s..... .(*Contractor/*his sub-vendor) meet the requirements specified at clause no. 4.4.1.3 (a) of Chapter 04, “Provenness” , Volume II and have an on-going collaboration agreement/technology licensing agreement as on the date of bid opening with M/s..... (hereinafter referred to as Collaborator/Technology Licensor) who is a manufacturer of Electrostatic Precipitator and meets the requirements as specified in clause no. 4.4.1.1 of Chapter 04, “Provenness” , Volume II. The Contractor*and *his Sub-Vendor and the Collaborator/Technology Licensor 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 successful performance of the Electrostatic Precipitator and be jointly and severally liable to perform all contractual obligations for the Electrostatic Precipitator for EPC Package for “1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar” fully meeting the stipulated technical requirements, guaranteed parameters and characteristics as per the Bidding Documents in the event the bid is accepted by the Owner resulting into a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. We the Collaborator/Technology Licensor and the Contractor *and *his Sub-Vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the complete Electrostatic Precipitator and all the contractual obligations including the technical guarantees for the complete Electrostatic Precipitator.
2. In case of any breach of the Contract committed by the Contractor *and *his Sub-Vendor, we the Collaborator/Technology Licensor do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Electrostatic Precipitator and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract for the Electrostatic Precipitator, we the Collaborator/Technology Licensor and Contractor *and *his Sub-Vendor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, Contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor/ his Sub-Vendor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor/ his Sub-Vendor before proceeding against the Collaborator/Technology Licensor 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 Contractor.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:

- (a) We the Collaborator/Technology Licensor shall be fully responsible for complete design, manufacture, supply, installation so as to ensure satisfactory, reliable, safe and trouble free performance of Electrostatic Precipitator.

Further, the Collaborator/Technology Licensor shall depute their technical experts from time to time to the Contractor's/his sub-vendor's /Owner's project site as required by the Owner and agreed to by Contractor *and *his Sub-Vendor/ Collaborator/Technology Licensor to facilitate the successful performance of the Electrostatic Precipitator as stipulated in the aforesaid Contract.

Further, the Collaborator/Technology Licensers shall ensure proper design, manufacture, installation, testing and successful performance of the Electrostatic Precipitator under the said Contract in accordance with stipulations of Bidding Documents and if necessary, the Collaborator/Technology Licensers shall advise the Contractor/* his Sub-Vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

- (b) In the event the Collaborator/Technology Licensor and the Contractor *and *his Sub-Vendor fail to demonstrate that the Electrostatic Precipitator meets the guaranteed parameters and demonstration parameters as specified in the contract, the Collaborator/Technology Licensor and the Contractor and *and *his Sub-Vendor shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Owner.
- (c) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the Electrostatic Precipitator and payment of financial liabilities and penalties and fulfilment of all other contractual obligations as provided under the contract shall be the joint and severally responsibility of the Contractor *and *his Sub-Vendor and Associate/ Collaborator.

4. We, the Contractor *and *his Sub-Vendor and the Collaborator/Technology Licensor do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days of satisfactory completion of such defect liability period. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 *his Sub-Vendor and Collaborator/Technology Licenser 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 Contract.
6. In case of Award, in addition to the Contract Performance Security furnished by the Contractor, the Collaborator/Technology Licenser*and *Contractor's Sub-Vendor shall each 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 equal to INR 12 Million (Rupees Twelve 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 valid till ninety (90) days beyond the end of defect liability period of the last 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 the period of such delay. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
8. We, the Associate/Collaborator and the Contractor *and *his Sub-Vendor agree that this Undertaking shall form an integral part of the Contracts from the date of signing of this Deed of Joint Undertaking. 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 signing of this Deed of Joint Undertaking.

IN WITNESS WHEREOF, the Collaborator/Technology Licenser and the Contractor *and *his Sub-Vendor 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
(Contractor)

.....
(Signature Name & Address)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company.....

WITNESS

For M/s.....
(*Contractor's Sub-Vendor)

.....
(Signature Name & Address)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company.....

WITNESS

For M/s
(Collaborator/ Technology Licensor)

.....
(Signature Name & Address)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the Company
.....

Note : Power of Attorney of the person signing on behalf of Collaborator and Contractor/his sub-vendor is to be furnished by Contractor.

" Contractor shall strike out, whichever is not applicable.

ANNEXURE-III

**FORM OF DEED OF JOINT UNDERTAKING TO BE PROVIDED
FOR(NAME OF EQUIPMENT)
AS PER CLAUSE 4.3.3 OF CHAPTER 04, "PROVENNESS" , VOLUME II**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY **SUB-VENDOR (i.e. SG SUPPLIER/MANUFACTURER AS IN ITEM 4.0 OF BID DATA SHEET), *INDIAN JOINT VENTURE COMPANY/*SUBSIDIARY COMPANY MEETING THE REQUIREMENTS SPECIFIED AT CLAUSE NO. 4.3.3 OF CHAPTER 04, "PROVENNESS" , VOLUME II ALONGWITH QUALIFIED EQUIPMENT MANUFACTURER OF (NAME OF EQUIPMENT) MEETING THE REQUIREMENTS AS PER CLAUSE 4.3.1 OF CHAPTER 04, "PROVENNESS" , VOLUME II AND ITS *HOLDING/*SUBSIDIARY COMPANY, AS APPLICABLE FOR SUCCESSFUL PERFORMANCE OF (NAME OF EQUIPMENT), IN WHICH EXECUTANT OF THE DJU ARE JOINTLY AND SEVERALLY LIABLE FOR THE SUCCESSFUL PERFORMANCE OF THE.....(NAME OF EQUIPMENT)

The DEED OF UNDERTAKING executed thisday ofTwo thousandby M/sa Company, meeting the requirements as per clause 4.3.3 of Chapter 04, "Provenness" , Volume II, incorporated underhaving its Registered Office at (hereinafter called the "Indian JV/Subsidiary Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

**M/s a SG Supplier/Manufacturer as in Item 4.0 Of Bid Data Sheet incorporated underhaving its Registered Office at(hereinafter called the "Sub-Vendor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/sa Company registered under thehaving its Registered Office at(hereinafter called the " Qualified Equipment Manufacturer " , which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/sa Company registered under thehaving its Registered Office at(hereinafter called the "*Holding/*Subsidiary Company of Qualified Equipment Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour HPGCL, a Government of Haryana undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "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 "1 x 800 MW Super Critical Expansion Unit 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 vide clause 4.3.3 of Chapter 04, “Provenness” , Volume II of bidding documents, it has been specified that a JV / Subsidiary Company formed for manufacturing and supply of equipment(s) as listed at clause no. 4.3.1 of Chapter 04, “Provenness” , Volume II can also manufacture such equipment, provided that it has a valid collaboration or licensing agreement for design, engineering, manufacturing of such equipment(s) in India with a qualified equipment manufacturer who meets the requirements stipulated at clause 4.3.1 of Chapter 04, “Provenness” , Volume II of bidding documents (or the technology provider of the qualified equipment manufacturer). Further, in such a case, such qualified equipment manufacturers is having, directly or indirectly through its holding company/ subsidiary company, at least 26% equity participation in the Indian Joint Venture Company/ Subsidiary Company, which shall be maintained for a lock-in period of seven (7) years from the date of incorporation of such Joint Venture/ Subsidiary or up to the end of defect liability period of the contract, whichever is later. In addition, the contractor/sub-vendor along with the Indian Joint Venture Company/ Subsidiary Company, qualified equipment manufacturers and its holding/ subsidiary Company, as applicable, shall furnish DJU for each equipment in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment.

WHEREAS M/s (*Indian JV/*Subsidiary Company) has been formed for manufacturing and supply of equipment(s) as listed at clause no. 4.3.3 of Chapter 04, “Provenness” , Volume II has a valid collaboration or licensing agreement for design, engineering, manufacturing of(Name Of Equipment) in India with M/swho meets the requirements stipulated at clause 4.3.3 of Chapter 04, “Provenness” , Volume II of bidding documents (or the technology provider of the qualified equipment manufacturer).

AND WHEREAS M/s (Qualified Equipment Manufacturer) is having, *directly *or *indirectly through its *holding company M/s...../ *subsidiary company M/s....., at least 26% equity participation in the Indian *Joint Venture Company/ *Subsidiary Company, which shall be maintained for a lock-in period of seven (7) years from the date of incorporation of such Joint Venture/ Subsidiary or up to the end of defect liability period of the contract, whichever is later.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. We the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and Indian *JV/*Subsidiary Company and the Sub-Vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the (Name of Equipment).

2. In case of any breach of the Contract committed by the Indian *JV/*Subsidiary Company, we the **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the (Name of Equipment) and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the sub-vendors obligations stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract for the (Name of Equipment), we the Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, Contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor/ his Sub-Vendor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Indian *JV/*Subsidiary Company / **Sub-Vendor before proceeding against the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer nor any extension of time or any relaxation given by the Owner to the Indian *JV/*Subsidiary Company / **Sub-Vendor shall prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:

(a) We the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of the Qualified Equipment Manufacturer shall ensure that complete design, manufacturing, quality assurance and installation of the (Name of Equipment) is carried out inline with our manufacturing & quality drawings and procedures and shall be fully responsible for its compliance so as to ensure satisfactory, reliable, safe and trouble free performance of (Name of Equipment).

Further, we, the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Indian *JV/*Subsidiary Company's works and/ or at Owner's project site.

Further, the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer shall depute their technical experts from time to time to the **sub-vendor's / Indian *JV/*Subsidiary Company works/ Owner's project site as required by the Owner and

agreed to by **Sub-Vendor to facilitate the successful performance of the (Name of Equipment) as stipulated in the aforesaid Contract.

Further, the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer shall ensure proper design, manufacture, installation, testing and successful performance of the (Name of Equipment) under the said Contract in accordance with stipulations of Bidding Documents and if necessary, the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer shall advise the **Sub-Vendor/ Indian *JV/*Subsidiary Company suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

- (b) In the event Indian *JV/*Subsidiary Company/**Sub-Vendor fail to demonstrate that the (Name of Equipment) meets the guaranteed parameters and demonstration parameters as specified in the contract, the Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Owner.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the (Name of Equipment) and payment of financial liabilities and penalties and fulfilment of all other contractual obligations as provided under the contract shall be the joint and severally responsibility of the **Sub-Vendor and Indian *JV/*Subsidiary Company and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer.
4. We, the **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and Indian *JV/*Subsidiary Company do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the equipment covered under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days of satisfactory completion of such defect liability period. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and Indian *JV/*Subsidiary 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 Contract.

6. In case of Award, in addition to the Contract Performance Security for the Contract, the **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and Indian *JV/*Subsidiary Company shall each 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 equal to INR 1.5 Million (Rupees One and Half 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 valid till ninety (90) days beyond the end of defect liability period of the last 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 the period of such delay. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
8. We, the **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and Indian *JV/*Subsidiary Company agree that this Undertaking shall form an integral part of the Contracts from the date of signing of this Deed of Joint Undertaking. 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 signing of this Deed of Joint Undertaking.

IN WITNESS WHEREOF, the **Sub-Vendor and Qualified Equipment Manufacturer and the *Holding/*Subsidiary Company of Qualified Equipment Manufacturer and *Indian Joint Venture Company/ *Subsidiary Company Vendor 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
(*Contractor / *Sub-Vendor)

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the Company
.....

1.

WITNESS

For M/s
(Indian *JV/*Subsidiary Company)

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company.....

1.

WITNESS

For M/s
(Qualified Equipment Manufacturer)

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company.....

1.

WITNESS

*For M/s
(*Holding/*Subsidiary Company of
Qualified Equipment Manufacturer)

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company

Note : Power of Attorney of the person signing is to be furnished.

* Contractor/Sub-Vendor shall strike out, whichever is not applicable.

**EPC Package for 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana**

**BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(Experience Details - Applicable to all the Bidders)**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

Details of Provenness for the offered Steam Turbine as per Clause No. 4.1, Chapter 04, "Provenness", Volume II of Bidding Documents.

S No.	Item Description	Plant Name	Module No.	Operating Steam parameters i.e. Initial Pressure, Initial Temperature & Reheat Steam Temperature	Date of Commencement of Successful Operation
1.	Provenness of HP Turbine Module				
2.	Provenness of IP Turbine Module				
3.	Provenness of Combined HP and IP Turbine Module (if applicable)				
4.	Provenness of LP Turbine(s) Module				

(Bidder to furnish details of reference turbine module as per Annexure-I to this attachment)

Certified that the offered Steam Turbine Set shall be built up using above proven HP, IP and LP turbine modules of M/s..... (Name of Steam Turbine Manufacturer). The Turbine to be supplied under this contract shall be manufactured assembled and tested at (Name of the Factory) where turbine of at least 500 MW rating have been manufactured in past/the Indian manufacturing company formed by bidder under supervision of (Qualified Steam Turbine Manufacturer).

Certificate(s) from Owner that the aforesaid Steam Turbine Modules are in successful operation prior to the date of Techno-Commercial bid opening and caused no serious problem in past, are furnished along with techno-commercial at Annexure 1 to this Attachment-3K.

- Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Details of Module of the reference Turbine

- S No.	Item Description	Reference module
HP Turbine		
1	Type of steam admission (Full arc/ partial arc)	
2	Number of steam admission points	
3	Number of exhausts	
4	Bearing span	
5	Outer casing barrel or not	
6	Steam flow direction (single flow/double flow/opposed flow)	
7	Minimum/Maximum inner casing diameter	
8	Minimum/Maximum outer casing diameter	
IP Turbine		
1	Type of steam admission (Full arc/ partial arc)	
2	Number of steam admission points	
3	Number of exhausts	
4	Bearing span	
5	Steam flow direction (single flow /double flow)	
6	Minimum/Maximum inner casing diameter	

S.No.	Item Description	Reference module
-------	------------------	------------------

7 Minimum/Maximum outer casing diameter

LP Turbine

1 Bearing span

2 Steam flow direction (single flow /double flow)

3 Exhaust area provided / maximum possible

**EPC Package for 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana**

**BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(Experience Details - Applicable to all the Bidders)**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL,
Haryana

Summary of Critical Equipment indicated under clause 4.3, Chapter 04, "Provenness", Volume II

Equipment Name	Sub-Vendor Name	Collaborator's Name, if applicable	Seeking Qualification as per clause..... Chapter 04, Volume II
Name of equipment	Name of proposed Sub-Vendor	Name of Proven equipment manufacturer. (If the proposed vendor himself does not meet the provenness criteria)	Clause (i.e. 3.1 or 3.2 or 3.3 of Chapter 04, Volume II) sub-under which Qualification of sub-vendor is sought
Condenser	Sub-vendor- 1		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 2		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 3		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 4		4.3.1* /4.3.2* /4.3.3
Condensate Extraction Pumps (CEP)	Sub-vendor- 1		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 2		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 3		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 4		4.3.1* /4.3.2* /4.3.3
Condenser Air Evacuation Pump	Sub-vendor- 1		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 2		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 3		4.3.1* /4.3.2* /4.3.3
	Sub-vendor- 4		4.3.1* /4.3.2* /4.3.3

Name of equipment	Name of proposed Sub-Vendor	Name of Proven equipment manufacturer. (If the proposed vendor himself does not meet the provenness criteria)	Clause (i.e. 3.1 or 3.2 or 3.3 of Chapter 04, Volume II) sub-under which Qualification of sub-vendor is sought
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Feed Water	Sub-vendor- 1		4.3.1* /4.3. /4.3.
Low Pressure Heaters	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*
Feed water	Sub-vendor- 1		4.3.1* /4.3. /4.3.
High Pressure Heaters	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*
Deaerator	Sub-vendor- 1		4.3.1* /4.3. /4.3.
	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*
Boiler Feed Pumps (BFP)	Sub-vendor- 1		4.3.1* /4.3. /4.3.
	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*
HP Bypass system	Sub-vendor- 1		4.3.1* /4.3. /4.3.
	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*
LP Bypass system	Sub-vendor- 1		4.3.1* /4.3. /4.3.
	Sub-vendor- 2		4.3.1* /4.3. /4.3.
	Sub-vendor- 3		4.3.1* /4.3. /4.3.
	Sub-vendor- 4		4.3.1* /4.3. /4.3. ?* ?*

1. If qualification is sought as per clause 4.3.1 then details of the Bidder / sub vendor shall be filled at A to F.
2. If qualification is sought as per clause 4.3.2, then details (as per 1.00.00 below) of the proposed Bidder / sub-vendor is to be filled individually for each equipment / sub-vendor and collaborator (i.e. manufacturer of proven equipment) data shall be filled at A to F.
3. If qualification is sought as per clause 4.3.3, then details (as per 2.00.00 below) of the proposed sub-vendor is to be filled individually for each equipment and collaborator (i.e. manufacturer of proven equipment) data shall be filled at A to F.

* strike out whichever is not applicable.

**EPC Package for 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

S. No.	Item Description	Installation-1
1.00.00	Details of manufacturer of equipment for units of at least 500 MW rating as per clause 4.3.2 of Chapter 04, "Provenness", Volume II.	
1.01.01	Name and Address of Sub-Vendor	
1.01.02	Name and Address telephone No. & Fax No. of responsible persons of the Sub-Vendor	
1.01.03	Name of the equipment to be supplied by the Sub-Vendor	
1.02.00	Details of Reference Plant	
1.02.01	Name of the Station and its Location	
1.02.02	Client Name and its Address, Fax No. & Tel. Nos.	
1.02.03	Name and Designation of the responsible person in Client's Organisation	
1.02.04	Contract No. & Date	
1.02.05	Capacity in MW of Unit and no. of Units	
1.02.06	Starting Date of Work/ Date of Order	

S. No.	Item Description	Installation-1
1.02.07	Scheduled Date of Completion	
1.02.08	Actual Date of Completion	
1.02.09	Date of Commissioning of System/Package	
	Whether the system/equipment are in successful operation prior to the date of techno-commercial bid opening	Yes/No
1.02.10	Date of Commencement of Successful Operation	
1.02.11	Brief Scope of Work	
1.02.12	M/s (Name of the Sub-vendor) is a regular manufacturer of (Name of the equipment) for units of at least 5 00 MW rating	Yes/No
1.02.13	Certificate from such Owner that aforesaid equipment has been supplied by the sub-vendor and is running satisfactorily prior to the date of techno-commercial bid opening to attachment at Annexure.....	
1.02.14	The proposed sub-vendor M/s. has a collaboration/valid licensing agreement for design, engineering, manufacturing supply of (Name of the equipment) in India with M/s (Name of Collaborator) who meets the requirement at clause no. 4 . 3.1 of Chapter 04, "Provenness", Volume II & the relevant details are furnished at relevant Attachment (as applicable) please also include the collaboration/	

S. No.	Item Description	Installation-1
2.00.00	Details of Subsidiary/JV Company proposed for manufacturing of critical equipment as per Clause 4.3.3 of Chapter 04, "Provenness" , Volume II	
2.01.00	Name and Address with Telephone Number of the Indian Subsidiary / JV Company proposed for manufacturing of (Name of the equipment).	
2.02.00	Name and Address with Telephone No. of the promoter(s) of the Subsidiary/ JV Company	
2.03.00	% of the Equity held by the promoter(s)	
2.04.00	Equity lock in period (from the date of incorporation of JV)	
2.05.00	Name and Address with Telephone No. of a promoter of Subsidiary / JV Company formed at 2.01.00 above who meets the requirement of Clause 4.3.1 Chapter 04, "Provenness" , Volume II (Please furnish experience details as per relevant Attachment 3K)	
2.06.00	M/s. (the subsidiary/ JV Company) has a collaboration or valid licensing agreement with M/s (subsidiary/JV promoter) for design, Engineering, Manufacturing & Supply of (Name of the equipment) in India. (Please furnish details of collaboration/ licensing agreement	

- 2.07.00 If equity held by the Qualified Equipment Manufacturer (as per clause 3.1)
- 2.08.00 Whether equity held directly or indirectly ?
- 2.09.00 If indirectly then furnish the relationship tree along with all relevant subsidiaries holding company
- 2.10.00 Please furnish the commitment for lock in period as per requirement
- 2.11.00 Certified that DJU and Bank Guarantee shall be furnished as per format enclosed in the holding document meeting the requirement ?
- 2.12.00 Bidder to furnish documentary evidence \ in support of above date

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

I.(A) DETAILS OF Cooling Tower (as per clause 4.4.2.1 of Chapter 04, "Provenness" , Volume II of Bidding Documents

In support of Sub-Qualifying Requirements of Clause 4.4.2.1 of Chapter 04, "Provenness" , Volume II of Bidding Document, we confirm that our Sub-vendor M/ s..... have designed, constructed and commissioned at least one (1) number Induced Draught Cooling Tower in RCC Construction with splash type fill, of capacity not less than 60000 M³/hr or 80% of offered capacity whichever is lower which is in successful operation for at least one (1) year as on date of bid opening.

We further confirm that the reference cooling towers are of the same type i.e. cross flow splash type Cooling Tower or counter flow splash type cooling tower as is being offered by us. The details of the reference cooling tower executed by our Sub-vendor is furnished below:

Sl. No.	Description/Details	Plant
1.	Description of Work and Name of Client	.....
2.	Location/Address of the Plant/works	.....
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc)	.....
4.	No. of Cooling Towers	.....
5.	Capacity of each Cooling Tower (Cu.M/hr.)	.....
6.	Type of Cooling Towers (ID Cross flow/ ID Counter flow)	.....
7.	Type of Construction	.....
8.	Whether scope of works included	
	(a) Design of Cooling Towers	YES*/NO*

Sl. No.	Description/Details	Plant
	(b) Construction of Cooling towers	YES*/NO*
	(c) Commissioning of Cooling towers	YES*/NO*
9.	Type of fill used, (splash type or not)	YES*/NO*
10.	Value of Contract/Work (Rs. in million)	YES*/NO*
11.	Date of order by the client	
12.	Date of Commissioning of the Cooling tower	Tower 1:
13.	Is the cooling tower in successful operation as on bid opening date?	YES*/NO*
14.	Number of years of successful operation as on date of bid opening	.....years
15.	Certificate from client to substantiate Bidder's QR data is enclosed at Annexure to this Attachment-3A-9	YES*/NO*
16.	Whether the reference cooling tower at sl. No. 1 is designed by bidder himself or not	YES*/NO*
17.	If 'No' then furnish the details of cooling Towers/ design proposed	
18.	Experience of designer	
	a. Description of work & name of client	
	b. Location / Address of Plants /work	

Sl. Description/Details
No.

Plant

- c. Address of client (including contact person name, telephone no., e-mail etc.
- d. No. of cooling towers
- e. Capacity of each cooling tower (m3/hr)
- f. Type of Cooling Towers (ID Cross flow/ID counter flow)
- g. Type of Construction (RCC or not)
- h. Type of fill used, (splash type or not)
- i. Value of contract/Work (Rs. in million)
- j. Date of order by the client
- k. Date of Commissioning of the cooling tower
- l. Is the cooling tower in successful operation as on Techno-commercial bid opening date?

Note : z Sub-vendor to ensure submission of documentary evidences in the form of copies of Letter of Award/purchase order, Clients performance/completion certificate etc for each tower/contract to establish that Sub-vendor has designed, Constructed including the details such as the capacity/type of cooling towers, Commissioning dates etc with the bid in support of the above declarations.

z * Strike off whichever is not applicable.

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

I.(B) DETAILS OF Cooling Tower Bidder (as per clause 4.2.2 of Chapter 04, "Provenness" , Volume II of Bidding Document

In support of Sub-Qualifying Requirements of Clause 4.4.2.2 of Chapter 04, "Provenness" , Volume II of Bidding Document, we confirm that our Sub-vendor M/ s..... have designed, constructed and commissioned at least one (1) number Induced Draught Cooling Tower in RCC Construction with splash type fill, of capacity not less than 80000 M³/hr or 80% of offered capacity whichever is lower which is in successful operation for at least one (1) year as on date of bid opening.

Sl. No.	Description/Details	Plant
1.	Description of Work and Name of Client	
2.	Location/Address of the Plant/works	
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc)	
4.	No. of Cooling Towers	
5.	Capacity of each Cooling Tower (Cu.M/hr.)	
6.	Type of Cooling Towers (ID Cross flow / ID Counter flow)	
7.	Type of Construction	
8.	Whether scope of works included	
	(a) Design of Cooling Towers	YES*/NO*
	(b) Construction of Cooling towers	YES*/NO*
	(c) Commissioning of Cooling towers	YES*/NO*

Sl. No.	Description/Details	Plant
9.	Type of fill used, (splash type or not)	YES*/NO*
10.	Value of Contract/Work (Rs. in million)	YES*/NO*
11.	Date of order by the client	
12.	Date of Commissioning of the Cooling tower	Tower 1:
13.	Is the cooling tower in successful operation as on bid opening date?	YES*/NO*
14.	Number of years of successful operation as on date of bid opening	.....years
15.	Certificate from client to substantiate Bidder's QR data is enclosed at Annexure to this Attachment-3A-9	YES*/NO*

Note : z Sub-vendor to ensure submission of documentary evidences in the form of copies of Letter of Award/purchase order, Clients performance/completion certificate etc for each tower/contract to establish that Sub-vendor has designed, Constructed including the details such as the capacity/type of cooling towers, Commissioning dates etc with the bid in support of the above declarations.

z * Strike off whichever is not applicable.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

I.(C) DETAILS OF Cooling Tower Associate/Collaborator (as per clause 4.4.2.3 of Chapter 04, "Provenness" , Volume II of Bidding Documents

In support of Sub-Qualifying Requirements of Clause 4.4.2.3 of Chapter 04, "Provenness" , Volume II of Bidding Document, we confirm that we have associated/ collaborated with M/s..... who have designed, constructed and commissioned at least one (1) number Induced Draught Cooling Tower in RCC Construction with splash type fill, of capacity not less than 80000 M³/hr or 80% of offered capacity whichever is lower which is in successful operation for at least one (1) year as on date of bid opening.

We further confirm that the reference cooling towers are of the same type i.e. cross flow splash type Cooling Tower or counter flow splash type cooling tower as is being offered by us. The details of the reference cooling tower executed by our Sub-vendor is furnished below:

S No.	Description/Details	Plant
1.	Description of Work and Name of Client	.....
2.	Location/Address of the Plant/works	.....
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc)	.....
4.	No. of Cooling Towers	.....
5.	Capacity of each Cooling Tower (Cu.M/hr.)	.....
6.	Type of Cooling Towers (ID Cross flow/ ID Counter flow)	.....
7.	Type of Construction	.....
8.	Whether scope of works included	
	(a) Design of Cooling Towers	YES*/NO*
	(b) Construction of Cooling towers	YES*/NO*

S No.	Description/Details	Plant
	(c) Commissioning of Cooling towers	YES*/NO*
9.	Type of fill used, (splash type or not)	YES*/NO*
10.	Value of Contract/Work (Rs. in million)	YES*/NO*
11.	Date of order by the client	
12.	Date of Commissioning of the Cooling tower	Tower 1:
13.	Is the cooling tower in successful operation as on bid opening date?	YES*/NO*
14.	Number of years of successful operation as on date of bid opening	.....years
15.	Certificate from client to substantiate Bidder's QR data is enclosed at Annexure to this Attachment-3A-9	YES*/NO*

Note:

➤ Sub-vendor to ensure submission of documentary evidences in the form of copies of Letter of Award/purchase order, Clients performance/completion certificate etc for each tower/contract to establish that Sub-vendor has designed, Constructed including the details such as the capacity/type of cooling towers, Commissioning dates etc with the bid in support of the above declarations.

➤ Strike off whichever is not applicable.

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common Seal).....

S. No.	Item Description	Station-I
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G. TURBINE HALL EOT CRANE

In support of Sub-Qualifying Requirements of Clause 4.4.13 of Chapter 04, "Provenness" , Volume II of Bidding Document, we confirm that our Sub-vendor M/S have designed, manufactured, erected and commissioned EOT cranes of capacity 100T or more with minimum crane span of 28 meters, which is in successful operation in at least two (2) power stations for a minimum period of two (2) years prior to the date of Techno-Commercial bid opening.

- 1.00.00 Name, Address and Telephone No. of manufacturer
- 1.01.00 Name of the station and its location
 - 1.01.01 Client name and its address
Fax No. & Tel. No.
 - 1.01.02 Name and Designation of the responsible person in client's organisation
 - 1.01.03 Contract No. & Date
 - 1.01.04 Capacity in MW of Unit and No. of Units
 - 1.01.05 Starting date of work/Date of work

S. No.	Item Description	Station-I
1.01.06	Schedule date of completion	
1.01.07	Actual date of completion	
1.01.08	Date of Commissioning of System/Package Operation	
1.01.11	Brief Scope of Work	
1.01.12	Brief Technical Particulars of the system/Package/equipment:	
	(i) Designed by	
	(ii) Manufactured by	
	(iii) Erected by	
	(iv) Commissioned by	
	(v) Main hoist capacity (T)	
	(vi) Aux. hoist capacity (T)	
	vii) Span (m)	
	viii) Make	

*** Bidder to strike out whichever is not applicable**

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common Seal).....

Dear Sirs,

A) Applicable to Bidders seeking qualification as per Clause no. 4.43.1 of Chapter 04, "Provenness", Volume II of Bidding Document

In terms of Clause no. 4.4.3.1 of Chapter 04, "Provenness", Volume II of Technical Specification, we confirm that, we have designed by ourselves/through our Collaborator/Associate (manufactured*/got manufactured*), supplied, (erected*/supervised erection*), and (commissioned* / supervised commissioning*) of at least two (2) nos. of (vertical wet pit pumps*), each of capacity 36,000 cum./hr or more having specific speed in the range of 4000-7000(**) (US units) which have been in successful operation for at least two (2) years prior to date of Techno-Commercial bid opening. We further confirm that reference pumps are of same type i.e. (vertical wet pit type pumps*) as is being offered by us. The details furnished below:

* In the blank space provided above, Bidder has to mention the option whichever is applicable.

Note: Bidder has to furnish details of minimum 2 nos reference pumps and maximum 6 nos. of reference pumps in the following tables.

No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6	Sl.

1. Name of the client
2. Complete Address of Client with Name of Contract Person(s), Tel No. & Fax No.
3. Name & Location of Plant
4. Make of the Pumps

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
5.	Capacity of Pump (m3/hr.) at Best Efficiency Point (BEP)						
6.	Head (mwc) at BEP						
7.	Speed (rpm) at BEP						
8.	Specific Speed (U.S. units) at BEP						
9.	Duty Application of Pumps						
10.	Type of Pumps supplied/installed in the reference installation (Vertical wet pit pumps*/concrete volute pumps*/metallic volute with concrete encasement pumps*)						
11.	Date of Commissioning						
12.	No. of years of successful operation prior to date of Techno-Commercial bid opening date						
13.	Whether the pump is in operation as on date of Techno-Commercial bid opening (mention YES or NO as applicable)	Yes*/No*					

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
14.	Whether bidder's scope included (mention YES or NO as applicable)						
	a Design						
	b Manufacturing						
	c Got Manufactured						
	d Supply						
	e Erection						
	f Supervision of Erection						
	g Commissioning						
	h Supervision of commissioning						

- Note : In case bidder's answer is 'No' in any of the above cases, the name of the agency which carried out the work should be indicated.

** Specific speed as stipulated above is the specific speed calculated at the best efficiency point of the pumps as defined in Hydraulic Institute Standards (HIS).

Bidders to ensure submission of documentary evidences in the form of copies of letter of award, purchase order, clients performance/completion certificate, etc. for each contract to establish that they have supplied, erected & commissioned the CW System including the engineered supporting documents of commissioning dates as mentioned at Sl. No. 11 above etc. with the bid in support of the above declarations.

(B) Applicable to Bidders seeking Qualification as per Clause no. 4.4.3.2 of Chapter 04, "Provenness" , Volume II of Technical Specification (Bidders to fill up details as per form B(I) and B(II) for Technical Criteria)

(B)(I) In terms of Clause no. 4.4.3.2 of Chapter 04, "Provenness" , Volume II of Technical Specification we confirm that, we have designed by ourselves (manufactured*/got manufactured*), supplied, (erected*/ supervised erection*), and (commissioned* / supervised commissioning* of at least two (2) nos. of (vertical wet pit pumps*), each of capacity 36,000 cum./hr or more having specific speed in the range of 4000-7000(**) (US units) which have been in successful operation for at least two (2) years prior to date of techno- commercial bid opening, as per the details furnished below:

* In the blank space provided above , Bidder has to mention the option whichever is applicable.

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
1	Name of the Client						
2	Complete Address of Client with Name of Contract Person(s), Tel No. & Fax No.						
3	Name & Location of Plant						
4	Make of the Pumps						
5	Capacity of Pump (m3/hr.) at Best Efficiency Point (BEP)						
6	Head (mwc) at BEP						
7	Speed (rpm) at BEP						

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
8	Specific Speed (U.S. units) at BEP**						
9	Duty Application of Pumps						
10	Type of Pumps supplied/installed in the reference installation (Vertical wet pit pumps/concrete volute pumps*/metallic volute with concrete encasement pumps*) Bidder to mention whichever is applicable						
11	Date of Commissioning						
12	No. of years of successful operation prior to date of Techno-Commercial bid opening date						
13	Whether the pump is in operation prior to date of Techno-Commercial bid opening (mention YES or NO as applicable)	Yes*/No*					

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
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14 Whether bidder's scope included (mention YES or NO as applicable)

Note: In case bidder's answer is 'No' in any of the above cases, the name of the agency which carried out the work should be indicated.

- a Design
- b Manufacturing
- c Got Manufactured
- d Supply
- e Erection
- f Supervision of Erection
- g Commissioning
- h Supervision of commissioning

15 Documentary evidence/certificate in support of above is enclosed at Annexure ____ to Attachment-3A-1.

Bidder to mention Annexure no in the blank space provided in the columns.

Specific speed as stipulated above is the specific speed calculated at the best efficiency point of the pumps as defined in Hydraulic Institute Standards (HIS).

Bidders to ensure submission of documentary evidences in the form of copies of letter of award, purchase order, clients performance/completion certificate, etc. for each contract to establish that they have supplied, erected & commissioned the CW System including the engineered supporting documents of commissioning dates as mentioned at Sl. No. 11 above etc. with the bid in support of the above declarations.

(B)(II) In terms of Clause no. 4.4.3.2 of Chapter 04, "Provenness" , Volume II of Technical Specification we confirm that, our Associate/Collaborator (M/s.....) have designed by themselves, (manufactured*/got manufactured*), supplied, (erected*/ supervised erection*), and (commissioned* / supervised commissioning*) of at least two (2) nos. of (vertical wet pit pumps*), each of capacity 36,000 cum./hr or offered capacity whichever is lower or more having specific speed in the range of 4000-7000(**) (US units) which have been in successful operation for at least two (2) years prior to date of techno-commercial bid opening, We further confirm that reference pumps are of same type i.e. (vertical wet pit type pumps*) as is being offered by us. The details furnished below:

(*In the blank space provided above, Bidder has to mention the option whichever is applicable.)

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
1	Name of the Client						
2	Complete Address of Client with Name of Contract Person(s), Tel No. & Fax No.						
3	Name & Location of Plant						
4	Make of the Pumps						
5	Capacity of Pump (m3/hr.) at Best Efficiency Point (BEP)						
6	Head (mwc) at BEP						
7	Speed (rpm) at BEP						

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
8	Specific Speed (U.S. units) at BEP**						
9	Duty Application of Pumps						
10	Type of Pumps supplied/installed in the reference installation (Vertical wet pit pumps/concrete volute pumps*/metallic volute with concrete encasement pumps*) Bidder to mention whichever is applicable						
11	Date of Commissioning						
12	No. of years of successful operation prior to date of Techno-Commercial bid opening date						
13	Whether the pump is in operation as on date of Techno-Commercial bid opening (mention YES or NO as applicable)	Yes*/No*					
14	Whether bidder's scope included (mention YES or NO as applicable)						

Note : In case bidder's answer is 'No' in any of the above cases, the name of the agency which carried out the work should be indicated.

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
	a Design						
	b Manufacturing						
	c Got Manufactured						
	d Supply						
	e Erection						
	f Supervision of Erection						
	g Commissioning						
	h Supervision of commissioning						
15	Documentary evidence/certificate in support of above is enclosed at Annexure _____ to Attachment-3A-1. Bidder to mention Annexure no in the blank space provided in the columns.						
16	Whether Joint Deed of Undertaking has been submitted offline prior to opening of Techno-Commercial Bid in a separate sealed envelope (mention YES or NO as applicable)						

* Specific speed as stipulated above is the specific speed calculated at the best efficiency point of the pumps as defined in Hydraulic Institute Standards (HIS).

Bidders to ensure submission of documentary evidences in the form of copies of letter of award, purchase order, clients performance/completion certificate, etc. for each contract to establish that they have supplied, erected & commissioned the CW System including the engineered supporting documents of commissioning dates as mentioned at Sl. No. 11 above etc. with the bid in support of the above declarations.

C) Applicable to Bidders seeking Qualification as per Clause no. 4.4.3.3(a) of Chapter 04, "Provenness", Volume II of Technical Specification (Bidders to fill up details as per form C(I) and C(II) for Technical Criteria)

C1) In terms of Clause no. 4.4.3.3(a) of Chapter 04, "Provenness", Volume II of Technical Specification, we confirm that, we are [wholly* or partially* (with minimum 51% holding)] held Indian subsidiary of a firm meeting requirements of clause 4.4.3.1 of Chapter 04, "Provenness", Volume II of Technical Specification. Further, we confirm that we have executed/are executing at least one (1) contract involving design, (manufacture*/got manufactured*), supply, (erection*/supervision of erection*), and (commissioning* / supervision of commissioning*) of at least two (2) nos. of (vertical wet pit pumps*), each of capacity 36,000 cum./hr or more, as per the details furnished below:

(*In the blank space provided above, Bidder has to mention the option whichever is applicable.)

Note: Bidder has to furnish details of minimum 1 no reference contract and maximum 3 nos of reference contracts (each contract involving minimum 2 nos of pumps) in the following tables.

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
1.	Name of the Client						
2.	Complete Address of Client with Name of Contract Person(s), Tel No. & Fax No.						
3.	Name & Location of Plant						
4.	Make of the Pumps						
5.	No. of Pumps Supplied/Supplying						

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
6.	Capacity of Pump (m3/hr.) at Best Efficiency Point (BEP)						
7.	Duty Application of Pumps						
8.	Type of Pumps supplied/installed in the reference installation (Vertical wet pit pumps/concrete volute pumps*/metallic volute with concrete encasement pumps*) Bidder to mention whichever is applicable						
9.	Date of Commissioning						
10.	Whether bidder's scope included (mention YES or NO as applicable)						
Note : In case bidder's answer is 'No' in any of the above cases, the name of the agency which carried out the work should be indicated.							
a	Design						
b	Manufacturing						
c	Got Manufactured						

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
	d Supply						
	e Erection						
	f Supervision of Erection						
	g Commissioning						
	h Supervision of commissioning						
10	Documentary evidence/certificate in support of above is enclosed at Annexure to Attachment-3A-1. Bidder to mention Annexure no in the blank space provided in the columns.						

The Bidder is not permitted to quoted more than three (3) reference work/contracts each involving two pumps as specified in Qualifying Requirement.

Bidders to ensure submission of documentary evidences in the form of copies of letter of award, purchase order, clients performance/completion certificate, etc. for each contract to establish that they have supplied, erected & commissioned the CW System including the engineered supporting documents of commissioning dates as mentioned at Sl. No. 9 above etc. with the bid in support of the above declarations.

C2) (I) In terms of Clause no. 4.3.3 (a) Of Chapter 4, Volume II of Technical Specification, we confirm that our holding Company (M/s.....), meets the requirements of clause no. 4.3.1 of Chapter 04, "Provenness" , Volume II of Technical Specification, who have designed, (manufactured*/got manufactured*), supplied, (erected*/supervised erection*), and (commissioned* / supervised commissioning*) of at least two (2) nos. of (vertical wet pit pumps* or concrete volute pumps* or metallic volute pumps with concrete encasement*), each of capacity 36,000 cum./hr or offered capacity whichever is lower or more having specific speed in the range of 4000-7000(**) (US units) which have been successful operation for at least two (2) years prior to date of Techno-Commercial bid opening. We further confirm that reference pumps are of same type i.e. (vertical wet pit type pumps* or concrete volute type pumps* or metallic volute pumps with concrete encasement*) as is being offered by us.

(*In the blank space provided above, Bidder has to mention the option whichever is applicable.)

Note: Bidder has to furnish details of minimum two (2) reference pumps and maximum six (6) reference pumps in the following tables.

The details furnished below :

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
1	Name of the Client						
2	Complete Address of Client with Name of Contract Person(s), Tel No. & Fax No.						
3	Name & Location of Plant						
4	Make of the Pumps						
5	Capacity of Pump (m3/hr.) at Best Efficiency Point (BEP)						

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
6	Head (mwc) at BEP						
7	Speed (rpm) at BEP						
8	Specific Speed (U.S. units) at BEP**						
9	Duty Application of Pumps						
10	Type of Pumps supplied/installed in the reference installation (Vertical wet pit pumps/concrete volute pumps*/metallic volute with concrete encasement pumps*) Bidder to mention whichever is applicable						
11	Date of Commissioning						
12	No. of years of successful operation prior to date of Techno-Commercial bid opening Date						
13	Whether the pump is in operation as on date of Techno-Commercial bid opening (mention YES or NO as applicable)	Yes*/No*					

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
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14 Whether bidder's scope included (mention YES or NO as applicable)

Note : In case bidder's answer is 'No' in any of the above cases, the name of the agency which carried out the work should be indicated.

- a Design
- b Manufacturing
- c Got Manufactured
- d Supply
- e Erection
- f Supervision of Erection
- g Commissioning
- h Supervision of commissioning

15 Documentary evidence/certificate in support of above is enclosed at Annexure _____ to Attachment-3A-1.

Bidder to mention Annexure no in the blank space provided in the columns.

Sl. No.	Description	Pump-1	Pump-2	Pump-3	Pump-4	Pump-5	Pump-6
16	Whether Joint Deed of Undertaking has been submitted offline prior to opening of Techno-Commercial Bid in a separate sealed envelope (mention YES or NO as applicable)						

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

DEED OF JOINT UNDERTAKING FOR CW SYSTEM WORK

S No.	Qualifying Requirement Route	JDU(s) to be submitted
1	4.3.2 of Chapter 04, Volume II	Form - 13 A
2	4.3.3 of Chapter 04, Volume II	Form - 13 B
3	4.3.1 and Notes (i) of Chapter 04, Volume II,	Form - 13 C
4	4.3.2 and Notes (i) of Chapter 04, Volume II,	Form - 13 D
5	4.3.3 and Notes (i) of Chapter 04, Volume II	Form - 13 E-1

FORM OF DEED OF JOINT UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/IT'S SUB-VENDOR, IT'S SUB-VENDOR(IF APPLICABLE) AND THE ASSOCIATE/ COLLABORATOR AS PER CL. NO. 4.4.3.2 OF CHAPTER 04, "PROVENNESS" , VOLUME II FOR SUCCESSFUL PER- FORMANCE OF CW PUMPS

This DEED of UNDERTAKING executed on this..... day of
Two thousand by M/s a Company incorporated under having its Registered Office at..... (hereinafter called the "Associate/Collaborator", which expression shall include its successors, administrators, executors and permitted assigns) and M/sa Company registered under thehaving its Registered Office at(hereinafter called the "**Holding/*Subsidiary Company of Qualified Equipment Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour HPGCL a Government of Haryana Undertaking incorporated under the Companies Act, 1956, having its Registered Office at Panchkula (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC package for 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana vide its Bidding Document N03/HPGCL/DCRTPP/EPC/800MW which includes design, engineering, manufacture, supply, transportation to site, testing and commissioning including putting the plant into satisfactory operation of the CW System Equipment for its " hereinafter referred to as "Plant".

AND WHEREAS AS PER cl. No. 4.4.3.2 of Chapter 04, "Provenness" , Volume II of bidding documents stipulates that CW pumps can be sourced from bidder/it's sub-vendor/its sub- vendor who meets the requirements of as per cl. No. 4.4.3.2 of S Chapter 04, "Provenness" , Volume II and associates/collaborates with a firm who in turn meets the stipulated requirements as per cl. No. 4.4.3.1 of Chapter 04, "Provenness" , Volume II of Bidding Documents which the bidder/it's sub-vendor/its sub-vendor himself is unable to meet.

WHEREAS M/s (Bidder/it's sub-vendor) who meets the requirement of cl. No. 4.4.3.2 of Chapter 04, "Provenness" , Volume II and desires to Associate / Collaborate with M/s (Associate / Collaborator) who in turn meets the requirements as specified in cl. No. 4.4.3.1 of Chapter 04, "Provenness" , Volume II, the Bidder/it's sub-vendor and the associate/collaborator are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking for successful performance of CW Pumps, in

which the bidder/it's sub-vendor and Associate / Collaborator are jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees for the CW Pumps for this Plant fully meeting the guaranteed parameters and characteristics as per Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract, we the Associate / Collaborator 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 CW Pumps under the Contract(s) including the guaranteed parameters for CW Pump(s).
2. In case of any breach of the Contract committed by the Contractor, we the Associate / Collaborator do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of CW Pump under the Contract and undertake to carryout all the obligations and responsibilities under this Deed of Undertaking including technical guarantees for CW Pumps in order to discharge the Contractors Obligation's and responsibilities stipulated in the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract, we the Associate / Collaborator and Contractor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its writ-ten demand without any demur, reservation, contest or protest in any manner what-so ever. This is without prejudice to any rights of the Owner against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate / Collaborator (with respect to obligations and responsibilities of the Associate / Collaborator 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 / Collaborator and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:
 - (a) The Associate / Collaborator shall be fully responsible for design, engineering commissioning and extending all necessary support for carrying out guarantee test to the satisfaction of the Owner.

Further, the Associate / Collaborator shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by the Owner and agreed to by Contractor and Associate / Collaborator to facilitate the successful performance of the CW Pumps stipulated in the aforesaid Contract.

Further, the Associate / Collaborator shall provide support to Contractor to ensure proper design, manufacture, supply, installation, testing and successful performance of the CW Pumps covered under the said Contract in accordance with stipulations of Bidding Documents and if necessary the Associate/Collaborator shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract.

- (b) In the event the Associate / Collaborator and the Contractor fail to demonstrate successful performance of the CW Pumps as set forth in paragraph 1 above, the Associate / Collaborator and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected design to the Owner.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectifications or modifications to the CW Pumps and payment of financial liabilities and penalties shall be the joint and several responsibility of the Contractor and the Associate / Collaborator.
 - (d) The Associate / Collaborator will be fully responsible to ensure 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 CW Pumps under the Contract.
4. We, the Contractor and the Associate / Collaborator do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under this system. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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. In case of Award, in addition to the Contract Performance Security to be furnished by the Contractor, the Associate / Collaborator shall furnish 'as security' an on demand Performance Bank Guarantee from any Bank as listed in SCC in favour of the Owner as per in the format specified the Bidding Documents. The value of such Bank Guarantee shall be equal to **INR ten million** and it shall be the 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 valid till ninety (90) days beyond the end of defect liability period of the last equipment covered under this system. 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. 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 in connection with this Deed of Undertaking shall be 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 and the Courts of Haryana shall have exclusive jurisdiction.
7. We, the Associate / Collaborator and the Contractor agree that this Undertaking shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till its validity.
8. That this Deed of Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate / Collaborator 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

For M/s
(Associate / Collaborator)

1.
(Signature Name & Address)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

For M/s.....
Bidder/it's sub-vendor/
it's sub-vendor/Contractor)

1.
(Signature Name & Address)

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

Name

Designation

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Associate/Collaborator and Bidder/it's sub-vendor/it's sub-vendor is to be furnished by the Bidder/it's sub-vendor/it's sub-vendor.

FORM OF DEED OF JOINT UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/IT'S SUB-VENDOR, IT'S SUB-VENDOR(IF APPLICABLE) AND THE ASSOCIATE/ COLLABORATOR AS PER cl. No. 4.4.3.3 OF CHAPTER 04, "PROVENNESS" , VOLUME II FOR SUCCESSFUL PER- FORMANCE OF CW PUMPS

This DEED of UNDERTAKING executed on this..... day of Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and M/sa Company registered under thehaving its Registered Office at(hereinafter called the "*Holding*/Subsidiary Company of Qualified Equipment Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), in favour HPGCL, a Government of Haryana undertaking incorporated under the Companies Act, 1956, having its Registered Office at PUNCHKULA (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC package vide its Bidding Document No. D-1-4034-4100-00-T-RSB which includes design, engineering, manufacture, supply, transportation to site, testing and commissioning including putting the plant into satisfactory operation of the CW System Equipment for its **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** hereinafter referred to as "Plant".

AND WHEREAS AS PER cl. No. 4.4.3.3 of Chapter 04, "Provenness" , Volume II of bidding documents stipulates that CW pumps can be sourced from bidder/it's sub-vendor/its sub-vendor who meets the requirements of as per cl. No. 4.4.3.3(a) of Chapter 04, "Provenness" , Volume II which is a wholly or partially (with minimum 51% holding) held Indian subsidiary of a firm meeting requirements of cl. No. 4.4.3.1 of Chapter 04, "Provenness" , Volume II of Bidding Documents which the bidder/it's sub-vendor/its sub-vendor himself is unable to meet.

WHEREAS M/s (Bidder/it's sub-vendor/it's sub-vendor) who meets the requirement of cl. No. 4.4.3.3 of Chapter 04, "Provenness" , Volume II and which is a wholly* or partially* (with minimum 51% holding) held Indian subsidiary of a firm M/ s..... (Holding Company) who in turn meets the requirements as specified in 4.4.3.1 of Chapter 04, "Provenness" , Volume II, the Bidder/it's sub-vendor/it's sub-vendor and the Holding Company are required to jointly execute and furnish

along with the bid an irrevocable Deed of Joint Undertaking for successful performance of CW pump, in which the bidder/it's sub-vendor/it's sub-vendor and Holding Company are jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees for the CW Pumps and other equipment for **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** fully meeting the guaranteed parameters and characteristics as per Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract, we the Holding Company 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 CW pump.
2. In case of any breach of the Contract committed by the Contractor, we the Holding Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the CW pump and undertake to carryout all the obligations and responsibilities under this Deed of Undertaking (including technical guarantees for CW Pumps) 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, we the Holding Company and Contractor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Holding Company (with respect to obligations and responsibilities of the Holding 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 rights of the Owner under this Deed of Joint Undertaking to proceed against the Holding Company and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:
 - (a) The Holding Company shall be fully responsible for design, engineering, supply, erection, testing, commissioning and putting into satisfactory operation and carrying out guarantee test to the satisfaction of the Owner.

Further, the Holding Company shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by the Owner and agreed to by Contractor and Holding Company to facilitate the successful performance of the CW pump.

Further, the Holding Company shall ensure proper design, manufacture, supply, installation, testing and successful performance of the CW pump in accordance with stipulations of Bidding Documents and if necessary the Holding Company shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract.

- (b) In the event the Holding Company and the Contractor fail to demonstrate successful performance of all equipment stipulated in Contracts as set forth in paragraph 1 above, the Holding Company and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected design to the Owner.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectifications or modifications to the equipment in the Contract and payment of financial liabilities and penalties shall be the joint and several responsibility of the Contractor and the Holding Company.
4. We, the Contractor and the Holding Company do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under this CW System. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 Holding 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 CW Pumps and other equipment under the Contract and timely delivery thereof to meet the completion schedule under the Contract.
 6. In case of Award, in addition to the Contract Performance Security to be furnished by the Contractor, the Holding Company shall furnish 'as security' an on demand Performance Bank Guarantee from any Bank as listed in SCC in favour of the Owner as per in the format specified the Bidding Documents. The value of such Bank Guarantee shall be equal to INR thirteen million and it shall be the 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 valid till ninety (90) days beyond the end of defect liability period of the last equipment covered under this CW System. 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. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

Any dispute that may arise in connection with this Deed of Undertaking shall be 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 and the Courts of Haryana shall have exclusive jurisdiction.

7. We, the Holding Company and the Contractor agree that this Undertaking shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till its validity.
8. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Holding Company 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

For M/s
(Holding Company)

1.
(Signature Name & Address)

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

Common Seal of the Company
.....

WITNESS

For M/s.....
(Bidder/it's sub-vendor /
it's sub-vendor/Contractor)

1.
(Signature Name & Address)

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

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Holding Company and Bidder/it's sub-vendor/it's sub-vendor is to be furnished by the Bidder/it's sub-vendor/it's sub-vendor.

FORM OF DEED OF JOINT UNDERTAKING

AS PER CLAUSE 4.4.3.1 AND NOTES (I) OF CHAPTER 04, "PROVENNESS", VOLUME II

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/IT'S SUB-VENDOR, IT'S SUB-VENDOR(IF APPLICABLE) AND THE ASSOCIATE/ COLLABORATOR AS PER cl. No. 4.4.3.1 and Notes (i) of Chapter 04, "Provenness", Volume II FOR SUCCESSFUL PERFORMANCE OF CW PUMPS

This DEED of UNDERTAKING executed on this..... day of
Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Bidder/it's sub-vendor/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, (Subsidiary of the Bidder/it's sub-vendor)
M/s..... a company registered under the having its registered office at, (Subsidiary of the Bidder/it's sub-vendor) M/s..... a company registered under the having its registered office at, (Subsidiary of the Bidder/it's sub-vendor)and M/s..... a company registered under the having its registered office at(Subsidiary of the Bidder/it's sub-vendor) who is/are lending strength/experience to the Bidder/it's sub-vendor for meeting the requirements stipulated in Clause 3.0.0 of BDS and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns)] HPGCL, a Government of Haryana incorporated under the Companies Act, 1956, having its Registered Office at(hereinafter called "HPGCL" or "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC package vide its Bidding Document No. which includes design, engineering, manufacture, supply, transportation to site, testing and commissioning including putting the plant into satisfactory operation of the CW System Equipment for **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** hereinafter referred to as "Plant".

AND WHEREAS AS PER Notes (i) of CLAUSE 4.4.3.3 of Chapter 04, "Provenness" , Volume II of bidding documents stipulates that a firm can meet the requirements stipulated under clause 4.4.3.1 of Chapter 04, "Provenness" , Volume II either singularly or collectively along with its Subsidiaries..

AND WHEREAS the Bidder, it's sub-vendor, collaborator and Subsidiary(ies) are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking for successful performance of CW Pumps, in which the bidder/it's sub-vendor and the Subsidiaries are jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees for the CW Pumps for **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** fully meeting the guaranteed parameters and characteristics as per Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract(s), we the Contractor and the Subsidiary(ies), do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of CW Pumps under the Contract(s) including the guaranteed parameters for CW Pumps.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Subsidiary(ies) do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of CW Pumps under the Contract(s) and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking including technical guarantees for CW Pumps in order to discharge the Contractor's Obligations and responsibilities stipulated in the Contract(s). Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s), we the Subsidiary(ies) and Contractor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its writ-ten demand without any demur, reservation, contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor under the Contract(s) and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Subsidiary(ies) (with respect to obligations and responsibilities of the Subsidiary(ies) 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 Subsidiary(ies) and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:
 - (a) We the Subsidiary(ies) shall be fully responsible for design, engineering, commissioning and extending all necessary support for carrying out guarantee test to the satisfaction of the Owner.

Further, the Subsidiary(ies) shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by the Owner and agreed to by Contractor and the Subsidiary(ies) to facilitate the successful performance of the CW Pumps stipulated in the aforesaid Contract(s).

Further, the Subsidiary(ies) shall provide support to Contractor to ensure proper design, manufacture, supply, installation, testing and successful performance of the CW Pumps covered under the said Contract(s) in accordance with stipulations of Bidding Documents and if necessary the Subsidiary(ies) shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract(s).

- (b) In the event the Subsidiary(ies) and the Contractor fail to demonstrate successful performance of the CW Pumps as set forth in paragraph 1 above, the Subsidiary(ies) and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected design to the Owner.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectifications or modifications to the CW Pumps and payment of financial liabilities and penalties shall be the joint and several responsibility of the Contractor and the Subsidiary(ies).
 - (d) The Subsidiary(ies) will be fully responsible to ensure 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 CW Pumps under the Contract.
4. We, the Contractor and the Subsidiary(ies) do hereby undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under this system. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 Security(ies) to be furnished by the Contractor, the Contractor and all its Subsidiary(ies) lending strength/ experience to the Bidder/its sub-vendor for fulfilment of the requirements stipulated in Clause 3.0.0 of BDS shall each be required to furnish separate on demand Bank Guarantee divided for a value equally divided among them for an amount aggregating INR ten million from any Bank as listed in SCC in favour of the Owner as per in the format specified the Bidding Documents and it shall be the guarantee towards the faithful performance /compliance of this Deed of Joint Under-

taking 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 end of defect liability period of the last equipment covered under this system. 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. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
- 7. We, the Subsidiary(ies) and the Contractor agree that this Undertaking shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till its validity.
- 8. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Subsidiary(ies) 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

For M/s
(Subsidiary 1 of Bidder /
it's sub-vendor/Contractor)

- 1.
(Signature Name & Address)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 2 of Bidder /
it's sub-vendor/Contractor)

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

Name

Designation

Common Seal of the Company
.....

1.
(Signature Name & Address)

For M/s
(Subsidiary 3 of Bidder /
it's sub-vendor/Contractor)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 4 of Bidder /
it's sub-vendor/Contractor)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s.....
(Bidder/it's sub-vendor/Contractor)

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

Name

Designation

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Subsidiary(ies) and Bidder/it's sub-vendor is to be furnished by the Bidder/it's sub-vendor.

FORM OF DEED OF JOINT UNDERTAKING

AS PER CLAUSE 4.4.3.2 AND NOTES (I) OF CHAPTER 04, "PROVENNESS" , VOLUME II

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/IT'S SUB-VENDOR, IT'S SUB-VENDOR(IF APPLICABLE) AND THE ASSOCIATE/ COLLABORATOR AS PER 4.4.3.2 and Notes (i) of Chapter 04, "Provenness" , Volume II FOR SUCCESSFUL PERFORMANCE OF CW PUMPS

This DEED of UNDERTAKING executed on this..... day of
Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Bidder/it's sub-vendor/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 "Associate/Collaborator", which expression shall include its successors, administrators, executors and permitted assigns)

AND

M/s..... a company registered under the having its registered office at(Subsidiary-1 of Associate/Collaborator)
M/s..... a company registered under the having its registered office at , (Subsidiary-2 of Associate/Collaborator) M/s..... a company registered under the having its registered office at (Subsidiary-3 of Associate/Collaborator) and M/s..... a company registered under the having its registered office at (Subsidiary-4 of Associate/Collaborator) who are lending strength/experience to the Associate/Collaborator for meeting the requirements stipulated in clause 3.0.0 of BDS and (hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) HPGCL, a Government of Haryana Undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC package vide its Bidding Document No. which includes design, engineering, manufacture, supply, transportation to site, testing and commissioning including putting the plant into satisfactory operation of the CW System Equipment for its **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** hereinafter referred to as "Plant".

AND WHEREAS Item AS PER Notes (i) of CLAUSE 4.4.3.3 of Chapter 04, "Provenness", Volume II of bidding documents stipulates that the Bidder/it's sub-vendor who meet the requirement of CLAUSE 4.4.3.2 of Chapter 04, "Provenness", Volume II and associates/collaborates with a firm who in turn meets the requirements of CLAUSE 4.4.3.1 of Chapter 04, "Provenness", Volume II along with its Subsidiary(ies).

AND WHEREAS the Bidder/it's sub-vendor, Associate/Collaborator and Subsidiary(ies) are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking for successful performance of CW Pumps, in which the bidder/it's sub-vendor, Associate/Collaborator and Subsidiary(ies) are jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees for the CW Pumps for Plant fully meeting the guaranteed parameters and characteristics as per Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract(s), we the Contractor, Associate/Collaborator and the Subsidiary(ies), do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of CW Pumps under the Contract(s) including the guaranteed parameters for CW Pumps.
2. In case of any breach of the Contract(s) committed by the Contractor, we the Associate/Collaborator and the Subsidiary(ies) do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of CW Pumps under the Contract(s) and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking including technical guarantees for CW pumps in order to discharge the Contractor's Obligations and responsibilities stipulated in the Contract(s). Further, if the Owner sustains any loss or damage on account of any breach of the Contract(s), we the Associate/Collaborator, the Subsidiary(ies) and Contractor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor under the Contract(s) and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate/Collaborator and the Subsidiary(ies) (with respect to obligations and responsibilities of the Associate/Collaborator and its subsidiaries 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/Collaborator,

Subsidiary(ies) and Contractor.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:

(a) We, the Associate/Collaborator and the Subsidiary(ies) shall be fully responsible for design, engineering, commissioning and extending all necessary support for carrying out guarantee test to the satisfaction of the Owner.

Further, the Associate/Collaborator and the Subsidiary(ies) shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by the Owner and agreed to by Contractor, Associate/Collaborator and the Subsidiary(ies) to facilitate the successful performance of the CW Pumps stipulated in the aforesaid Contract(s).

Further, the Associate/Collaborator and the Subsidiary(ies) shall provide support to Contractor to ensure proper design, manufacture, supply, installation, testing and successful performance of the CW Pumps covered under the said Contract(s) in accordance with stipulations of Bidding Documents and if necessary the Associate/Collaborator and the Subsidiary(ies) shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract(s).

(b) In the event the Associate/Collaborator, the Subsidiary(ies) and the Contractor fail to demonstrate successful performance of the CW Pumps as set forth in paragraph 1 above, the Associate/Collaborator, the Subsidiary(ies) and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected design to the Owner.

(c) Implementation of the corrected design and all other necessary repairs, replacements, rectifications or modifications to the CW Pumps and payment of financial liabilities and penalties shall be the joint and several responsibility of the Contractor, the Associate/Collaborator and the Subsidiary(ies).

(d) The Associate/Collaborator and the Subsidiary(ies) 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 CW Pumps under the Contract.

4. We, the Contractor, Associate/Collaborator and the Subsidiary(ies) do hereby undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under this system. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by

such period of delay. We further agree that this 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 Security(ies) to be furnished by the Contractor, the Associate/Collaborator and all its Subsidiary(ies) lending strength / experience to the Associate/Collaborator for fulfilment of the requirements stipulated in clause 3.0.0 of BDS shall each be required to furnish separate on demand Bank Guarantee for a value divided equally among them for an amount aggregating INR ten million from any Bank as listed in SCC in favour of the Owner as per in the format specified the Bidding Documents and it shall be the 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 end of defect liability period of the last equipment covered under this system. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be ex- tended by such period of delay. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
7. We, the Associate/Collaborator, the Subsidiary(ies) and the Contractor agree that this Undertaking shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till its validity.
8. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate/Collaborator, the Subsidiary(ies) 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.
(Signature Name & Address)

For M/s
(Associate/Collaborator)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 1 of Associate /
Collaborator)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 2 of Associate /
Collaborator)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 3 of Associate /
Collaborator)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s
(Subsidiary 4 of Associate /
Collaborator)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

1.
(Signature Name & Address)

For M/s.....
(Bidder/it's sub-vendor/Contractor)

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

Name

Designation

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Associate/Collaborator, Subsidiary(ies) and Bidder/it's sub-vendor is to be furnished by the Bidder/it's sub-vendor.

FORM OF DEED OF JOINT UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/IT'S SUB-VENDOR, IT'S SUB-VENDOR(IF APPLICABLE) AND THE ASSOCIATE/ COLLABORATOR AS PER cl. No. 4.4.3.3 and NOTES (I) OF CHAPTER 04, "PROVENNESS" , VOLUME II FOR SUCCESSFUL PERFORMANCE OF CW PUMPS

This DEED of UNDERTAKING executed on this..... day of
Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Holding 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 Bidder/it's sub-vendor/Contractor, which expression shall include its successors, administrators, executors and permitted assigns) in favour of HPGCL, a Government of Haryana undertaking under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC package vide its Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW which includes design, engineering, manufacture, supply, transportation to site, testing and commissioning including putting the plant into satisfactory operation of the CW System Equipment for its **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana** hereinafter referred to as "Plant".

AND WHEREAS AS PER note i) of CLAUSE 4.4.3.3 of Chapter 04, "Provenness" , Volume II of bidding documents stipulates CW pump can be sourced from bidder/it's sub-vendor (who meets the requirement of CLAUSE 4.4.3.3 (a) of Chapter 04, "Provenness" , Volume II VI [which is a wholly or partially (with minimum 51% holding) held Indian subsidiary] of a firm (bidder/it's sub-vendor's holding Company) meeting requirements of CLAUSE 4.4.3.1 of Chapter 04, "Provenness" , Volume II along with its subsidiaries.

WHEREAS M/s (Bidder/it's sub-vendor) who meets the requirement of CLAUSE 4.4.3.3 of Chapter 04, "Provenness" , Volume II and which is a wholly* or partially* (with minimum 51% holding) held Indian subsidiary of a firm M/s (Holding Company) who in turn meets the requirements of CLAUSE 4.4.3.1 of Chapter 04, "Provenness" , Volume II (along with its subsidiaries*), the Bid-der/it's sub-vendor, the Holding Company and subsidiaries are required to jointly execute

and furnish along with the bid an irrevocable Deed of Joint Undertaking for successful performance of CW pump, in which the bidder/its sub-vendor, Holding Company and subsidiaries are jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees for the CW Pumps and other equipment for the system fully meeting the guaranteed parameters and characteristics as per Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract, we the Holding Company 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 CW Pumps.
2. In case of any breach of the Contract committed by the Contractor, we the Holding Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the CW pump and undertake to carry out all the obligations and responsibilities under this Deed of Undertaking (including technical guarantees for CW Pumps) 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, we the Holding Company and Contractor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Holding Company (with respect to obligations and responsibilities of the Holding 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 rights of the Owner under this Deed of Joint Undertaking to proceed against the Holding Company and Contractor.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:
 - (a) The Holding Company shall be fully responsible for design, engineering, supply, erection, testing, commissioning and putting into satisfactory operation and carrying out guarantee test to the satisfaction of the Owner.

Further, the Holding Company shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by the Owner and agreed to by Contractor and Holding Company to facilitate the successful performance of the CW pump.

Further, the Holding Company shall ensure proper design, manufacture, supply, installation, testing and successful performance of the CW pump in accordance with stipulations of Bidding Documents and if necessary the Holding Company shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract.

- (b) In the event the Holding Company and the Contractor fail to demonstrate successful performance of the CW pump as set forth in paragraph 1 above, the Holding Company and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected design to the Owner.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectifications or modifications to the CW Pumps and payment of financial liabilities and penalties shall be the joint and several responsibility of the Contractor and the Holding Company.
4. We, the Contractor and the Holding Company do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last equipment covered under this system. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 Holding 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 CW Pumps and other equipment under the Contract and timely delivery thereof to meet the completion schedule under the Contract.
 6. In case of Award, in addition to the Contract Performance Security to be furnished by the Contractor, the Holding Company shall furnish 'as security' an on demand Performance Bank Guarantee from any Bank as listed in SCC in favour of the Owner as per in the format specified the Bidding Documents. The value of such Bank Guarantee shall be equal to INR ten million and it shall be the 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 valid till ninety (90) days beyond the end of defect liability period of the last equipment covered under this system. 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. The guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.

Any dispute that may arise in connection with this Deed of Undertaking shall be 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 and the Courts of Haryana shall have exclusive jurisdiction.

7. We, the Holding Company and the Contractor agree that this Undertaking shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till its validity.
8. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Holding Company 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

For M/s
(Holding Company)

1.
(Signature Name & Address)

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

Name

Designation

Common Seal of the Company
.....

WITNESS

For M/s.....
(Bidder/it's sub-vendor/Contractor)

1.
(Signature Name & Address)

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

Name

Designation

Common Seal of the Company
.....

Note: Power of Attorney of the person signing on behalf of Holding Company and Bidder/ it's sub-vendor is to be furnished by the Bidder/it's sub-vendor.

Strike out whichever is not applicable.

Sub : Sub-Qualifying Requirements for the Fire Detection and Protection System

To satisfy the requirements specified in Clause No. 4.4.5 of Chapter 04, "Provenness", Volume II of Bidding Document, we furnish following details :

1.

We/ sub-vendor declare that we have designed, supplied, erected and commissioned at least two (2) fire protection systems, each of Contract value not less than Rs. 50 million or equivalent in foreign currency, (exchange rate applicable as on date of Techno-commercial Bid Opening) in thermal power plant installations. Each of the above Fire Protection System comprise of

- a) fire hydrant system
- b) high velocity water spray (HVW) or medium velocity water (MVW) spray or sprinkler system.
- c) fire water pumping and pressurizing arrangement.

We further declare that the systems mentioned above have been designed to the recommendations of *Tariff Advisory Committee of India or Oil Industry Safety Directorate (OISD) or any other International reputed authority (like LPC-U.K. or NFPA - USA) and these systems are in successful operation for atleast two (2) years prior to date of Techno-commercial bid opening. The details of Fire Protection system executed by us are furnished below : -

Details pertaining to Technical Qualification of the Sub-vendor.

S No.	Description	Plant No. 1	Plant No. 2
A. DATA OF FIRE PROTECTION SYSTEMS EXECUTED: (To be filled up for contracts having order value not less than Rs. 50 million or equivalent in for foreign currency (exchange rate applicable as on date of techno-commercial bid opening)			
1.	Client name and address	.....	.....
2.	Name and Address of the plant/ installation	.....	.....

Sl.No.	Description	Plant No. 1	Plant No. 2
3.	Whether Fire protection system executed is for industrial installation ?	Yes*/No*	Yes*/No*
4.	Date of order	.....	.....
5.	Date of commissioning	.....	.....
6.	Period of operation prior to the date of techno-commercial bid opening	.....	.....
7.	Value of the order in Rs. Million	.....	.....
8.	The Scope included :		
	a) Design	Yes*/No*	Yes*/No*
	b) Supply	Yes*/No*	Yes*/No*
	c) Erection	Yes*/No*	Yes*/No*
	d) Commissioning	Yes*/No*	Yes*/No*
9.	The fire protection system have been designed as per TAC/NFPA/OISD/LPC/any other International reputed authority (Please indicate the name of the authority)	Yes*/No*	Yes*/No*
10.	The above contract included :		
	a) Fire Hydrant system	Yes*/No*	Yes*/No*
	b) High velocity water spray (HVW) system	Yes*/No*	Yes*/No*
	c) Medium velocity water spray (MVW) System	Yes*/No*	Yes*/No*
	d) Sprinkler System	Yes*/No*	Yes*/No*

Sl.No.	Description	Plant No. 1	Plant No. 2
	e) Fire water pumping and pressurizing arrangement	Yes*/No*	Yes*/No*
11.	Documentary evidence/certificate from client in support of above is enclosed	Yes*/No*	Yes*/No*

We further confirm that notwithstanding anything stated above, the Owner reserves the right to assess our / our Collaborator's / our Associate's / our Subsidiarie's / our Group Companies to perform the Contract, should the circumstances warrant such assessment in the overall interest of the Owner in line with QR requirement at Clause No. 4.5 of Chapter 04, "Provenness", Volume II

Note :(1) Continuation sheets of like size and format may be used as per Sub-vendor requirement and be annexure to this attachment.

* **Please Strike off whichever is not applicable.**

2.

We/ Sub-Vendor furnish the following details of the firm from whom the analogue addressable type fire alarm system is proposed to be supplied for this package.

We/sub - vendor further declare that the analogue addressable type fire alarm system proposed to be supplied for this package shall be sourced from a firm M/S _____ who has supplied at least two (2) similar systems and these systems have been approved or listed by UL-USA / FM-USA / LPC-UK / similar agency and are in successful operation for at least two (2) years prior to date of Techno-commercial bid opening. The details of the bid proposed firm are furnished below :

S No.	Description	Plant No. 1	Plant No. 2
1.	Name of supplier	.....	.....
2.	Address of supplier	.....	.....
3.	Experience details of supplier		
	a) Name of the client	.....	.....

b)	Address of the client	.....	.....
c)	Address of the installation	.....	.....
d)	Type of the installation (Industrial / commercial)	.....	.....
e)	Whether the installed system has been approved by UL- USA/FM- USA/LPC-UK/Similar agency ? (please specify agency)	Yes*/No*	Yes*/No*
f)	Whether the installed system has been listed by UL-USA/ FM-USA/LPC-UK / Similar agency? (please specify agency)	Yes*/No*	Yes*/No*
g)	Date of order / award for analogue addressable type fire alarm system	.....	.....
h)	Date of commissioning of the above system	.....	.....
i)	Number of years for which the system is in operation prior to date of techno- commercial bid opening	.....	.....
j)	Documentary evidence/certificate in support of above system to be enclosed	.....	.....

*** Please strike off whichever is not applicable.**

Note : If a Sub-vendor proposed more than one firm for the supply of analogue addressable type fire alarm system, separate data shall be submitted in the above format for each of the proposed suppliers.

3.

We / our sub-vendor furnish the following details of the firm from whom the inert gas fire extinguishing system is proposed to be supplied for this package.

We / our sub-vendor further declare that the Inert gas fire extinguishing system to be supplied under the package shall be sourced from an agency M/S _____ who has designed and supplied at least two (2) Inert gas total flooding fire extinguishing system each having a total risk Volume of at least 1000 M³. Further, we declare that these systems have been designed to the recommendation of Tariff Advisory Committee of India or any other international reputed authority (like LPC-U.K. or NFPA, USA) and are in operating condition for a period not less than two (2) years prior to date of Techno-commercial bid opening. The details of the bid proposed firm are furnished below :

 - Name of the agent proposed for this Package by the bidder :

- Sl. No. Description	Plant No. 1	Plant No. 2

1. Name of supplier	.....	.....
2. Address of supplier	.....	.....
3. Experience details of supplier		
a) Name of the client	.....	.....
b) Address of the client	.....	.....
c) Address of the installation	.....	.....
d) Type of the installation (Industrial / commercial), pl. specify	.....	.....
e) Whether the installed systems have been designed to the recommendation of TAC-India or any other international reputed authority (like LPC-UK or NFPA - USA) (please specify agency)	Yes*/No*	Yes*/No*

- Sl. No.	Description	Plant No. 1	Plant No. 2
f)	Risk area protected using the above clean against has a volume of	.....Cu.M	.....Cu.m
g)	The total flooding gaseous fire extinguishing system has been designed by bidder.	Yes*/No*	Yes*/No*
h)	Date of order / award for total flooding inert gas fire extinguishing system	.....	.....
i)	Date of commissioning of the above system	.....	.....
j)	Number of years for which the system is in operation prior to date of techno-commercial bid opening	.....	.....
k)	Documentary evidence/certificate in support of above to be enclosed	.....	.....

Note: If a Sub-vendor proposed more than one firm for the supply of total flooding inert gas fire extinguishing system, separate data shall be submitted in the above format for each of the proposed suppliers/ agent.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

* Please strike off whichever is not applicable.

Sub : Sub-Qualifying Requirements for the Air Conditioning System

In line with the Sub-Qualifying Requirements stipulated in Clause No. 4.4.6 of Chapter 04, "Provenness", Volume II, we hereby confirm that we have designed, supplied, erected and commissioned at least two (2) numbers of Air Conditioning systems each having a total installed capacity of 300TR or more, which should have included at least one chilling unit with a minimum capacity of 60 TR at each reference system in industrial/Commercial installations. The system should be in operation for at least two (2) years as on the date of Techno-commercial bid opening.

In addition, we have manufactured and supplied at least two (2) nos. of similar type of chiller units each having a capacity of not less than 150 TR, which are in successful operation for at least two (2) years as on the date of Techno-commercial bid opening.

(A) The details are given below :

SNo.	Item Description	Plant No. 1	Plant No. 2
1.	Name of the Client with full address, contact person(s), fax and telephone no.		
2.	Name and address of the Plant		
3.	Purchase Order no. and date		
4.	Copy of purchase order enclosed	Yes/No	Yes/No
5.	Date of Commissioning		
6.	No. of years of successful operation prior to date of techno-commercial bid opening		
7.	Whether clients certificate is enclosed to prove that "the Air Conditioning system is in successful operation for at least two (2) years prior to the date of techno-commercial bid opening"	Yes/No	Yes/No
8.	Total installed capacity of air conditioning system	..... TR	..... TR
9.	Capacity of largest chilling unit in above air conditioning system	..... TR	..... TR

S No.	Item Description	Plant No.1	Plant No. 2
10.	Type of installation	Industrial/ Commercial Installation	Industrial/ Commercial Installation
11.	The scope of Contract included		
	(a) Design	Yes/No	Yes/No
	(b) Supply	Yes/No	Yes/No
	(c) Erection	Yes/No	Yes/No
	(d) Commissioning	Yes/No	Yes/No
12.	Documentary evidence in support of S No. 8 to 11 enclosed	Yes/No	Yes/No

(B) Chillers proposed to be supplied under this package would be sourced from following manufacturers. Experience details of the manufacturers are given below :

(a) Type of vapour compression type chilling unit offered Centrifugal / Screw compressor

(b) Name and Address of Manufacturer from whom the above equipment is sourced

(c) For the above type of chiller Experience details of the Manufacturer is as follows :

S No.	Item Description	Plant No.1	Plant No. 2
1.	Name of the Client with address, name of contact person(s), tel. no. & fax no.		
2.	Purchase Order no. and date		
3.	Date of Commissioning		
4.	No. of years of successful operation prior to the on date of techno-commercial bid opening		
5.	Capacity of chiller unit	..... TR	..... TR
6.	Clients certificate to demonstrate successful operation of machine for atleast two (2) years prior to the date of techno-commercial bid opening enclosed	Yes/No	Yes/No
7.	Documentary evidence in support of S No. 2 to 7 above enclosed	Yes/No	Yes/No

Date : _____ (Signature).....
 Place : _____ (Printed Name).....
 _____ (Designation).....
 _____ (Common seal).....

Sub : Sub-Qualifying Requirements for the Ventilation System

In line with the Sub-Qualifying Requirements stipulated in clause no. 4.4.7 of Chapter 04, "Provenness" , Volume II of Technical Specification of Bidding Documents, we have designed, supplied, erected and commissioned atleast two (2) numbers ventilations systems including air washer units having individual fan capacity of 1,25,000 M³/hr. or more at each ventilation system, in industrial/Commercial installations. The systems should have been in successful operation for atleast two (2) years as on the date of Techno-commercial bid opening.

- Sl.	Item	Plant 1	Plant 2
-			
1.	Name of the Project and its address	.....	.....
2.	Name of the Client with address, name of Contact person(s) with tel.no. & fax no.	.....	.....
3.	Order No. and date		
4.	Purchase order enclosed	Yes*/No*	Yes*/No*
5.	Date of commissioning	.....	.....
6.	Individual fan capacity of air washer unit in ventilation system, M ³ /hr.	.....	.....
7.	The scope for the ventilation system contract included		
	(a) Engineering	Yes*/No*	Yes*/No*
	(b) Supply	Yes*/No*	Yes*/No*
	(c) Erection	Yes*/No*	Yes*/No*
	(d) Commissioning	Yes*/No*	Yes*/No*

Sl.	Item	Plant 1	Plant 2
8.	No. of years of successful operation prior to date of techno-commercial bid opening	.....	.....
9.	The installation where the ventilation system has been provided can be treated as Industrial/commercial installation	Yes*/No*	Yes*/No*
10.	Documentary evidence with respect to item 5 to 8 above is enclosed	Yes*/No*	Yes*/No*
11.	Clients certificate regarding successful operation of ventilation system enclosed	Yes*/No*	Yes*/No*

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Note : Continuation sheets of like size and format may be used as per Sub-vendor's requirement and shall be annexed to this Attachment-3K.

Sub : Sub-Qualifying Requirements for the Compressed Air System stipulated in Clause No. 4.4.8 of Chapter 04, "Provenness" , Volume II of Technical Specification of Bidding Documents.

In line with the Sub-Qualifying Requirements stipulated in clause no. 4.4.8 of Chapter 04, "Provenness" , Volume II of Technical Specification of Bidding Documents, we have designed, manufactured, supplied, erected/supervised erection and commissioned/supervised commissioning of at least two (2) numbers non-lubricated oil free screw type air compressor of minimum capacity 40 NM3 /min each or at least two(2) numbers centrifugal air compressors of minimum capacity 50 NM3 /min each and at rated discharge pressure of 8 kg/cm2 (g) which have been in successful operation for at least two (2) years prior to the date of techno-commercial bid opening.

We have manufactured and supplied at least two (2) numbers Air Drying Plant each of capacity 40 NM3/min or more and the type same as offered, which have been in successful operation prior to the date of techno- commercial bid opening

S No.	Item	Plant 1	Plant 2
A) Air Compressor			
1.	Name of the Project and its address where the system is installed	.....	.....
2.	Name of the Client with address, name of Contact person(s) with tel.no. & fax no.	.....	.....
3.	Order No. and date		
4.	Purchase order enclosed	Yes/No	Yes/No
5.	Name of the Manufacturer & Address		
6.	Date of commissioning of the compressors		
7.	No. of Compressors supplied		

8. Whether the scope of work executed for the aforesaid compressors included the following

a) Designed	Yes/No	Yes/No
b) Supplied	Yes/No	Yes/No
c) Manufactured	Yes/No	Yes/No
d) Erected	Yes/No	Yes/No
e) Commissioned	Yes/No	Yes/No

S No.	Item	Plant 1	Plant 2
9.	Brief Technical particulars of the Compressors (Bidder to fill)		
	a) whether the compressor supplied was non lubricated oil free screw/centrifugal compressor		
	b) Make & Model		
	c) Capacity		
	i) Flow NM ³ /Min)		
	ii) Discharge pressure (Kg/cm ² /g)		
10.	Whether atleast two (2) compressor have been in successful operation for a period of not less than two (2) yeas prior to the date of techno-commercial bid opening		
11.	Whether documentary evidence in support of serial no 3) to 10) enclosed?	Yes/No	Yes/No
B)	Air Drying plant		
1.	Name of the Project and its address where the system is installed	.....	.....
2.	Name of the Client with address, name of Contact person(s) with tel.no. & fax no.	.....	.....
3.	Order No. and date		
4.	Purchase order enclosed	Yes/No	Yes/No
5.	Name of the Manufacturer & Address		
6.	Date of commissioning of the Air drying unit		

Sl.	Item	Plant 1	Plant 2
7.	No. of Air drying unit supplied		
8.	Whether the scope of work executed for the aforesaid Air drying unit included the following		
	a) Supplied	Yes/No	Yes/No
	b) Manufactured	Yes/No	Yes/No
9.	Brief Technical particulars of the Air Drying unit (Bidder to fill)		
	a) Type		
	b) Flow NM3/Min)		
10.	Whether at least two nos. air drying plants have been in successful operation prior to the date of techno-commercial bid opening.		
11.	Whether documentary evidence in support of serial no 3 to 10) enclosed?	Yes/No	Yes/No

- Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub-Qualifying Requirements for OF HYDROGEN GENERATION PLANT (as per clause 4.4.18 of Chapter 04, “Provenness” , Volume II of Bidding Documents

In line with the Sub-Qualifying Requirements stipulated in clause no. 4.4.18 of Chapter 04, “Provenness” , Volume II of Technical Specification of Bidding Documents, we have designed and supplied at least one (1) hydrogen generation plant of the type specified, comprising of electrolyser(s) and gas compressor(s) to generate Hydrogen at 5 NM³/hr (minimum) of 99.7% purity (minimum) at the main electrolyser outlet which has been in successful operation for at least two (2) years prior to the date of Techno-Commercial bid opening.

S No.	Item Description	
(i)	Name and Address of Hydrogen Generation Plant Supplier	
(ii)	Name and Address of the installation where above Hydrogen Generation Plant has been supplied	
(iii)	Date of Order for above Hydrogen Generation Plant	
(iv)	Date of Commissioning for above Hydrogen Generation Plant	
(v)	Capacity of above Hydrogen Generation Plant (for H ₂ Plant capacity not less than 5 NM ³ /hr)	
(vi)	Above Hydrogen Generation Plant comprise of Electrolyser and Gas Compressors with minimum Hydrogen purity of 99.7% at main electrolyser output	Yes*/No*
(vii)	Type of Hydrogen Generation Plant in the above installation	Bipolar
(viii)	Whether Bipolar Type of Hydrogen Generation Plant has been offered in the present contract	Yes
(ix)	Clients Certificate indicating at least one year successful operation of the plant prior to the date of techno-commercial bid opening	Yes* / No*

S No.	Item Description	
(x)	Scope included design and supply of Hydrogen Generation Plant	Yes* / No*

- Bidder to furnish documentary evidence in support of all the above information.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Qualification details for Water Pre-treatment Plant & Liquid Effluent Treatment Plant.

In terms of clause no. 4.4.9 of Chapter 04, "Provenness", Volume II, We/our sub-vendor confirm that, we have designed, supplied, erected and commissioned at least two (2) numbers of water/waste water treatment plants, each with a total capacity of 1500 M³/hr. (minimum), comprising of clarifiers/tube settlers/thickeners or a combination thereof including civil works. The plants should be in successful operation for at least Two (2) years prior to the date of Techno-commercial bid opening, as per following details:

- Sl. No.	Description	Plant 1	Plant 2
-			
1.	Name, Address & FAX/Phone No. of Client and Site/Plant		
2.	Contract number & date of award of Contract		
3.	Type of Treatment Plant	Water* / Waste Water* Treatment	Water* / Waste Water* Treatment
4.	Total Capacity of the Treatment Plant in Cum/hr.		
5.	Number of Clarifiers / tube settlers/ thickeners installed		
6.	Capacity of each Clarifiers/tube settler/thickeners installed (cu.m./hr.)		
7.	Total capacity of Clarifiers / tube settlers / thickness installed (cum/hr.)		
8.	Date of Commissioning of the plant		
9.	Is the plant operating successfully at present ?	Yes* / No*	Yes* / No*
10.	Number of years of successful operation prior to the date of bid opening		

- Sl. No.	Description	Plant 1	Plant 2
11.	In the above contract, Bidder's scope included :		
	(a) Design	Yes* / No*	Yes* / No*
	(b) Supply	Yes* / No*	Yes* / No*
	(c) Erection	Yes* / No*	Yes* / No*
	(d) Commissioning	Yes* / No*	Yes* / No*
	(e) Civil Works	Yes* / No*	Yes* / No*
12.	Whether Documentary evidence/ certificate in support of above data enclosed ?	Yes* / No*	Yes* / No*

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

ION EXCHANGE DEMINERASLISATION PLANT

In terms of clause no. 4.4.10 of Chapter 04, "Provenness" , Volume II, We/our sub-vendor confirm that, we have designed, supplied, erected and commissioned at least one (1) number of Ion exchange based demineralising plant, consisting of at least two (2) streams of minimum 40 M³/Hr capacity, capable of producing outlet water quality of silica and conductivity not more than 0.01 ppm as SiO₂ and 0.1 micro mho/cm respectively, which are in successful operation for at least Two (2) years prior to date of Techno-Commercial bid opening, as per following details:

Sl. No.	Description	Data
1.	Client's Name & address	
2.	Order No. & Date	
3.	Scope of Work (Strike out whichever is not applicable)	Design/ Supply/ Erection/ Commissioning
4.	Number of Ion Exchange based DM Streams	
5.	Capacity of each DM Stream (M ³ /hr)	
6.	Silica in effluent water (ppm) as SiO ₂	
7.	Conductivity of effluent water (micro mho/cm)	
8.	Date of commissioning of plant	
9.	No. of years of successful operation prior to date of techno commercial bid Opening?	Yes* / No*
10.	Documentary evidence for the above data are enclosed?	Yes* / No*

Date : (Signature).....
 Place : (Printed Name).....
 Designation).....
 (Common seal).....

Note : Continuation sheets of like size and format, may be used and annexed to this Schedule if required.

REVERSE OSMOSIS PLANT

In terms of clause no. 4.6.0.0 of Chapter 04, "Provenness", Volume II, We/our sub-vendor confirm that, we have designed, designed, supplied, erected and commissioned during the last ten years at least one number sea water reverse osmosis plant with a permeate water capacity of minimum 30 m³/ hour. which should have been in successful operation for a period of not less than one year as on date of LOA:

Sl. No.	Plant No. 1	Plant No. 2	Plant No. 3
1. Name of work	.....	.....	.....
2. Name & Address of the Client (Including contact person name, telephone no., Fax, e-mail etc)	.....	.....	.....
3. Order No. & Date award of Contract	.....	.....	.....
4. Name & Address of Installation where the RO Plants have been installed	.....	.....	.....
5. Capacity (Permeate flow) of Plant in cum/ hr	.....	.....	.....
6. Whether the above plant have been inlet feed as TDS \geq 500 ppm	Yes* / No*	Yes* / No*	Yes* / No*
7. Whether the above plant is capable of producing permeate water quality with TDs not more than 100ppm with inlet feed as TDS \geq 500ppm	Yes* / No*	Yes* / No*	Yes* / No*
8. Whether the above plant have inlet feed as sea water	Yes/No	Yes/No	Yes/No

Sl. No.	Plant No. 1	Plant No. 2	Plant No. 3	
9.	Whether the above Plant is capable of producing permeate water quality with TDS not more than 500ppm when Inlet is sea water.	Yes* / No*	Yes* / No*	Yes* / No*
10.	Whether scope of work in the above contract includes:			
	(a) Design	Yes* / No*	Yes* / No*	Yes* / No*
	(b) Supply	Yes* / No*	Yes* / No*	Yes* / No*
	(c) Erection	Yes* / No*	Yes* / No*	Yes* / No*
	(d) Commissioning	Yes* / No*	Yes* / No*	Yes* / No*
	(e) Supervision of commissioning	Yes* / No*	Yes* / No*	Yes* / No*
11.	Date of commissioning of the plant	.....	.....	.....
12.	Date of completion of plant	.....	.....	.....
13.	Number of years of successful operation prior to the date of techno-commercial bid opening	.....years	.....years	.....years
14.	Required documentary evidence in support of Sl. No. 1 to13 above is enclosed?	Yes* / No*	Yes* / No*	Yes* / No*

***Strike off whichever is not applicable.**

Date : (Signature).....

Place : (Printed Name).....
(Designation).....
.

(Common seal).....

MILL REJECT HANDLING SYSTEM

We, hereby furnish the data on provenness criteria for Mill reject handling system as per clause no. 4.4.11.1 of Chapter 04, "Provenness", Volume II which have been in successful operation in at least one (1) plant for a period not less than one year on date of bid opening. The details of type and minimum equipment rating of such equipment are given below :

S No.	Item Description	Station-I
(i)	Name of the station and its location	
(ii)	Client name and its address, Fax No. & Tel. No. – e-mail id – website address	
(iii)	Name and Designation of the responsible person in client's organisation	
(iv)	Name of manufacturer & address	
(v)	Contract No. & Date	
(vi)	Capacity in MW of each Unit	
(vii)	Starting date of work	
(viii)	Scheduled date of completion	
(ix)	Actual date of completion	
(x)	Date of Commissioning of system/Package	
(xi)	Whether the Mill Reject Handling System has been in successful operation for a period not less than one (1) year prior to date of techno-commercial bid opening	*Yes/*No

S No.	Item Description	Station-I
(xii)	Brief Technical Particulars of the system/Package/equipment :	
-	Type of system (Pneumatic)	*Yes/*No
-	Mill rejects conveying rate (TPH)	.....

(Applicable for Bidder/his sub vendors who is not a manufacturer of proven equipment as per clause no. 4.4.11 Chapter 04, "Provenness" , Volume II and seeking qualification as per clause no. 4.4.11.2, Chapter 04, "Provenness" , Volume II.)

We confirm that we are a manufacturer of pneumatic conveying systems and have manufactured and supplied pressure type pneumatic conveying system of capacity 5 TPH or higher which are in successful operation in at least one (1) plant for a period not less than one (1) year as on date of Techno-Commercial bid opening. We confirm that we* (or our proposed sub-vendor) have valid collaboration or licensing agreement for design, engineering, manufacture and supply with M/s who meet the requirements of Clause. no. 4. 4.11.2 Chapter 04, "Provenness" , Volume II. The details of type and minimum equipment rating of such equipment are given below :

S No.	Item Description	Station-I
A	PNEUMATIC CONVEYING SYSTEMS	
(i)	Name of the plant and its location	
(ii)	Client name and its address, Fax No. & Tel. No.	
	– e-mail id	
	– website address	
iii)	Name and Designation of the responsible person in client's organisation	
(iv)	Contract No. & Date	
(v)	Capacity in MW of each Unit, in case of power plant	
(vi)	Starting date of work	
(viii)	Scheduled date of completion	
(viii)	Actual date of completion	
(ix)	Date of Commissioning of system/Package	

- S.No.	Item Description	Station-I
(xi)	Whether the Mill pneumatic conveying System has been in successful operation for a period not less than one (1) year prior to date techno-commercial of bid opening	*Yes/*No
(xii)	Brief Technical Particulars of the system/Package/equipment :	
	- Type of system (Pneumatic)	.....
	- Material Handled and bulk density .	...../..... Kg/ Cubic.m
	- Conveying rate (TPH)	.....
	- Write-up on system enclosed	*Yes/*No
(xiii)	Collaborators name and address	.....
(xiv)	Copy of collaboration/ valid licencing agreement for mill reject handling system meeting the requirement stipulated at 4. 13.02, Chapter 04, "Provenness" , Volume II is enclosed as per Annexure-I to this Attachment	*Yes/*No

B. COLLABORATOR'S EXPERIENCE FOR MILL REJECT HANDLING

S No.	Item Description	Station-I
(i)	Name of the plant and its location	
(ii)	Client name and its address, Fax No. & Tel. No. - e-mail id - website address	
iii)	Name and Designation of the responsible person in client's organisation	
(iv)	Name of manufacturer & address	
(v)	Contract No. & Date	
(vi)	Capacity in MW of each Unit	
(vii)	Starting date of work	
(viii)	Scheduled date of completion	
(ix)	Actual date of completion	
(x)	Date of Commissioning of system/Package	
(xi)	Whether the Mill Reject Handling System has been in successful operation for a period not less than one (1) year prior to date of techno-commercial bid opening	*Yes/*No
(xii)	Brief Technical Particulars of the system/Package/equipment :	
	- Type of system (Pneumatic)	*Yes/*No
	- Mill rejects conveying rate (TPH)	.....

Date : (Signature).....
Place : (Printed Name).....
Designation).....
(Common seal).....

Applicable for Bidder/his sub vendors seeking provenness criteria as per clause no. 4.4.11.3, Chapter 04, "Provenness", Volume II.

We confirm that JV company*/subsidiary company* formed by one of our promoters of the Indian JV*/subsidiary company* formed for steam generator set has collaboration/valid licencing agreement for design, engineering, manufacturing of mill reject handling system in India, with the JV promoter who meets the requirement stipulated at clause 4. 4.11.3, Chapter 04, "Provenness", Volume II and details in respect of collaboration/ valid licencing agreement for the mill reject handling system is enclosed as per Annexure-I to this Attachment. The data in respect of provenness criteria for these equipment which are in successful operation in at least one (1) plant for a period not less than one year prior to the date of techno-commercial bid opening are furnished below.

S No.	Item Description	Station-I
(i)	Name of the plant and its location	
(ii)	Client name and its address, Fax No. & Tel. No.	
	– e-mail id	
	– website address	
iii)	Name and Designation of the responsible person in client's organisation	
(iv)	Name of manufacturer & address	
(v)	Contract No. & Date	
(vi)	Capacity in MW of each Unit	
(vii)	Starting date of work	
(viii)	Scheduled date of completion	
(ix)	Actual date of completion	
(x)	Date of Commissioning of system/Package	
(xi)	Whether the Mill Reject Handling System has been in successful operation for a period not less than one (1) year prior to date of techno-commercial bid opening	*Yes/*No

S No.	Item Description	Station-I
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(xii) Brief Technical Particulars of the system/Package/equipment :

- Type of system (Pneumatic) *Yes/*No
- Mill rejects conveying rate (TPH)

Date : (Signature).....

Place : (Printed Name).....

Designation).....

(Common seal).....

Sub : Sub-Qualifying Requirements for the Condensate Polishing Plant

A In terms of clause no. 4.4.12 of Chapter 04, "Provenness" , Volume II, We/our sub-vendor confirm that we have designed, supplied, erected and commissioned at least one (1) condensate polishing plant of mixed bed, deep bed type consisting of service vessel of minimum capacity of 500 m³/hr. The plant shall have external regeneration system, incorporating the same resin separation and regeneration process as proposed by the bidder/ its sub vendor for this package. The above plant should have been in successful operation for a period of at least one (1) year prior to date of Techno-Commercial bid opening as per following details:

Sl. No.	Description	Plant-I
1.	Name of Client	
2.	Location of the plant & address with name of contract person(s) with contract tel. & fax no.	
3.	Order No. and Date	
4.	Number and Capacity of Service Vessels (in M ³ /hr.) in the above plant	
5.	Whether bidder's scope included	
	(i) Design	Yes* / No*
	(ii) Supply	Yes* / No*
	(iii) Erection	Yes* / No*
	(iv) Commissioning	Yes* / No*
6.	Whether the above Condensate Polishing Plant have external regeneration system	Yes* / No*
7.	Process of resin separation and regeneration adopted in the above Condensate Polishing Plant (Bidder to describe)	

Sl. No.	Description	Plant-I
8.	Whether the process of resin separation and regeneration proposed for this package is same as that of the process adopted in the above Condensate Polishing Plant	Yes* / No*
9.	Date of Commissioning of the Condensate Polishing Plant	
10.	Number of years of successful operation of above Condensate Polishing Plant prior to the date of Techno-commercial Bid Opening	
11.	Whether Documentary evidence/ certificate(s) from client enclosed for the above data (for Sl. No. 1 to 10)	Yes* / No*

FORM OF JOINT DEED OF UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/SUB
VENDOR AND ITS ASSOCIATE/COLLABORATOR FOR PERFORMANCE OF
CONDENSATE POLISHING PLANT (CPU) PACKAGE
for 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana**

**(Applicable for Bidder/its Sub-Vendor
meeting the requirement**

Clause no. 4.4.12 of Chapter 04, "Provenness" , Volume II)

This DEED of JOINT UNDERTAKING executed this day of Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Associate/Collaborator", 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)/ its sub-vendor, which expression shall include its successors, administrators, executors and permitted assigns) HPGCL, a Government of Haryana undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "Owner" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Owner invited Bids for EPC Package for "1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana" vide its Bidding Document for design, engineering, supply, erection, testing and commissioning of complete Condensate Polishing Plant Package for hereinafter referred to as "Plant" vide its Bid Document No AND WHEREAS Clause no. 4.4.12 (b) Chapter 04, "Provenness" , Volume II, bidding documents stipulates that bidding is open to Bidder who is a Contractor in Water Treatment Plant and has executed at least one (1) no. Ion exchange based Demineralising Plant of minimum capacity of 60 Cum per hour consisting of maximum two (2) streams and associates/collaborates for this Bid with an Associate who in turn fully meets the requirements stipulated Clause no. 4.4.12 (a) of Chapter 04, "Provenness" , Volume II, in Bidding Documents.

AND WHEREAS M/s..... (Bidder) is entitled to bid under Clause no. 4.4.12 (b) of Chapter 04, "Provenness" , Volume II, provided the Bidder/ its sub-vendor (if applicable) and its qualified Associate / Collaborator give an undertaking that they shall be held jointly and severally responsible and bound unto the Owner for the successful performance of Condensate Polishing Plant as per the Bidding Documents in the event the bid is accepted by the Owner resulting in a Contract (hereinafter called the 'Contract') under the Condensate Polishing Plant Package.

WHEREAS M/s has submitted its proposal in response to the aforesaid Notice Inviting Tender/Invitation For Bids by the Owner bearing proposal No..... dated 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 above specifications.

AND WHEREAS M/s Bidder/ its sub-vendor (if applicable) do not meet the requirements of Clause no. 4.4.12 (a) of Sub Chapter 04, "Provenness", Volume II, and in order to fully meet the requirements Clause no. 4.4.12 (a) of Chapter 04, "Provenness", Volume II, desires to associate with M/s [hereinafter referred to as Associate] who meets the requirements of Clause no. 4.4.12 (a) of Chapter 04, "Provenness", Volume II and the Bidder/ its sub-vendor(if applicable) and the Associate are required to jointly execute and furnish an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound into the Owner for successful performance of the Condensate Polishing Plant under the Contract for which the Associate is associated for Condensate Polishing Plant Package of 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana as per Bid Documents, in the event the Bid is accepted by the Owner resulting in a Contract (hereinafter referred to as Contract).

NOW THEREFORE, THIS UNDERTAKING WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract by the Owner to the Contractor, we the aforesaid Associate/Collaborator 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 Condensate Polishing Plant under the Contract and establishing technical guarantees.
2. In case of any breach of the Contract committed by the Contractor, we the Associate/Collaborator do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Condensate Polishing Plant and undertake to carry our all the obligations and responsibilities under this deed of Joint undertaking 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, we the Associate/Collaborator & Contractor jointly and severally undertake to promptly indemnify, and pay such loss/damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

This is without prejudice to any rights of the Owner against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor, before proceeding against the Associate/Collaborator (with respect to obligations and responsibilities of the Associate/Collaborator covered under this Deed of Joint Undertaking), nor any extension of time would prejudice any rights of the Owner under this Joint Deed of Undertaking to proceed against the Associate/Collaborator & 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/Collaborator will be fully responsible for design, engineering & commissioning and extending all necessary support for putting in to satisfactory operation and carrying out the Guarantee Tests for Condensate Polishing Plant to the satisfaction of the Owner.

Further, the Associate/Collaborator shall depute their technical experts from time to time to the Contractor's works/Owner's project site as required by Owner and agreed to by the Contractor/Collaborator to facilitate the successful performance of the Condensate Polishing Plant as stipulated in the aforesaid Contract.

Further the Associate/Collaborator shall Provide support to Contractor to ensure proper design, manufacture, erection, testing, commissioning and successful performance of the Condensate Polishing Plant in accordance with the Contract specifications and if necessary, the Associate/Collaborator shall advise the Contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract.

- (b) In the event the Associate/Collaborator and Contractor fail to demonstrate successful performance of the Condensate Polishing Plant as set forth in paragraph 1 above, the Associate/Collaborator and the Contractor shall promptly carry out all the corrective measures at their own expense and shall promptly provide corrected designs to the Owner.
- (c) Implementation of the corrected designs and all other necessary repairs, replacements, rectifications or modifications to the Condensate Polishing Plant and payments of financial liabilities, penalties and any other obligations as provided under the Contract shall be the joint and several responsibilities of the Contractor and Associate/Collaborator.
- (d) The Associate/Collaborator will be fully responsible to extend the support to ensure the quality of all equipment/main assemblies/components manufactured at Contractor's works and/or Associates(s)/Collaborator(s) works and/or Vendor's works and/or fabricated/constructed at site, and their repairs or replacement if necessary for incorporation in the Condensate Polishing Plant under the Contract.

4. We, the Contractor and Associate/Collaborator do hereby undertake and confirm that the Undertaking shall be irrevocable and shall not be revoked till the expiry of defect liability period of the Plant under the Contract 1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna Nagar, Haryana and further stipulate that the Undertaking herein

contained shall terminate after ninety (90) days of satisfactory completion of such defect liability period. We further agree that this undertaking shall be without any prejudice to the various liabilities of the Contractor, including the Contract Performance Guarantees as well as other obligations of the Contractor in the terms of the Contract.

5. In case of Award, in addition to the Contractor Performance Security furnished by the Contractor, the Associate/Collaborator shall furnish "as Security" an on demand Performance Bank Guarantee, in favour of the Owner in a form acceptable to Owner as per provisions of the Bidding Documents. The value of such Bank Guarantee shall be equal to **INR 2.8 Million (Rupees Two Million Eight Hundred Thousand)** for the Contract signed between the Contractor, its sub-vendor and OWNER and it shall be towards guaranteeing 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 valid for entire period of Contract, i.e. till ninety (90) days beyond the end of the Defect Liability Period of the Condensate Polishing Plant Package under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by the period of such delay. The Bank Guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
6. Any dispute that may arise in connection with this Deed of Joint Undertaking shall be 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 and the Courts of Haryana shall have exclusive jurisdiction.
7. We, the Associate/Collaborator, the Contractor and its sub-vendor agree that this Undertaking shall be irrevocable and shall form an integral part of the Contract. We further agree that this Undertaking shall continue to be enforceable till the successful completion of Contract and till the Owner discharges it.
8. The Deed of Joint Undertaking (DJU) shall be submitted prior to the placement of order on the approved sub-vendor.

IN WITNESS WHEREOF, the Associate/Collaborator and the Contractor, through their authorised representatives, have executed these present and affixed common seals of their respective companies on the Day, Month and Year first mentioned above.

For M/s
(Associate/Collaborator)

Witness :

1.
(Name in Block Letters)

.....
(Signature of the authorised representative)

.....
(Official Address)

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

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

2.
(Name in Block Letters)

.....
(Signature of the authorised representative)

.....
(Official Address)

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

For M/s.....
(Sub-vendor)

3.
(Name in Block Letters)

.....
(Signature of the authorised representative)

.....
(Official Address)

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

Note: (1) Power of Attorney of the persons signing on behalf of Associate/ Collaborator and Bidder/its sub-vendor is to be furnished by the Bidder and to be attached with the signed Deed of Joint Undertaking.

(2) The bank Guarantee shall be from bank as per provisions of Section- V (SCC) of the Bidding Documents.

B. Details of Associate

In terms of clause no. 4.4.12 (b) of Chapter 04, "Provenness", Volume II, we confirm that, we are is a contractor in water treatment plant and has executed at least one (1) number Ion Exchange Based demineralising plant of minimum capacity of 60 M³/hr consisting of maximum two (2) streams and associates for this bid with an associate who in turn fully meets the requirements stipulated at 4.4.12 (a) above as per following details:

Sl. No.	Description	Plant-I
1.	Name of Client	
2.	Location of the plant & address with name of contact person(s) with contact tel. & fax. no.	
3.	Order No. and Date	
4.	Number of DM Stream(s) executed in the plant	
5.	Capacity of each stream (Cum/hr.)	
6.	Date of Commissioning of the DM Stream(s)	
7.	Whether Documentary evidence/ certificate(s) from client enclosed for the above data (for Sl. No.1 to 6)	Yes/No

Details of Associate :

In support of qualifying requirements of Clause 4.4.12 of Chapter 04, "Provenness" , Volume II of Technical Specification, we purpose to associate with M/s. We confirm that our Associate, have designed, supplied, erected and commissioned at least one (1) condensate polishing plant of mixed bed, deep bed type consisting of service vessel of minimum capacity of 500 m³/hr. The plant has external regeneration system, incorporating the same resin separation and regeneration process as proposed by for this package. The above plant is in successful operation for a period of at least one (1) year as on date of bid opening as per details below.

S No.	Description	Plant-I
1.	Name of Associate	
2.	Location of the plant & address with name of contact person(s) with contact tel. & fax. no.	
3.	Order No. and Date	
4.	Number and Capacity of Service Vessels (in Cum/hr) in the above Plant	
5.	Whether the scope of work included	
	a) Design	Yes/No
	b) Supply	Yes/No
	c) Erection	Yes/No
	d) Commissioning	Yes/No
6.	Whether the above Condensate Polishing Plant have external regeneration system	Yes/No
7.	Process of resin separation and regeneration adopted in the above Condensate Polishing Plant Associate to describe)	Yes/No

S No.	Description	Plant-I
8.	Whether the process of resin separation and regeneration proposed for this package is same as that of the process adopted in the above Condensate Polishing Plant	Yes/No
9.	Date of Commissioning of the Condensate Polishing Plant	
10.	Number of years of successful operation of above condensate Polishing plant prior to the date of Techno-commercial Bid opening	
11.	Whether Documentary evidence/ certificate(s) from client enclosed for the above data (for Sl. No. 3 to 12)	Yes/No
12.	Quality of Condensate at the outlet the Condensate Polishing Plant achieved/guaranteed	
	a) Sodium (ppb) as Na	
	b) Chloride (ppb) as Cl	
	c) Silica (ppb) as SiO ₂	
	d) Iron (ppb)	
	e) Crud	

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(For Qualification as per Clause 4.4.15 of Chapter 04, "Provenness" , Volume II)**

Bidder's Name & Address :
,
To
Chief Engineer (Projects)
HPGCL
Haryana

- 1.0 We are qualified under clause no. 4. 4.15.1 of Chapter 04, "Provenness" , Volume II of Bidding Documents.
- 2.0 We are a supplier of ash handling systems having executed ash handling systems involving design, engineering, manufacture, supply, erection and commissioning for the following systems:

We also confirm that the activity of design and engineering for the systems described 2.1(a), 2.1(b), 2.1(c) & 2.1 (d) of this Attachment- 3K have been carried out by us & not through external design agency/agencies. We also confirm that the activity of design and engineering for the system described in 4.0 of this attachment 3K have been carried out by us or through design agency/design agencies having experience for high concentration slurry disposal system.
- 2.1 (a) Bottom Ash Handling System
(i) Bottom Ash Handling system comprising a jet pump system in conjunction with water impounded Bottom Ash Hopper designed for the conveying capacity of 65 tonnes/hour (dry ash basis) or more per jet pump for pulverised coal fired boilers.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design conveying capacity per Jet pump (TPH) referred by client (Documentary evidence attached)	Offered Ash conveying capacity by bidder per Jet Pump (TPH)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of bid opening	Remarks
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- (i)
(ii)

- Note : (a) The reference Bottom Ash Handling System is of the same type i.e. jet pump system as is being offered by us for the present plant.
(b) Clients certificate enclosed in support of
(i) Details about above (Yes/No.)
(ii) Successful operation of above plants for at least two (2) years prior to the date of techno-commercial bid opening. (Yes/No.)

2.1(b) **Pneumatic Fly Ash Handling System**

2.1(b)(i) Pneumatic Fly ash handling system for conveying fly ash from electrostatic precipitators (ESPs) of a single pulverised coal fired boiler unit, by vacuum conveying system designed for 45 TPH or more conveying capacity per vacuum stream.

S No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design conveying capacity (TPH) specified by client (Documentary evidence attached)	Offered Ash conveying capacity by bidder (TPH)	Name of manufacturer (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
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(i)

(ii)

Note : (a) The reference Pneumatic Fly Ash Handling Systems are of the same type i.e. vacuum system as is being offered by us for the present plant.

(b) Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

2.1(b) Pneumatic Fly Ash Transportation System having capacity of not less than 80 TPH for conveying Fly Ash through blowers from a pulverised Coal fired boiler unit for a conveying distance of not less than 200 M including fly ash storage silos.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design Fly Ash transportation capacity (TPH) and conveying distance specified by client (Documentary evidence attached)		Offered Ash transportation capacity and conveying distance		Name of manufacturer (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
			Capacity TPH	Conveying distance M	Capacity TPH	Conveying distance M			

- (i)
- (ii)

Note : Clients certificate enclosed in support of

- (i) Details about above (Yes/No.)
- (ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Note : Clients certificate enclosed in support of

- (i) Details about above (Yes/No.)
- (ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

2.1 (d) Ash Slurry Disposal System

- (i) Complete ash slurry disposal system for handling not less than 150 tonnes of ash per hour for pulverised coal fired power stations which includes, among others, ash slurry pumps & piping system with associated controls.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design Ash slurry Disposal capacity (TPH) referred by client (Documentary evidence attached)	Offered Ash Slurry capacity (TPH)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of bid opening	Remarks
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- (i)
(ii)

- Note : (a) The reference Ash Slurry capacity is of the same type i.e. Ash slurry disposal capacity is being offered by us for the present plant.
(b) Clients certificate enclosed in support of
(i) Details about above (Yes/No.)
(ii) Successful operation of above plants for at least two (2) years prior to the date of techno-commercial bid opening. (Yes/No.)

3.0 We are qualified under clause 4.4.15 of Chapter 04, "Provenness" , Volume II of Bidding Documents.

3.1 We are a supplier of ash handling systems and have executed Ash Handling systems for pulverised coal fired boiler units generating not less than 65 TPH of ash per Boiler which includes bottom ash handling system comprising either a jet pump system in conjunction with water impounded Bottom Ash Hopper involving design and engineering / design and engineering through external agency/agencies, manufacture, supply, erection and commissioning for the following plants (Refer clause no. 4.4.15 of Chapter 04, "Provenness" , Volume II of bidding documents)

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Total Ash generation per boiler (T/Hr)	Total ash handling capacity (bottom+fly ash) (Tonnes/hour) per boiler	Type of Bottom Ash Handling System Supplied	Name of design and Engineering agency (Experience) list enclosed)	Name of manufacturer (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
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(i)

(ii)

Note : Client's certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

3.2 We are a supplier of ash handling systems and have executed ash handling plant for pulverised coal fired boiler unit, generating not less than 45 TPH per stream of ash per Boiler which includes fly ash handling system for conveying fly ash from ESPs in dry form (involving pneumatic conveying systems of vacuum or pressure type) or in wet (slurry) form involving design and engineering/design and engineer- ing through external agency/agencies, manufacture, supply, erection, and commissioning for the following plants (Refer clause no. 4. 4.15) of Chapter 04, "Provenness" , Volume II of bidding documents).

S No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Total Ash generation per boiler (T/Hr)	Total ash handling capacity (bottom+fly ash) (Tonnes/hour) per boiler	Type of fly Ash Handling System supplied	Name of design and Engineering agnecy (Experience) list enclosed)	Name of manufacturer (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
(i)									
(ii)									

Note : Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

BIDDER/HIS SUB-VENDOR TO FILL UP RELEVANT PORTION OF QUALIFICATION DATA FOR THE PORTION THE BIDDER/ HIS SUB-VENDOR IS MEETING THE QUALIFYING REQUIREMENT AS PER CLAUSE 4.4.15 OF CHAPTER - 4, "PROVENNESS" , VOLUME II OF BIDDING DOCUMENT.

4.0 We are a supplier of ash handling systems having executed ash handling systems involving design and engineering/ design and engineering through external agency/agencies, manufacture, supply, erection and commissioning for the following systems.

4.1(a) Bottom Ash Handling System

(i) Bottom Ash Handling system comprising a jet pump system in conjunction with water impounded Bottom Ash Hopper designed for the conveying capacity of 65 tonnes/hour (dry ash basis) or more per jet pump for pulverised coal fired boilers.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design conveying capacity per Jet pump (TPH) specified by Client (Documentary evidence attached)	Offered Ash conveying capacity by us per Jet Pump (TPH)	Name of the design and engineering agency (Experience list enclosed) (Clause 4.4.15.3 Chapter 04 Volume II of Bidding Document)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
---------	-----------------------------	---	--	---	---	--	--	---------

(i)

(ii)

Note : (a) The reference Bottom Ash Handling System is of the same type i.e. jet pump system as is being offered by us for the present plant.

(b) Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

4.1(b) **Pneumatic Fly ash handling system**

- (i) Pneumatic Fly ash handling system for conveying fly ash from electrostatic precipitators (ESPs) of a single pulverised coal fired boiler unit; by vacuum conveying system designed for 45 TPH per stream or more conveying capacity.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which System installed	Design conveying capacity (TPH) specified by Client	Offered Ash conveying capacity by us (TPH)	Name of the design and engineering agency (Experience list enclosed (clause no. 4.4.15.3 Chapter 04 Volume II Of bidding document	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
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(i)

(ii)

Note : (a) The reference Pneumatic Fly Ash Handling System is/are of the same type i.e. vacuum system as is being offered by us for the present plant/we are qualified as per 4.4.15 of Chapter 04, "Provenness" , Volume II of bidding documents and above pneumatic fly ash handling system is of the same type i.e. vacuum system as is being offered by us for the present plant (strike out whichever is not applicable).

Clients certificate enclosed in support of

- (i) Details about above (Yes/No.)
(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

4.1(c) Pneumatic Fly Ash Transportation System having capacity of not less than 90 TPH per stream for transporting Fly Ash from buffer Hoppers from buffers to silos for a Pulverised Coal fired boiler unit for a conveying distance of not less than 200 M including fly ash storage silos.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design Fly ash transportation capacity & conveying distance specified by Client		Offered Ash Transportation capacity & conveying distance		Name of the design and engineering agency (Experience list enclosed)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
			Capacity TPH	Conveying distance M	Capacity TPH	Conveying distance M.				
(i)										
(ii)										

Note : Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening. (Yes/No.)

4.1 (d) Complete ash slurry disposal system for handling not less than 150 tonnes of ash per hour for pulverised coal fired power stations which includes, among others, ash slurry pumps & piping system with associated controls

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which system installed	Design Ash slurry Disposal capacity (TPH) referred by client (Documentary evidence attached)	Offered Ash Slurry Disposal capacity (TPH)	Name of the design and engineering agency (Experience list enclosed)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of bid opening	Remarks
---------	-----------------------------	---	--	--	--	--	--	---------

(i)
(ii)

Note (a) Clients certificate enclosed in support of
 (i) Details about above (Yes/No.)
 (ii) Successful operation of above plants for at least two (2) years prior to the date of techno-commercial bid opening. (Yes/No.)

Date :

(Signature).....

Place :

(Printed Name).....

(Designation).....

(Common seal).....

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant,
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(Details of Qualification Experience of Collaborator(s) / Associate(s)) For Ash Handling System**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

1.0 Name(s) of the Collaborator(s)/Associate(s) :

- | | | | |
|----------|----------|----------|----------|
| 1. ----- | 2. ----- | 3. ----- | 4. ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |

1.0 (a) System(s) for which association/collaboration is made :

- | | | | |
|----------|----------|----------|----------|
| 1. ----- | 2. ----- | 3. ----- | 4. ----- |
|----------|----------|----------|----------|

1.2 M/s * (our Collaborator/Associate) are a supplier of ash handling systems having executed ash handling systems involving design, engineering, manufacture, supply, erection and commissioning for the following systems. We also confirm that the activity of design and engineering for the systems described in this Attachment-3K have been carried out by the Collaborator/Associate of the relevant systems, himself & not through external design agency/agencies.

*** Name of all Collaborator(s)/Associate(s).*

1.2 (a) **Bottom Ash Handling System**

- (i) Bottom Ash Handling System comprising a jet pump system in conjunction with water impounded Bottom Ash Hopper designed for the conveying capacity of 65 TPH (dry ash basis) or more per jet pump for pulverised coal fired boilers :

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which equipment installed	Design conveying capacity per Jet Pump (TPH) specified by Client	Offered Ash conveying capacity by our collaborator per Jet Pump (TPH)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
(i)							
(ii)							

Note : (a) The reference Bottom Ash Handling System is of the same type i.e. jet pump system as is being offered by us for the present plant.

(b) Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening (Yes/No.)

1.2(b) Pneumatic Fly Ash Handling System

- (i) Pneumatic fly Ash Handling System for conveying fly ash from electrostatic precipitators of single pulverised coal fired boiler unit by vacuum conveying system designed for 45 TPH or more conveying capacity per stream.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which equipment installed	Design conveying capacity (TPH) specified by Client	Maximum ash production rate of unit (TPH)	Offered Ash conveying capacity by our collaborator per vacuum extractor (TPH)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
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(i)

(ii)

Note : 1. The reference Pneumatic Ash Handling Systems are of the same type i.e. vacuum system, as is being offered by us for the present plant /we are qualified as per 4. **4.15** of Chapter 04, "Provenness" , Volume II and above pneumatic fly ash handling system is of the same type i.e. vacuum system as is being offered by us for the present plant (strike out whichever is not applicable).

2. Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening (Yes/No.)

1.2 (c) Pneumatic Fly Ash Transportation System having capacity of not less than 90 TPH per stream for Transporting Fly Ash from pulverised coal fired boiler unit for a conveying distance of not less than 200M. including fly ash storage silos.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which equipment installed	Design Fly ash transportation capacity & conveying distance specified by Client		Offered Ash Transportation capacity & conveying distance by Collaborator		Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
			Capacity TPH	Conveying distance M	Capacity TPH	Conveying distance M			

(i)

(ii)

Note : Clients certificate enclosed in support of

- (i) Details about above (Yes/No.)
- (ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening (Yes/No.)

1.2(d) Complete Ash Slurry Disposal system for handling not less than 150 TPH ash per hour for pulverised coal fired power stations, which includes, among others ash slurry pumps & piping system.

Sl. No.	Name of Plant with location	No. of Units with MW Capacity in which equipment installed	Total Quantity of ash handled (Tonnes/ Hour)	Scope of work along with scheme (Enclosed with bid)	Name of manufacturers (Experience list enclosed)	Date of Commissioning and No. of years in successful operation as on date of techno-commercial bid opening	Remarks
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(i)

(ii)

Note : Clients certificate enclosed in support of

(i) Details about above (Yes/No.)

(ii) Successful operation of above plants for at least two (2) years as on date of techno-commercial bid opening (Yes/No.)

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub-Vendor seeking qualification under clause no. 4. 18.2 of Chapter 04, "Provenness" , Volume II will fill up relevant portion of the above qualification data for which they collaborate(s)/associate(s) in this Attachment-3K and strike out which ever is not applicable.

FORM OF JOINT DEED OF UNDERTAKING

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE
ASSOCIATE/COLLABORATOR ALONG WITH THE BIDDER AND SUBVENDOR
FOR PERFORMANCE OF RELEVANT SYSTEM(S) OF
ASH HANDLING SYSTEM OF EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant, Yamuna nagar
(AS PER CLAUSE 4.4.15.1, Chapter 4, Volume II)**

This DEED of UNDERTAKING executed this..... day ofTwo thousand by M/sa Company incorporated under having its Registered Office at (hereinafter called the "Collaborator"/"Associate", 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 Sub vendor, 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, which expression shall include its successors, administrators, executors and permitted assigns) HPGCL, a Government of Haryana Undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "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** (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

And whereas WHERE AS 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**, against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW including design, engineering, manufacture, supply, transportation to site, installation, testing and commissioning (including trial operation and Performance & Guarantee tests) of the Ash Handling System consisting mainly of:-

- (a) a wet ash conveying system for ash collected in the boiler furnaces, economiser, and air preheaters, including treatment system for bottom ash overflow water.
- (b) a dry fly ash conveying system for the ash collected in electrostatic precipitators collection hoppers.
- (c) a dry fly transportation and storage system including dry fly ash storage silos for loading trucks.
- (d) Ash water supply system.

AND WHEREAS the bid documents stipulate that bidding is open to a bidder/sub vendor who meets the requirements of Clause No. 4.4.15, Chapter 4, Volume II of Bidding Documents, provided they collaborate(s)/associate(s) with a party(ies) who meets either the total requirement or the balance part under 4.4.15, Chapter 4, Volume II of Bidding Documents, which the Bidder/sub vendor himself is not able to meet.

AND WHEREAS M/s..... (Bidder/Sub vendor) itself meet the requirements specified in Clause No. 4.14.1.5.2, Chapter 4, Volume II and clause no..... "*"..... of Item No. 4.4.15.1, Chapter 4, Volume II of Bidding Documents and desire to associate/collaborate with M/s [hereinafter referred to as Collaborator/Associate] who meets the qualifying requirement as specified in Clause No..... "*"..... of Item No. 4.0 of Bid Data Sheets (BDS) of Bidding Documents referred to above AND WHEREAS as a pre-condition for submitting the bid in item of 4.4.15, Chapter 4, Volume II, the Bidder, Sub vendor and the Collaborator/Associate are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly responsible and bound unto the Owner for successful performance of the aforesaid relevant system(s) of Ash Handling System for which the Collaboration/Association has been entered into (hereinafter called "Relevant System(s) of Ash Handling System), fully meeting the parameters guaranteed for the Relevant System(s) as per the bid specifications, in the event the Bid is accepted by the Owner, resulting in a Contract (hereinafter called the "Contract").

NOW THEREFORE, THIS UNDERTAKING WITNESSTH AS UNDER :

1. That in consideration of the Award of the Contract by the Owner to the Bidder, we the aforesaid Associate/Collaborator , Bidder and Sub vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the Relevant System(s) of Ash Handling System

such that if fully meets the guaranteed parameters required as per the Contract specification.

2. In case of any breach of the Contract committed by the Bidder and Sub vendor, we the Associate/Collaborator do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Relevant System(s) of Ash Handling System and undertake in order to discharge the Bidder'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, we the Collaborator/ Associate jointly and severally undertake to promptly indemnify, and pay such loss/ damages caused to the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

"*" Please fill up Clause No. 4.4.15.1(a) and/or 4.4.15.1 (b) and/or 4.4.15.1 (c) and/or 4.4.15.1 (d) whichever is/are applicable.

This is without prejudice to any rights of the Owner against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Associate(s)/Collaborator(s), nor any extension of time would prejudice any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate/Collaborator.

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/Collaborator will be fully responsible for design, engineering, supply, installation, putting in to satisfactory operation and carrying out the guarantee tests for Relevant System(s) of Ash Handling System to the satisfaction of the Owner.

Further, the Associate/Collaborator shall depute their technical experts from time to time to the Bidder's/Sub vendor's works/Owner's project site as required by Owner and agreed to the Associate/Collaborator to facilitate the successful performance of the Relevant System(s) of Ash Handling System as stipulated in the aforesaid Contract.

Further the Associate/Collaborator shall ensure proper design, manufacture, installation testing and successful performance of the Relevant System(s) of Ash Handling System in accordance with the Contract specifications and if necessary the Collaborator/Associate shall advise the Bidder/Sub vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

- (b) In the event the Associate/Collaborator and Contractor fail to demonstrate successful performance of the Relevant System(s) of Ash Handling System as set forth in paragraph 1 above, the Associate/Collaborator and the Bidder/Sub vendor shall promptly carry out all the measures at their own expense and shall promptly provide corrected designs to the Owner.
 - (c) Implementation of the corrected designs and all other necessary repairs, replacements, rectifications or modifications to the Relevant System(s) of Ash Handling System and payments of financial liabilities, penalties and any other obligations as provided under the Contract shall be the joint and several responsibilities of the Bidder/Sub vendor and Associate(s)/Collaborator(s).
- 4. We, the Bidder/Sub vendor and Associate/Collaborator do hereby undertake and confirm that the Undertaking shall be irrevocable and shall not be revoked till the expiry of defect liability period of the plant under the Contract and further stipulate that the Undertaking herein contained shall terminate upon satisfactory completion of such defect liability period. We further agree that this undertaking shall be without any prejudice to the various liabilities of the Bidder, including the Contract Performance Guarantees as well as other obligations of the Bidder in the terms of the Contract.
- 5. The Bidder/Sub vendor and Associate/Collaborator will be fully responsible for the quality of all equipment/main assemblies/components manufactured at their works or at their Vendor's works or constructed at site, and their repairs or replacement if necessary for incorporation in the relevant system(s) of Ash Handling System equipment and timely delivery thereof to meet the completion schedule under the Contract.
- 6. In addition to the Contractor's Performance Bank Guarantee, the Associate/Collaborator shall furnish "as Security" the Performance Bank Guarantees, from any reputed commercial Bank in favour of the Owner in a form acceptable to Owner. The value of such Bank Guarantees shall be as per *4.4.15.2, Chapter 4, Volume II* and it shall be towards guaranteeing the faithful performance/compliance of this Deed of Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and valid for entire period of contract, i.e. till ninety (90) days beyond the end of the Defect Liability period of the EPC package. The Bank Guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
- 7. This Deed of Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.

8. We, the Associate/Collaborator , Bidder and sub vendor agree that this Undertaking shall be irrevocable and shall form an integral part of the Contract. We further agree that this Undertaking shall continue to be enforceable till the successful completion of Contract and till the Owner discharge it.
9. That this Deed shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Associate/Collaborator , Bidder and Sub vendor through their authorised representatives, have executed these present and affixed common seals of their respective companies on the Day, Month and Year first mentioned above.

For M/s
(Associate/Collaborator)

Witness :

1.

<p>..... (Name in Block Letters)</p> <p>..... (Official Address)</p>	<p>..... (Signature of the authorised representative)</p> <p>Name :</p> <p>Designation :</p> <p>Common Seal of the Company</p> <p>For M/s (Collaborator/Associate)</p>
--	--

2.

<p>..... (Name in Block Letters)</p> <p>..... (Official Address)</p>	<p>..... (Signature of the authorise representative)</p> <p>Name :</p> <p>Designation :</p> <p>Common Seal of the Company</p>
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For M/s.....
(Contractor)

3.
(Name in Block Letters)
(Signature of the authorise representative)

.....
(Official Address)
Name :
Designation :
Common Seal of the Company
.....

- Note: 1. Separate Joint Deed of Undertaking(s) for each Collaborator/Associate shall be submitted by the Bidder along with the bid.
2. The list of banks which are acceptable to OWNER for issuing Bank Guarantee is indicated in Annexure-I to SCC.

Schedule of Qualification Regarding Coal Sampling Unit

In conformity with the requirements specified under clause 4.4.16.4 Chapter 04, "Provenness" , Volume II of Coal Sampling system module, we have offered Coal Sampling System manufactured / supplied by M/s who has engineered and supplied two (2) nos. of Coal Sampling systems for sampling coal / other bulk mineral from conveyor of 1000 MTPH and above and working successfully for two (2) years as on date of Techno-Commercial bid opening. In support of the above, we furnish below following details.

a) Name of Coal Sampler supplier/manufacturer:

b) Experience and Details	Plant 1	Plant 2
i) Clients name and address		
ii) Year of commissioning		
iii) Nos. of Coal samplers supplied		
iv) Application (Power plant / mines etc.)		
- Lump size of coal		
- Suitable for belt width		
- Belt Capacity (TPH)		
v) Certificate from client enclosed	Yes/No	Yes/No

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(Experience List of Bidder)**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

Dear Sirs,

Sub : Sub-Qualifying Requirements for the Coal Handling Plant Package.

1. To satisfy the requirements of Item no. 4. 4.16 of Chapter 04, "Provenness" , Volume II
of

Bidding Documents, we furnish the following details :

* We M/s.....(Bidder/Sub-vendor) have filled in the requisite
Qualifying Requirement (QR) details in line with requirements of Clause No. 4.4.16.1
of Chapter 04, "Provenness" , Volume II of Bidding Documents in Attachment-3K which
establishes our meeting the QR.

* Sub-vendor to strike out whichever is not applicable.

I. Applicable to Sub-vendor meeting Sub-QR as per Clause No. 4.4.16.1 of Chapter 04, "Provenness", Volume II.

To satisfy the requirement of Clause No. 4.4.16.1 of Chapter 04, "Provenness", Volume II. We give below the details :

A. Qualifying Requirement details as per Clause 4.4.16.1 of Chapter 04, "Provenness", Volume II.

We confirm that we have designed, manufactured/ got manufactured, erected and commissioned at least two (2) integrated bulk material handling plants (essentially comprising of conveying and crushing) including all associated structural steel works and electrical works of minimum 1000 TPH rated capacity or above for coal of equivalent volumetric capacity which have been in successful operation in India for at least two (2) years prior to the date of Techno- Commercial bid opening. At least one (1) Wagon tippler and one (1) stacker cum reclaimers with 1000 TPH or more capacity have been supplied and commissioned in the above bulk material handling plants.

The details of the qualifying plant are as under :

1. Name of the client :
2. Complete address of Client :
with name of contact person(s),
e-mail, Fax and Tel No.
3. Name & Location of the Plant :
4. Contract / Order No. & Date :
5. Date of commissioning :
6. Conveying and crushing :
capacity (in Metric tonnes/hour)
7. Materials handled alongwith :
its bulk density
8. Whether the System is in operation :
as on date of Techno-commercial
bid opening Yes*/No*
9. No. of years of successful operation :
as on date of Techno-commercial bid opening

* Please strike out whichever is not applicable.

10. Whether bidder's/ Supplier's scope included
- | | |
|----------------------|----------|
| (a) Design | Yes*/No* |
| (b) Manufacturing | Yes*/No* |
| (c) Got Manufactured | Yes*/No* |
| (d) Erection | Yes*/No* |
| (e) Commissioning | Yes*/No* |
11. Whether the scope of work included all associated civil & structural steel and Electrical Works Yes*/No*
12. Client's certificate enclosed at Annexure..... to this Attachment-3K in support of :
- | | |
|---|----------|
| (i) Details sought at item Nos. 3 thru 11 above. | Yes*/No* |
| (ii) Successful operation of above Plant for at least one (1) year prior to date of techno-commercial bid opening | Yes*/No* |

* Please strike out whichever is not applicable.

(B) In accordance with clause no. 4.4.16.1 of Chapter 04, "Provenness" , Volume II, we have designed, manufactured, supplied, erected and commissioned including all associated structural steel works and electrical works of atleast two (2) numbers cantilever boom type, slewable and luffable, bucket wheel type travelling stacker-cum-reclaimer suitable for stacking and reclaiming at a rated continuous capacity of 1000/1000 Metric Tonnes per hour (or above) for coal or other mineral of equivalent volumetric capacity, which is in successful operation for atleast two (2) years as on date of Techno-commercial bid opening. The details of the qualifying plant are as follows :

1. Name of client with full address, contact person(s), Fax no. and Tel no.
2. Name & Location of the plant

3. Order no. and Date of order
4. Date of commissioning
5. Details of stacker/reclaimer
 - (a) Continuous rated Capacity
 - (i) Stacking (MTPH)
 - (ii) Reclaiming (MTPH) (average)
 - (b) Cantilever boom type, Slewable & luffable *Yes/No
 - (c) Bucket wheel type : * Yes/No
 - (d) Travelling type * Yes/No
 - (e) Boom Length (mtr.)
6. Material handled alongwith its bulk density
7. Whether work executed as prime contractor or sub-contractor
8. Whether system is in operation as on date of techno bid opening Yes*/No*
9. No. of years of successful operation as on date of Techno-commercial bid opening
10. Scope of work
 - (i) Whether bidder's scope included : *Yes/No
 - (a) Design : Yes/No
 - (b) Manufacturing : Yes/No
 - (c) Supply : Yes/No
 - (d) Erection : Yes/No

- (e) Commissioning : Yes/No
- (ii) Whether scope of work included all associated civil & structural steel and Electrical works : *Yes/No
- 11. Clients certificate enclosed at Annexure..... to this Attachment-3K in support of
 - (i) Details sought out item nos. 3 through 11 above : *Yes / No
 - (ii) Successful operation of above for atleast last two (2) years prior to date of techno-commercial bid opening : *Yes / No

* Strike out whichever is not applicable.

Date : Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

(C) In accordance with clause no. 4. 4.16.1 of Chapter 04, "Provenness" , Volume II, our Collaborator/Associate M/s_____ have designed, manufactured, supplied, erected and commissioned including all associated structural steel works and electrical works of atleast one (1) number cantilever boom type, slewable and luffable, bucket wheel type travelling stacker-cum-reclaimer suitable for stacking and reclaiming at a rated continuous capacity of 1000 TPH (or above) for coal or other mineral of equivalent volumetric capacity, which is in successful operation for atleast two (2) years as on date of Techno-commercial bid opening. The details of the qualifying plant are as follows :

1. Name of client with full address, contact person(s), Fax no. and Tel no.
2. Name & Location of the plant
3. Order no. and Date of order
4. Date of commissioning
5. Details of stacker/reclaimer
 - (a) Continuous rated Capacity
 - (i) Stacking (MTPH)
 - (ii) Reclaiming (MTPH) (average)
 - (b) Cantilever boom type, Slewable & luffable *Yes/No
 - (c) Bucket wheel type : * Yes/No
 - (d) Travelling type * Yes/No
 - (e) Boom Length (mtr.)
6. Material handled alongwith its bulk density
7. Whether work executed as prime contractor or sub-contractor
8. Whether system is in operation as on date of bid opening Yes*/No*
9. No. of years of successful operation as on date of techno-commercial bid opening

10. Scope of work
- (i) Whether bidder's scope included : *Yes/No
 - (a) Design : Yes/No
 - (b) Manufacturing : Yes/No
 - (c) Supply : Yes/No
 - (d) Erection : Yes/No
 - (e) Commissioning : Yes/No
 - (ii) Whether scope of work included all associated civil & structural steel and Electrical works : *Yes/No
11. Clients certificate enclosed at Annexure..... to this Attachment-3A-6 in support of
- (i) Details sought out item nos. 3 through 11 above : *Yes / No
 - (ii) Successful operation of above for atleast last two (2) years as on date of techno commercial bid opening : *Yes / No
12. Whether Deed of Joint Undertaking as per format enclosed in the Bidding Documents enclosed with the bid at Annexure..... to this Attachment-3K : *Yes / No

* Strike out whichever is not applicable.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

**FORM OF DEED OF JOINT UNDERTAKING
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE
COLLABORATOR / ASSOCIATE ALONGWITH THE CONTRACTOR FOR
COAL HANDLING PLANT FOR FORM OF JOINT DEED OF UNDERTAKING**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE
ASSOCIATE/COLLABORATOR ALONG WITH THE BIDDER AND SUBVENDOR
FOR PERFORMANCE OF INTERNAL COAL HANDLING PLANT OF EPC PACKAGE
FOR 1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
(AS PER CLAUSE 4. 4.16.1 OF Ch-04 PROVENNESS of VOL-II)**

This DEED of UNDERTAKING executed this..... day ofTwo thousand by M/sa Company incorporated under having its Registered Office at (hereinafter called the "Collaborator"/"Associate", 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 Sub vendor, 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, which expression shall include its successors, administrators, executors and permitted assigns) HPGCL, a Government of Haryana Undertaking incorporated under the Companies Act, 1956, having its Registered Office at Punchkula (hereinafter called "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** (hereinafter referred to as "Plant") vide its Bidding Document No. : 03/HPGCL/DCRTPP/EPC/800MW

And whereas WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Owner bearing proposal No..... dated for EPC Package for **1 x 800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant**, against the Owner's Bidding Documents No. 03/HPGCL/DCRTPP/EPC/800MW including design, engineering, manufacture, supply, transportation to site, installation, testing and commissioning (including trial operation and Performance & Guarantee tests) of the Internal Coal Handling Plant.

AND WHEREAS Clause 4.4.16, Chapter 4, Volume II of Bidding Documents stipulates that bidding is open to a bidder who meet the requirements stipulated in Clause 4.4.16.1, Chapter 4, Volume II and collaborates/associates with a firm who in turn fully meets the stipulated requirements as per Clause 4.4.16, Chapter 4, Volume II of Bidding Documents.

AND WHEREAS M/s..... (Bidder/Subvendor) himself does not meet the requirements of clause no. 4.4.16 , item 1.0.0 of Bid Data Sheets of Bidding Documents and hence desires to Collaborate/Associate with M/s..... (hereinafter referred to as Collaborate/Associate) who has designed, manufactured, supplied, erected and commissioned including all associated structural steel works and electrical works of at least one (1) number cantilever boom type, slewable and luffable, bucket wheel type travelling stacker-cum-reclaimer suitable for stacking and reclaiming at a rated continuous capacity of 1000/1000 Metric tonnes per hour (or above) for coal or other mineral of equivalent volumetric capacity which is in successful operation for at least two (2) years as on date of bid opening and as a pre condition for submitting the bid, the Bidder/Subvendor and the Collaborate/Associate are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking that they shall be held jointly and severally responsible and bound unto the Owner for successful performance of the relevant system (i.e. Stacker cum Reclaimer along with associated auxiliary equipment) to be designed, manufactured, supplied and installed under the EPC Package for **1 x 800 MW Super Critical Expansion Unit Deen Bandhu Chhotu Ram Thermal Power Plant** fully meeting the parameters guaranteed as per the Bidding Documents, in the event the Bid is accepted by the Owner resulting in a Contract (hereinafter called the "Contract").

NOW THEREFORE, THIS UNDERTAKING WITNESSETH AS UNDER :

1. That in consideration of the Award of the Contract by the Owner to the Bidder, we, the aforesaid Associate, Bidder and Sub vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the successful performance of the Stacker-Cum-Reclaimer and the associated auxiliary equipment and perform all the contractual obligations including the technical guarantees for the Stacker-cum-Reclaimer and the associated auxiliary equipment.
2. In case of any breach of the Contract committed by the Bidder/Sub vendor, we, the Collaborate/Associate, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Stacker-Cum-Reclaimer and associated auxiliary equipment and undertake to carry out all the obligations and responsibilities under the contract in order to discharge the Bidder's/Sub vendor/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, 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.

This is without prejudice to any rights of the Owner against the Bidder under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor before proceeding against the Associate, nor any extension of time or any relaxation given by the Owner to the Contractor would prejudice to any rights of the Owner under this Deed of Joint Undertaking to proceed against the Associate/Collaborator.

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 Collaborator/Associate will be fully responsible for design, manufacture, supply, erection, putting into satisfactory operation, commissioning and carrying out the guarantee tests as well as meeting all stipulated technical requirements and guaranteed parameters for Stacker-Cum-Reclaimer and the associated auxiliary equipment to the satisfaction of the Owner.

Further, the Collaborator/Associate shall depute their technical experts from time to time to the Bidder's/Sub vendor's works/Owner's project site as required by Owner and agreed to by the Contractor/Associate to facilitate the successful performance of the Stacker-Cum-Reclaimer and the associated auxiliary equipment as stipulated in the aforesaid Contract.

Further the Collaborator/Associate shall ensure proper design, manufacture, supply erection, testing and successful performance of the Stacker-Cum-Reclaimer and the associated auxiliary equipment in accordance with the specifications and stipulations of the Bidding Documents and if necessary the Associate shall advise the Bidder/Sub vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the Contract.

(b) In the event the Collaborator/Associate and Bidder/Sub vendor fail to demonstrate successful performance of the Stacker-Cum-Reclaimer and the associated auxiliary equipment as set forth in paragraph 1 above, the Collaborator/Associate and the Contractor shall promptly carry out all the measures at their own expense and shall promptly provide corrected designs to the Owner.

(c) Implementation of the corrected designs and all other necessary repairs, replacements, rectifications or modifications to the Stacker-Cum-Reclaimer and the associated auxiliary equipment and payments of financial liabilities, penalties and fulfilment of all other obligations as provided under the Contract shall be the joint and several responsibilities of the Contractor and Associate.

4. We, the Bidder/Sub vendor and Collaborator/Associate do hereby undertake and confirm that the Undertaking shall be irrevocable and shall not be revoked till the expiry of defect liability period of the Plant under the Contract and further stipulate that the Undertaking herein contained shall terminate after 90 days of satisfactory completion of such defect liability period. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this undertaking shall be without any prejudice to the various liabilities of the Bidder, including the Contract Performance Security as well as other obligations of the Bidder in terms of the Contract.
5. The Bidder/Sub vendor and Collaborator/Associate will be fully responsible for the quality of all equipment/main assemblies/components manufactured at their works or at their Vendor's works or fabricated/constructed at site, and their repairs or replacement, if necessary, for incorporation in the Stacker-Cum-Reclaimer and the associated auxiliary equipment and timely delivery thereof to meet the work schedule under the Contract.
6. In case of Award, in addition to the Contract Performance Security furnished by the Bidder, the Collaborator/Associate shall furnish "as Security" an on demand Performance Bank Guarantee in favour of the Owner in a form acceptable to Owner as per provisions of the Bidding Documents. The value of such Bank Guarantee shall be equal to INR 5 Million (Rupees Five million only) 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 valid for entire period of Contract, i.e. till ninety (90) days beyond the end of the Defect Liability period of the Coal Handling Plant Package under the Contract. In case of delay in completion of the defect liability period, the validity of this Bank Guarantee shall be extended by the period of such delay. The Bank Guarantee amount shall be promptly paid to the Owner on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Document. This Deed of Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
8. We, the Collaborator/Associate , Bidder and Sub vendor agree that this Undertaking shall be irrevocable and shall form an integral part of the Contracts. We further agree that this Undertaking shall continue to be enforceable till the successful completion of Contract and till the Owner discharge it.
9. That this Deed shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Collaborator/Associate, Bidder and Sub vendor, through their authorised representatives, have executed these present and affixed common seals of their respective companies on the Day, Month and Year first mentioned above.

For M/s
(Collaborator/Associate)

Witness :

1.
(Signatures)

.....
(Name & Official Address)

.....
(Signature of the authorised representative)

Name :

Designation :

Common Seal of the Company
.....

For M/s.....
(Sub vendor)

Witness :

1.
(Signatures)

.....
(Name & Official Address)

.....
(Signature of the authorised representative)

Name :

Designation :

Common Seal of the Company
.....

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

Witness :

1.
(Signatures)

.....
(Name & Official Address)

.....
(Signature of the authorised representative)

Name :

Designation :

Common Seal of the Company
.....

Note : * Bidder and his Collaborator/Associate to strike out whichever is not applicable.

Sub : Sub-Qualifying Requirements for the Fuel Oil System

In order to satisfy the requirement of bidder/sub vendor's experience, as indicated in Technical Specification clause no. 4.4.17 Chapter 04, "Provenness" , Volume II, we declare that we, M/s..... have designed, supplied, erected and commissioned at least one (1) no. of Fuel Oil Handling installation consisting of : -

(a) Unloading facilities

(b) One (1) No. of storage tanks of capacity not less than 500 M³

The details are given below :

Sl. No.	Description	Station-I	Station-II
-			
1.	Name and address of manufacturer		
2.	Client's Name & its address		
3.	Name & Location of the Plant		
4.	Contract / Order No. & Date		
5.	Date of commissioning		
6.	Capacity of storage tank	..... Cu.M	
7.	No. of above said storage tank		
8.	Scope of the work for the aforesaid contract including		
(i)	Design	Yes*/No*	
(ii)	Supply	Yes*/No*	
(iii)	Erection	Yes*/No*	
(v)	Commissioning	Yes*/No*	
(vi)	Date of commencement of successful operation		

Sl. No.	Description	Station-I	Station-II
	(vii) No. of years in successful operation prior to date of techno-commercial bid opening		
9.	Client's certificate(s) enclosed as Annexure..... to this Attachment-3K		

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

* Strike out whichever is not applicable.

CRITICAL EQUIPMENT, AUXILIARIES, SYSTEMS & BOUGHT OUT ITEMS FOR FLUE GAS DESULPHURISATION (FGD) SYSTEM

Summary of Critical Equipment indicated under clause 4.4.20, Chapter 4, Volume II.

Equipment Name	Sub Vendor Name	Collaborator's Name (If Applicable)	Seeking Qualification as per Clause ----, Chapter 4, Volume II.
Slurry Recirculation Pumps			4.4.20.2/4.4.20.6/4.4.20.7
Oxidation Blowers			4.4.20.2/4.4.20.3/4.4.20.7
Wet limestone Grinding mills			4.4.20.2/4.4.20.4/4.4.20.7
Slurry Pumps			4.4.20.2/4.4.20.6/4.4.20.7
Agitators			4.4.20.2/4.4.20.5/4.4.20.7
Vacuum Belt filters			4.4.20.2/4.4.20.7

- 1 *If qualification sought as per clause 4.4.20.1 then the details of the sub vendor (manufacturer) shall be filled by the bidder in the format A to F.
- 2 If the qualification sought as per the clause 4.4.20.2, then the details of JV/Subsidiary Company formed for manufacturing of such Equipment in India shall be furnished individually for each equipment by the bidder such as,
 - i) Copy of document of incorporation of JV/Subsidiary company in India
 - ii) Copy of collaboration or valid licensing agreement for design, engineering, manufacturing, supply of such equipment in India with the collaborator or technology licensor who meets the requirement stipulated at 4.4.20.1.
 - iii) Copy of document of at least 26% equity participation of qualified equipment manufacturer in the Indian JV company/subsidiary company directly or indirectly through its holding company /Subsidiary company, which shall be maintained for a lock -in period of seven (7) years from the date of incorporation of such JV/subsidiary or up to the end of defect liability period of the contract which ever is later.

Further, the details of collaborator or technology licensor or technology provider of the qualified equipment manufacturer who meets the requirement stipulated at 4.4.20.1,

Chapter 4 , Volume II shall be filled by the Bidder in the format A to F (format given at 1.00.00). In addition to that, the sub vendor along with the Indian JV company/subsidiary company, qualified equipment manufacturer and its holding company/subsidiary company as applicable shall furnish the DJU.

*** strike out whichever is not applicable.**

1.00.00 (Applicable for Bidder/his sub vendors seeking qualification as per clause no. 4.4.20.1, Chapter 4 , Volume II. Bidder shall furnish the required data only for those Equipment / auxiliaries which are proposed to be sourced under this route.)

We, hereby furnish the data on proveness criteria for critical equipment, auxiliaries, systems and Bought Out Items such as Slurry Recirculation Pumps, Oxidation Blowers, Wet Limestone Grinding Mills, Slurry Pumps, & Agitators which have been designed (either by self manufacturer or under Collaboration/Licencing Agreement), *manufactured/ *got manufactured and supplied by us /Manufacturer (or manufactured/ got manufactured & supplied by our proposed sub-vendors) and these are in successful operation in at least one (1) plant for a period not less than one year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder. The details of type and minimum equipment rating of such equipment are given below:

A. Slurry Recirculation Pumps: We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Slurry Recirculation Pumps of minimum 80% of the flow & 100% of the head of the offered Slurry Recirculation Pump, Centrifugal type working in a Wet Limestone based FGD application in Coal fired power plant and which has been in successful operation for minimum one (1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below:

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	No. of units and capacity in MW of unit	
4	Whether operating in a Wet Limestone based FGD application in Coal fired power plant - *Yes/*No	
5	Name of equipment manufacturer & address	
6	Date of commission of the Equipment:	
7	Model no. of the equipment:	
8	Brief Technical particulars of the Equipment	

S.No.	Description	Reference Work
9	Flow- .....m ³ /h	
10	Head- meters of liquid column	
11	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder - *Yes/*No	
12	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any document in public domain enclosed at annexure....to Attachment-3K
13	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
14	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

* Strike off whichever is not applicable.

B. Oxidation Blowers: We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Oxidation Blower of minimum 80% of the flow & 100% of the head of the offered Oxidation Blower, Centrifugal/positive displacement type working in FGD application in Coal fired power plant and which has been in successful operation for minimum one (1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below:

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	No. of units and capacity in MW of unit	
4	Whether power plant is coal fired	*Yes/*No
5	Whether operating in a Wet Limestone based FGD application in Coal fired power plant	*Yes/*No
6	Name of equipment manufacturer & address	
7	Date of commission of the Equipment:	
8	Model no. of the equipment:	
9	Brief Technical particulars of the Equipment	
10	Flow- .....m ³ /h	
11	Head- meters of liquid column	
12	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder	*Yes/*No
13	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any ocument in public domain enclosed at annexure....to Attachment3K
14	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
15	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

C. Wet limestone Grinding mills: We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Wet limestone Grinding mill of minimum 80% of the offered Ball mill capacity with pulverizing fineness not less than 90% thru 325 mesh, working in Wet limestone based FGD application in Coal fired power plant and which has been in successful operation for minimum one(1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below:

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	Whether power plant is coal fired	*Yes/*No
4	Whether operating in a Wet Limestone based FGD application in Coal fired power plant	*Yes/*No
5	Name of equipment manufacturer & address	
6	Date of commission of the Equipment:	
7	Model no. of the equipment:	
8	Brief Technical particulars of the Equipment	
9	Capacity	----- TPH with pulverizing fineness not less than 90% thru 325 mesh
10	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder	*Yes/*No
11	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any ocument in public domain enclosed at annexure....to Attachment3K
12	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
13	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

* Strike off whichever is not applicable.

D. Slurry Pumps: We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Slurry Pump of minimum 80% of the flow & 100% of the head of the offered Slurry Pump(s), Centrifugal type working in Wet Limestone based FGD application or ash slurry application in coal fired power plant and which has been in successful operation for minimum one (1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below:

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	No. of units and capacity in MW Unit	*Yes/*No
4	Whether operating in a Wet Limestone based FGD application in Coal fired power plant or similar process/ duty application	*Yes/*No
5	Whether operating in a similar process/ duty application	*Yes/*No (Indicate Industry Type)
6	Name of equipment manufacturer & address	
7	Date of commission of the Equipment:	
8	Model no. of the equipment:	
9	Brief Technical particulars of the Equipment	
10	Flow	----- m ³ /h
11	Head	----- metres of liquid column
12	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder	*Yes/*No
13	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any ocument in public domain enclosed at annexure....to Attachment3K
14	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
15	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

* Strike off whichever is not applicable.

E. Agitators: We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Agitators with rating not less than that supplied for 500 MW or higher size unit for similar application, Vertical/Horizontal type working in Wet Limestone based FGD application in Coal fired power plant and which has been in successful operation for minimum one(1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below::

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	No. of units and capacity in MW Unit	
4	Whether power plant is coal fired	*Yes/*No
5	Whether operating in a Wet Limestone based FGD application in Coal fired power plant	*Yes/*No
6	Name of equipment manufacturer & address	
7	Date of commission of the Equipment:	
8	Model no. of the equipment:	
9	Brief Technical particulars of the Equipment	
10	Agitators supplied for	.....MW Unit size
11	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder	*Yes/*No
12	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any ocument in public domain enclosed at annexure....to Attachment3K
13	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
14	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

F. **Vacuum Belt filters:** We declare that, we/our Sub-Vendor, have manufactured and supplied at least one (1) number of Vacuum Belt filter of minimum 80% of the offered Vacuum Belt filter capacity , Belt type, working in Wet Limestone based FGD application in Coal fired power plant and which has been in successful operation for minimum one(1) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder, as per the details furnished below:

S.No.	Description	Reference Work
1	Name of the reference plant & location:	
2	Client name and his address:	
3	No. of units and capacity in MW Unit	
4	Whether power plant is coal fired	*Yes/*No
5	Whether operating in a Wet Limestone based FGD application in Coal fired power plant	*Yes/*No
6	Name of equipment manufacturer & address	
7	Date of commission of the Equipment:	
8	Model no. of the equipment:	
9	Brief Technical particulars of the Equipment	
10	Capacity	.....TPH
11	Whether the equipment(s) are in successful operation in atleast one (01) plant for a period not less than one(01) year reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder	*Yes/*No
12	Flue gas Desulphurization system details:	*Technical extract/ *paper letter/ *email/ *Drawing from user or *contract document or *scheme or *any ocument in public domain enclosed at annexure.....to Attachment3K
13	Scope of Work:	*Letter of Award or *Contract or *P.O. enclosed at Annexure.....to Attachment-3K
14	Performance details:	*Certificate/*Letter/*Email from End user enclosed at Annexure.....to Attachment-3K

***2.00.00** **Applicable for JV Company/Subsidiary Company meeting provenness criteria as per clause no. 4.4.20.2, Chapter 4 Volume II.**

2.01.00 We, hereby confirm that JV company/ Subsidiary company (Strike off whichever is not applicable) formed for manufacturing and supply of equipment(s) (*Slurry Recirculation Pumps, *Oxidation Blowers, *Wet Limestone Grinding Mills, *Slurry Pumps, *Agitators) has a valid collaboration or licensing agreement for design, engineering, manufacturing of such equipment(s) in India with a qualified equipment manufacturer who meets the requirements stipulated at clause 4.26.1 of subsection-IA, Part-A, Section VI of bidding documents (or the technology provider of the qualified equipment manufacturer). Further, in such a case, such qualified equipment manufacturers is having, directly or indirectly through its holding company/subsidiary company, at least 26% equity participation in the Indian Joint Venture Company/subsidiary company, which shall be maintained for a lock-in period of seven (7) years from the date of incorporation of such Joint Venture / Subsidiary or up to the end of defect liability period of the contract, whichever is later. Further, JV / Subsidiary Company (Strike off whichever is not applicable) before resorting to design, engineering, manufacturing of such proven equipment(s) (*Slurry Recirculation Pumps, *Oxidation Blowers, *Wet Limestone Grinding Mills, *Slurry Pumps, *Agitators) by himself should *have sourced /*shall source such proven equipment(s) (*Slurry Recirculation Pumps, *Oxidation Blowers, *Wet Limestone Grinding Mills, *Slurry Pumps, *Agitators) for at least the first 800 MW unit completely from such qualified manufacturer. For subsequent units before taking up the manufacturing of such equipment(s) (*Slurry Recirculation Pumps, *Oxidation Blowers, *Wet Limestone Grinding Mills, *Slurry Pumps,*Agitators), the *we/ *our sub vendor(s) *will create /*have created manufacturing facilities at his works as per collaborator's/licenser's design, manufacturing and quality control system.

In addition, the Bidder along with the Indian *Joint Venture Company/ *Subsidiary Company, qualified equipment manufacturers and its holding/ subsidiary Company, as applicable, shall furnish DJU in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed.

***3.00.00** **Applicable for Bidder/his sub vendors seeking provenness criteria as per clause no. 4.4.20.3, Chapter 4, Volume II.**

3.01.00 We, hereby confirm that *we/*our sub-vendors is a manufacturer of Blowers/compressors for minimum 50 NM³/min capacity. (Details of references enclosed at Annexure)
(Data to be furnished in line with format given at 1.00.00 of this Attachment)

3.02.00 We further confirm that details in respect of collaboration / valid licencing agreement for the Oxidation Blower between *us/*our sub-vendors, as per 3.01.00 above, and with qualified Oxidation Blower manufacturer, who meets the requirement stipulated at clause **4.4.20.1**, Chapter 4, Volume II are enclosed as per **Annexure.....** to this Attachment. The data in respect of provenness criteria for the qualified Oxidation Blower manufacturer, which are in successful operation in at least one (1) plant for a period not less than one reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder are furnished below. We further confirm that we/ our sub vendor(s) have created manufacturing and testing facilities at our/ their works as per collaborator's/ Licensor's design, manufacturing & quality control system for the Oxidation Blowers.

Further, *we/*our sub-vendors before resorting to design, engineering, manufacturing of Oxidation Blower by itself *have sourced /*shall source Oxidation Blower for at least the first 800 MW unit completely from such qualified manufacturer who meets the requirement

stipulated at clause **4.26.1**, sub-section-IA, Part-A, Section-VI. We further confirm that we/ our sub vendor(s) for subsequent units before taking up the manufacturing of such Oxidation Blower *we/ *our sub vendor(s) *will create /*have created manufacturing facilities at his works as per collaborator's/licenser's design, manufacturing and quality control system. In addition, the Bidder along with the Indian *Joint Venture Company/ *Subsidiary Company, qualified equipment manufacturers and its holding/ subsidiary Company, as applicable, shall furnish DJU in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed.

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

4.00.00 **Applicable for Bidder/his sub vendors seeking provenness criteria as per clause no. 4.4.20.4, Chapter 4, Volume II.**

4.01.00 We, hereby confirm that *we/*our sub-vendors is a manufacturer of Dry Grinding Mills for minimum 20 T/h capacity. (Details of references enclosed at Annexure)
(Data to be furnished in line with format given at 1.00.00 of this Attachment))

4.02.00 We further confirm that details in respect of collaboration / valid licencing agreement for the Wet Grinding Mills between *us/*our sub-vendors, as per 4.01.00 above, and with qualified Wet Grinding Mill manufacturer, who meets the requirement stipulated at clause **4.4.20.1**, Chapter 4, Volume II are enclosed as per **Annexure-I** to this Attachment. The data in respect of provenness criteria for the qualified Wet Grinding Mill manufacturer, which is in successful operation in at least one (1) plant for a period not less than one reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder are furnished below.

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

Further, *we/*our sub-vendors before resorting to design, engineering, manufacturing of Wet Grinding Mill by itself *have sourced /*shall source Wet Grinding Mill for at least the first 800 MW unit completely from such qualified manufacturer who meets the requirement stipulated at clause **4.4,20,1**, Chapter 4, Volume II. We further confirm that we/ our sub vendor(s) for subsequent units before taking up the manufacturing of such Wet Grinding Mill, *we/ *our sub vendor(s) *will create /*have created manufacturing facilities at his works as per collaborator's/licenser's design, manufacturing and quality control system.

In addition, the Bidder along with our sub-vendors, as per 4.01.00 above (if applicable) and the qualified Wet Grinding Mill manufacturer and its holding/ subsidiary Company, as applicable, shall furnish DJU in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed.

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

***5.00.00** **Applicable for Bidder/his sub vendors seeking provenness criteria as per clause no. 4.4.20.5, Chapter 4, Volume II.**

5.01.00 We, hereby confirm that *we/*our sub-vendors is a manufacturer of a manufacturer of Agitators for similar process/duty application in petrochemical or metals and mining industry. (Details of references enclosed at Annexure)

(Data to be furnished in line with format given at 1.00.00 of this Attachment))

5.02.00 We further confirm that details in respect of collaboration / valid licencing agreement for the Agitator between *us/*our sub-vendors, as per 5.01.00 above, and with qualified Agitator manufacturer, who meets the requirement stipulated at clause **4.4.20.1**, Chapter 4, Volume III are enclosed as per **Annexure-.....** to this Attachment. The data in respect of proveneness criteria for the qualified Agitator manufacturer, which is in successful operation in at least one (1) plant for a period not less than one reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder are furnished below.

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

Further, *we/*our sub-vendors before resorting to design, engineering, manufacturing of Agitator by itself *have sourced /*shall source Oxidation Blower for at least the first 800 MW unit completely from such qualified manufacturer who meets the requirement stipulated at clause **4.4.20.1**, Chapter 4, Volume II. We further confirm that we/ our sub vendor(s) for subsequent units before taking up the manufacturing of such Agitator, *we/ *our sub vendor(s) *will create /*have created manufacturing facilities at his works as per collaborator's/licenser's design, manufacturing and quality control system.

In addition, the Bidder along with our sub-vendors, as per 5.01.00 above (if applicable) and the qualified Agitator manufacturer and its holding/ subsidiary Company, as applicable, shall furnish DJU in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed.

***6.00.00 Applicable for Bidder/his sub vendors seeking provenness criteria as per clause no. 4.4.20.6, Chapter 4, Volume II.**

6.01.00 We, hereby confirm that *we/*our sub-vendors is a manufacturer of a manufacturer of Slurry Pumps who meets the requirements stipulated at clause 4.4.20.1 (d), Chapter 4, Volume II,

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

6.02.00 We further confirm that details in respect of collaboration / valid licencing agreement for the Slurry Recirculation Pumps, between *us/*our sub-vendors, as per 6.01.00 above, and with qualified Slurry Recirculation Pump manufacturer, who meets the requirement stipulated at clause **4.26.1**, sub-section-I, Part-A, Section-VI are enclosed as per **Annexure-.....** to this Attachment. The data in respect of provenness criteria for the qualified Slurry Recirculation Pump manufacturer, which is in successful operation in at least one (1) plant for a period not less than one reckoned as on the date of consideration for approval but not later than six months to award date of contract to the Main bidder are furnished below.

(Data to be furnished in line with format given at 1.00.00 of this Attachment)

Further, *we/*our sub-vendors before resorting to design, engineering, manufacturing of Slurry Recirculation Pumps by itself *have sourced /*shall source Oxidation Blower for at least the first 800 MW unit completely from such qualified manufacturer who meets the requirement stipulated at clause **4.4.20.1**, Chapter 4, Volume II. We further confirm that we/ our sub vendor(s) for subsequent units before taking up the manufacturing of such Slurry Recirculation Pumps, *we/ *our sub vendor(s) *will create /*have created manufacturing facilities at his works as per collaborator's/licenser's design, manufacturing and quality control system.

In addition, the Bidder along with our sub-vendors, as per 6.01.00 above (if applicable) and the qualified Slurry Recirculation Pumps manufacturer and its holding/ subsidiary Company, as applicable, shall furnish DJU in which executant of the DJU shall be jointly and severally liable for the successful performance of the equipment as per the format enclosed

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
BIDDING DOCUMENT NO 03/HPGCL/DCRTPP/EPC/800MW
[Qualifying applicable]**

**DETAILS OF PROVENNESS OF THE OFFERED GENERATOR AS PER CLAUSE NO.
4.20 Chapter 04, "Provenness" , Volume II OF BIDDING DOCUMENTS**

	- Reference Generator	Offered Generator
(a)	Name of the Station and its Location	
(b)	Client Name and its Address, Fax and Tel. No.	
(c)	Name and Designation of the responsible person in Client's Organisation	
(d)	Contract No. & Date (e) Date of commissioning	
(f)	Date of commencement of successful operation	
(g)	Generator Make	
(h)	Model No.	
(i)	MVA Rating	
(j)	MW Rating	
(k)	Rated Voltage	
(l)	Cooling Medium (e.g. Water, hydrogen etc)	
	(i)	Stator Core
	(ii)	Stator Winding
	(iii)	Rotor

	- Reference Generator	Offered Generator
(m)	Number of shaft mounted fans	
(n)	Thermal Class of Insulation	
	(i) Stator	
	(ii) Rotor	
(o)	Type of Excitation System	
(p)	Details of Core & Core support system (e.g. Spring type/Rigid type etc.)	
(q)	Factory /Works where the Generator rating equal to 500MW or more was manufactured, assembled & tested	
(r)	Factory/works where the offered generator is proposed to be manufactured, assembled and tested	
(s)	Latest/recent certificate from client that the generator with above technical parameters is in successful operation for a	

	- Reference Generator	Offered Generator
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minimum period of one (1) year prior to the date of Techno-Commercial Bid opening (actual time period to be mentioned) and caused no serious problem in past, is enclosed at Annexure.... to this Attachment-3K

- (t) List of above Generators (with date of supply) already manufactured, assembled & tested in the factory/works mentioned at S.No.(s) above is enclosed at Annexure.... to this Attachment-3K

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW
(Experience List of the Bidder/Sub-vendor)**

Bidder's Name & Address : To
Chief Engineer (Projects)
HPGCL
Haryana

- (A) We meet the Qualification Requirements / Provenness data (as applicable) for Isolated Phase Busduct as per clause no. 5.1.1 of Chapter 04, "Provenness" , Volume II.

We / our sub-vendor have designed, manufactured, type tested, supplied, erected/ supervised erection and commissioned/ supervised commissioning of Isolated phase busduct for a turbo-generator of atleast 200 MW, which is in successful operation for a period of not less than two (2) years prior to the date of techno-commercial bid opening, as per details given below :

- a) Name of the Plant and Its Location :
- b) Client's name, his address with Fax No. :
- c) Rating of Turbo Generator (MW) :
- d) Number of Units :
- e) Bus duct rating (in KV & KA) :
- f) Brief Scope of work :
- g) Date of Award of Contract :
- h) Value of Order :
- i) Date of Commissioning :

- j) No. of years in successful operation prior to the date of Techno-commercial Bid Opening :
- k) Certificate from client in support of above i.e. from (a) to (j) including capacity of Turbo Generator, Busduct Rating, year and month of Commissioning, period of successful operation and that the above Isolated Phase bus duct installed by us have caused no serious problem in the past, is furnished with our bid proposal at Annexure.....

(B) We meet the Qualification Requirements / Provenness data (as applicable) for Isolated Phase Bus duct as per clause no. 5.1.2 of Chapter 04, "Provenness" , Volume II.

We / our sub-vendor have designed, manufactured, type tested, supplied, erected/supervised erection and commissioned/ supervised commissioning of Isolated Phase Busduct for a turbo-generator of at least 200MW, which have been in successful operation for a period of not less than two (2) years prior to the date of Techno Commercial bid opening as per details given below :

- a) Name of the Plant and Its Location :
- b) Client's name, his address with Fax No. :
- c) Rating of Turbo Generator (MW) :
- d) Number of Units :
- e) Bus duct rating (in KV & KA) :
- f) Brief Scope of work :
- g) Date of Award of Contract :
- h) Value of Order :
- i) Date of Commissioning :

j) No. of years in successful :
operation prior to the date of
Techno-commercial Bid Opening

k) Certificate from client in support of above i.e. from (a) to (j) including
capacity of Turbo Generator, Busduct Rating, year and month of
Commissioning, period of successful operation and that the above Isolated
Phase bus duct installed by us have caused no serious problem in the past,
is furnished with our bid proposal at Annexure.....

- Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

Note : Continuation sheets of like size and format may be added by the Sub-Vendor, if
required.

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant
BIDDING DOCUMENT NO. 03/HPGCL/DCRTPP/EPC/800MW**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

Sub : Sub-Qualifying Requirements for the Power Transformer

(A) We/subvendor have designed, manufactured, *installed / *supervised installation and *commissioned / *supervised commissioning of at least two (2) nos. (one each at two different installations) of 400 KV or above class generator transformers of at least 200 MVA capacity single phase transformer which are in successful operation for at least two (2) years prior to the date of techno-commercial bid opening as per stipulated requirements mentioned at Clause No. 5.2 of Chapter 04, "Provenness" , Volume II of Bidding documents. The details of the same are given below

Sl. No.	Item Description	Inst.No.1	Inst.No.2	Inst.No.3	Inst.No.4	Inst.No.5	Inst.No.6
1.00.00	Name of the Station and its Location						
1.01.00	Client Name and its Address, Fax and Tel. No.						
1.02.00	Name and Designation of the responsible person in Client's Organisation						
1.03.00	Contract No. & Date						
1.04.00	Voltage Ratio						
1.05.00	MVA Ratings						

Sl. No.	Item Description	Inst.No.1	Inst.No.2	Inst.No.3	Inst.No.4	Inst.No.5	Inst.No.6
1.06.00	Whether Single phase or Three phase						
1.07.00	Voltage Class of Transformers						
1.08.00	Date of Commissioning of Transformers						
1.09.00	Date of commencement of Successful Operations						
1.10.00	Scope of work executed for aforesaid Transformers included the following :						
	(i) Designed	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(ii) Manufactured	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(iii) *Installed/ *supervised installation	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(iv) *Commission ed/*supervised Commissioning	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1.11.00	No. of year in successful operation						
2.00.00	Certificate(s) from the client(s) are enclosed along with the bid at Annexure-..... to this Attachment-3K						

(B)

We /Sub-vendor.....have designed, manufactured, *in- stalled /*supervised installation and *commissioned / *supervised commissioning of atleast two (2) nos **220KV** or above class transformers which are in successful operation for atleast two (2) years prior to the date of techno-commercial bid opening and further we have established manufacturing facility for **400** KV class transformers based on technological support from our associate or collaborator, who meets the stipulated requirement in respect of Clause No. **5.2.1**, Chapter 04, "Provenness" , Volume II of the Bidding Documents. The details of same are given below:

Sl. No.	Item Description	Inst.No.1	Inst.No.2	Inst.No.3	Inst.No.4	Inst.No.5	Inst.No.6
A.	Details for 220 KV or above Class Transformers & manufacturing facilities for 400KV Class Transformer						
1.00.00	Name of the Stations and its Locations						
1.01.00	Client(s) Name and its Address, Fax and Tel. No.						
1.02.00	Name and Designation of the responsible person in Client's Organisation						
1.03.00	Contract No. & Date						
1.04.00	MVA Rating						
1.05.00	Whether Single Phase or Three Phase						
1.06.00	Voltage Ratio						
1.07.00	Date of commissioning of transformers						
1.08.00	Date of commencement of successful operation						

Sl. No.	Item Description	Inst.No.1	Inst.No.2	Inst.No.3	Inst.No.4	Inst.No.5	Inst.No.6
1.09.00	Whether manufacturing facility for 400 KV class transformer available based on technological support of associate/collaborator	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1.10.00	Scope of work executed for the aforesaid transformer includes the following						
	(i) Designed	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(ii) Manufactured	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(iii) *Installed/ *Supervised installation	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
	(iv) *Commissioned /*Supervised Commissioning	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1.11.00	No. of year in successful operation						
2.00.00	Certificate(s) from the client(s) are enclosed along with the bid at Annexure..... to this Attachment						

(C) **Details of Associate / Collaborator**

M/s a associate /collaborator of M/s..... have designed, manufactured, *installed/*supervised installation and commissioned/ supervised commissioning of at least two (2) nos. (one each at two different installations) of **400** KV class generator transformers of at least 200 MVA capacity (**single phase transformer**) which are in successful operation for atleast two (2) years prior to the date of techno-commercial bid opening as per stipulated requirements mentioned at clause no. **5.2.2** of Chapter 04, "Provenness" , Volume II of Bidding Documents

- Sl. No.	Item Description	Installation No.1	Installation No.2
1.00.00	Name of Associate or Collaborator		
1.01.00	Address of Associate or Collaborator including Tel. No and Fax No.		
1.03.00	Name of the Stations and its Locations		
1.04.00	Contract No. & Date		
1.05.00	Voltage Ratio		
1.06.00	MVA Rating		
1.07.00	Whether Single Phase or Three Phase		
1.08.00	Class of Transformers		
1.09.00	Date of commissioning of Transformers		
1.10.00	Date of commencement of successful operations		

1.11.00 Scope of work executed by aforesaid transformers includes the following :

(i)	Designed	Yes/No	Yes/No
(ii)	Manufactured	Yes/No	Yes/No
(iii)	*Installed/*Supervised installation	Yes/No	Yes/No
(iv)	*Commissioned/*Supervised Commissioning	Yes/No	Yes/No

1.12.00 No. of year in successful operation

2.00.00 Certificates from the client(s) are enclosed along with the bid at Annexure..... to this Attachment-3K

- Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Note :

1. Continuation sheet of like size & format may be used, if required.
2. *Strike off whichever is not applicable.

Sl. No.	Item Description	Inst.No.1	Inst.No.2	Inst.No.3	Inst.No.4	Inst.No.5	Inst.No.6
	(ii) Supplied	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
1.10.00	No. of years in successful operation						
2.00.00	Certificate(s) from the client(s) are enclosed along with the bid at Annexure-..... to this Attachment-3K.						

II. Whereby confirm that we/sub vendor M/s have our/his own facilities for conducting all routine and type tests on transformers as per IS:2026 (except short circuit test) as per Clause No. **5.3.2** of Chapter 04, "Provenness", Volume II. The details of the same are given below:

Sl. No.	Name of Test	Yes/No
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Note :

- 1) Sub vendor to use their own Performa for giving details of all routine and type test facilities available with them.
- 2) Certificates from client(s) must also be attached as Annexure..... to this Attachment-3k.

III. We/sub-vendor hereby confirm that the transformer considered for the above (Attachment-3K) have been successfully short circuit tested as per requirement of Clause No. **5.3.3** of Chapter 04, "Provenness" , Volume II. The details of the same are given below:

Sl. No.	Item Description	Details
1.00.00	Name of the station and its location	
1.01.00	Client name and its address, Fax and Tel. No.	
1.02.00	Name and designation of the responsible person in client's organisation	
1.03.00	Contract No. & Date	
1.04.00	Voltage Ratio	
1.05.00	MVA Ratings	
1.06.00	Voltage Class of transformers	
1.07.00	Short Circuit Test Carrying Agency (Test Lab) Name and Address	
1.08.00	Date of Short Circuit Test	
1.09.00	Short circuit test conducted successfully	Yes/No
2.00.00	Certificate(s) from the client(s) / Lab are enclosed along with the bid at Annexure-..... to this Attachment-3k.	

Note :

- 1) Sub-vendor may provide any additional information regarding short circuit test on transformers and enclose along with their bid at Annexure..... to this Attachment-3k.
- 2) If needed Sub-vendor may use own Performa for giving necessary details regarding short circuit test conducted on transformers and enclose with their bid at Annexure..... to this Attachment-3K.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub-Qualifying Requirements Data to be filled in to meet the provenness requirements (Refer Clause No. 5.4, 5.12, 5.13 of Chapter 04, "Provenness" , Volume II. for **LT Switchgears, DC Batteries and Battery Charger**

S No.	Item Description
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LT SWITCHGEAR

ROUTE-1

1.1 No. of Air circuit breaker panels and/or draw out motor control centre panels manufactured and supplied complete in all respects, under a single order, with fault rating of at least 50 kA (rms) for 1 sec and 105 kA (peak) which are in successful operation for a period of not less than two years prior to the date of Techno-Commercial bid opening.

1.2 No. of draw out circuit breaker panels with Air circuit breakers manufactured and supplied having fault rating of at least 50 kA for 1 second, 105kA MAKING and 50 kA BREAKING which are in successful operation for a period of not less than two (2) years prior to the date of Techno-Commercial bid opening

ROUTE-2

1.3 No. of draw out type Air Circuit Breaker Panels and / or draw out type Motor Control Centre Panels with fault rating of at least 45kA for one (1) second and 105kA peak under a single order which have been in successful operation for at least two (2) years.

And

1.4 No. of draw out type Air Circuit Breaker panels and/ or draw out type motor control centre panels having fault rating of at least 45kA for one (1) second and 105kA peak, under a single order which have been in successful operation for at least two (2) years.

1.5 No. of draw out type Air circuit breakers manufactured and supplied having fault rating of at least 45 kA for 1 second and 105kA peak which should have been in successful operation of not less than two (2) years prior to the date of Techno-Commercial bid opening

Note: Two different installations mean two different project sites or two different contracts.

1.6

DC Batteries

No's, Rating and type of the Battery manufactured and supplied and installed at two different industrial installations and which are in successful operation for at least two (2) years prior to the date of Techno-Commercial bid opening

Sub QR Data to be filled in to meet the provenness requirements (Refer Clause No.5.5 of Chapter 04, "Provenness" , Volume II) for 11KV/6.6 KV Switchgears

S.No.	Item Description
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11KV / 6.6 KV SWITCHGEARS

- 1.1 No. of 11 KV and /or 6.6KV Switchgear panels manufactured and supplied on an average per annum during the last three years prior to the date of Techno-commercial bid opening (under Route 1)
- 1.2 No. of 11KV and / or 6.6 KV Switchgear panel designed, manufactured and supplied complete in all respects with fault rating of at least 40KA for one (1) second and 100KA (peak), which are in successful operation for a period of at least two (2) years prior to the date of Techno-commercial bid opening (under Route 1)
- 1.3 No. of Vacuum Circuit breakers manufactured and supplied for 11 KV and / or 6.6 KV panels with a rating of 40 kA rms BREAKING, 100kA peak MAKING and 40kA withstand for one (1) second, which are in successful operation in 6.6kV or higher voltage application for a period of at least two years prior to the date of Techno-commercial bid opening (under Route 1)
- 1.4 No. of 11KV and / or 6.6KV Switchgear panels manufactured and supplied on an average per annum during the last three years prior to date of Techno-commercial bid opening (under Route -2)

S No.	Item Description
1.5	No. of 11KV and /or 6.6KV Switchgear panels manufactured and supplied complete in all respects with fault rating of at least 40kA for one (1) second and 100kA (peak) prior to date of Techno-commercial bid opening. (under Route -2) Offered Type of panels, type tested by the manufacturer (Yes/No)
1.6	No. of Vacuum circuit breakers manufactured and supplied for 11kV and /or 6.6kV panels with a rating of 40kA rms BREAKING, 100kA peak MAKING and 40kA withstand for one (1) second, prior to date of Techno-commercial bid opening (under Route-2)
1.7	Bidder's / Sub Vendor's associate or collaborator data to meet qualifying requirement stipulated at 1.2 & 1.3 stipulated above (under Route-2)
1.8	Deed of Joint Undertaking executed jointly by Bidder/Sub vendor and its Associate/ collaborator furnished (under Route-2)

- Note :
- 1) Certificates from the client for the successful operation for each of the above shall be Submitted.
 - 2) Supporting documents/ reference data as applicable shall be submitted.

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub QR Data to be filled in to meet the provenness requirements (Refer Clause No.5.6 of Chapter 04, "Provenness" , Volume II. for Numerical Relays & Networking

S No.	Item Description
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- 1.1 Manufacturer's name & address
 - 1.2 No. of Numerical relays with IEC 61850 used for application in Feeder protections/ Transformer protections / Motor protections manufactured, supplied and successfully configured at 220kV & above substation or 500MW & above Units
 - 1.3 No. of years in successful operation as on the date of Techno- commercial bid opening
 - 1.4 Certificate from client(s) in support of data at points 1.2 and 1.3 above
 - 2.1 Name & address of manufacturer / integrator
 - 2.2 No. of communicable Numerical Relays in the network on IEC 61850 designed and successfully done **SAT (Site acceptance test)** by the manufacturer /integrator prior to date of Techno-Commercial bid opening
 - 2.5 Certificate from client in support of data at points 2.2 above.
-

Sub : Sub-Qualifying Requirements for the CW Motor (Refer Clause No. 5.7 (a) of Chapter 04, "Provenness", Volume II.

S.No.	Item Description	Station-1	Station-2
CW MOTOR			
1.00.00	Name of the Station and its Location		
1.01.00	Client Name and its Address, Fax No. & Tel. Nos.		
1.01.01	Name and Designation of the responsible person in Client's Organisation		
1.01.02	Contract No. & Date		
1.01.03	Rating of Motor in KW		
1.01.04	Date of Commissioning		
1.01.05	Date of Commencement of Operation		
1.01.06	Whether the Motors are in Successful Operation for a period of not less than two (2) year prior to the date of techno-commercial bid opening	Yes/No	
1.01.07	Technical Particulars		
	(a) Make		
	(b) KW Rating at 50 deg.C ambient (atleast 2MW)		

S.No.	Item Description	Station-1	Station-2
(c)	Rated Voltage (KV)		
(d)	Motor Type (Squirrel Cage)	Yes/No	
(e)	DOL started	Yes/No	
(f)	Frame Size & Type Designation		
(g)	Type & Class of Insulation		
(h)	Type of Cooling		
(i)	Vertical	Yes/No	
(j)	Motor speed not exceeding 500rpm synchronous	Yes/No	
(k)	Reference Standard		

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub : Sub-Qualifying Requirements for the BFP Motor (Refer Clause No. 5.7 (b) of Chapter 04, "Provenness", Volume II.

S No.	Item Description	Station-I
BFP MOTOR		
1.00.00	Name of the Station and its Location	
1.01.00	Client Name and its Address, Fax No. & Tel. Nos.	
1.01.01	Name and Designation of the responsible person in Client's Organisation	
1.01.02	Contract No. & Date	
1.01.03	Rating of Motor in MW	
1.01.04	Date of Commissioning	
1.01.05	Date of Commencement of Operation	
1.01.06	Whether the Motors are in Successful Operation for a period of not less than two (2) years prior to the date of techno-commercial bid opening	Yes/No
1.01.07	Technical Particulars	
	(a) Make	
	(b) MW Rating at 50 deg.C. ambient (atleast 10MW)	
	(c) Rated Voltage (KV)	

- S.No.	Item Description	Station-I
	(d) Motor Type (Squirrel Cage)	Yes/No
	(e) Frame Size & Type Designation	
	(f) Type & Class of Insulation	
	(g) Type of Cooling	
	(h) Reference Standard	

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common seal).....

Sub : **Sub-Qualifying Requirement of ID Fan Motor (Refer Clause No. 5.7 (c) of Chapter 04, “Provenness” , Volume II).**

S No.	Item Description
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ID FAN MOTOR

- (i) Name of the station and its location
- (ii) Client name and its address,
 - Fax No. & Tel. No.
 - e-mail id
 - website address
- (iii) Name and Designation of the responsible person in client’s organisation
- (iv) Name of the manufacturers & address
- (v) Contract No. & Date
- (vi) Rating of motor in MW
- (vii) Date of commissioning
- (viii) Date of commencement of operation
- (ix) Whether the motors are in successful operation for a period not less than two (2) years prior to the date of techno-commercial bid opening #Yes/#No

Sub : Sub-Qualifying Requirement for Control Cables

In support of supplier experience as indicated in Technical Specification, clause 5.8 of Chapter 04, "Provenness" , Volume II. We declare that we have manufactured and supplied the following cables prior to the date of bid opening.

- (a) Atleast 300 KM of PVC insulated, PVC sheathed stranded copper conductor 1.1 kV grade cables in one single contract.
- (b) Atleast one (1) km of flame retardant low smoke cables.
- (i) The details of above (a) are given as under :

Sl.No.	Particulars	
1.	Client name and its address, fax no. & telephone no.	
2.	Name & Designation of the responsible person in client's organisation	
3.	Name, Address, telephone no. & fax no. of the user of the cables	
4.	Name & designation of the responsible person in user's organisation	
5.	Contract No. and date	
6.	Details of Stranded copper conductor, PVC insulated, PVC sheathed control cables of 1.1 KV grade	
(i)	Manufactured	Yes/No
(ii)	Supplied	Yes/No
(iii)	Rated voltage of cable	..... KV
(iv)	Type of Cable	

Sl.No.	Particulars
--------	-------------

(v) Total Quantity supplied prior to the date of bid opening in one single contract Km

7. User's Certificate of Cable enclosed

(ii) The details of above (b) are given as under :

1. Client name and its address, fax no. & telephone no.
2. Name & Designation of the responsible person in client's organisation
3. Name, Address, telephone no. & fax no. of the user of the cables
4. Name & designation of the responsible person in user's organisation
5. Contract No. and date
6. Details of Flame Retardant Low Smoke cables

(i) Manufactured Yes/No

(ii) Supplied Yes/No

(iii) Type of Cable

(iv) Total Quantity supplied as on date of bid opening Km

7. User's Certificate of Cable enclosed

Date : (Signature).....
Place : (Printed Name).....
(Designation).....
(Common seal).....

Note :

1. Continuation sheets of like size and format may be used as per the Sub-vendor's requirement and shall be annexed to this Attachment-3K.
2. Sub-vendor is required to attach necessary documents like copies of work order, completion certificates, agreements, drawings etc. in support of the details furnished above.

Sub : Sub-Qualifying Requirement for 1.1 kV Power Cables

In support of supplier experience as indicated in Technical Specification clause 5.9 of Chapter 04, "Provenness", Volume II. We declare that we have manufactured and supplied the following cables prior to the date of bid opening.

- (a) Atleast 100 KM of aluminium conductor, XLPE insulated, PVC sheathed power cables of 1.1 kV or higher grade in one single contract.
- (b) Atleast 100 KM of aluminium conductor, PVC insulated, PVC sheathed power cables of 1.1 kV or higher grade in one single contract.
- (c) Atleast one (1) KM of flame retardant low smoke cables.
- (d) 1.1 kV or higher grade power cable of minimum 630 sq.mm. conductor size.
 - (i) The details of above (a) are given as under :

Sl.No. Particulars

- 1. Client name and its address, fax no. & telephone no.
- 2. Name & Designation of the responsible person in client's organisation
- 3. Name, Address, telephone no. & fax no. of the user of the cables
- 4. Name & designation of the responsible person in user's organisation
- 5. Contract No. and date
- 6. Details of aluminium conductor, XLPE insulated, PVC sheathed Power cables of 1.1 KV or higher grade

(i) Manufactured

Yes/No

S No.	Particulars	
(ii)	Supplied	Yes/No
(iii)	Rated voltage of cable	..... KV
(iv)	Type of Cable	
(v)	Total Quantity supplied prior to the date of bid opening	..... Km
7.	User's Certificate of Cable enclosed	

(ii) The details of above (b) are given as under :

S No.	Particulars	
1.	Client name and its address, fax no. & telephone no.	
2.	Name & Designation of the responsible person in client's organisation	
3.	Name, Address, telephone no. & fax no. of the user of the cables	
4.	Name & designation of the responsible person in user's organisation	
5.	Contract No. and date	
6.	Details of aluminium conductor, PVC insulated, PVC sheathed Power cables of 1.1 KV or higher grade	
(i)	Manufactured	Yes/No

S No.	Particulars	
- (ii)	Supplied	Yes/No
(iii)	Rated Voltage of Cable	.....KV
(iv)	Type of Cable	
(v)	Total Quantity supplied prior to the date of bid opening in one single contract	..... Km

7. User's Certificate of Cable enclosed

(iii) The details of above (c) are given as under :

S No.	Particulars	
1.	Client name and its address, fax no. & telephone no.	
2.	Name & Designation of the responsible person in client's organisation	
3.	Name, Address, telephone no. & fax no. of the user of the cables	
4.	Name & designation of the responsible person in user's organisation	
5.	Contract No. and date	
6.	Details of Flame Retardant Low Smoke cables	
(i)	Manufactured	Yes/No
(ii)	Supplied	Yes/No

S No.	Particulars
(iii)	Type of Cable
(iv)	Total Quantity supplied as on date of bid opening Km
7.	User's Certificate of Cable enclosed

- (iv) The details of above (d) are given as under :

S No.	Particulars
1.	Client name and its address, fax no. & telephone no.
2.	Name & Designation of the responsible person in client's organisation
3.	Name, Address, telephone no. & fax no. of the user of the cables
4.	Name & designation of the responsible person in user's organisation
5.	Contract No. and date
6.	Details of 1.1 kV or higher grade power cable of minimum 630 sq.mm conductor size
(i)	Manufactured Yes/No
(ii)	Supplied Yes/No
(iii)	Rated Voltage of Cable kV
(iv)	Conductor Size in Cable sq.mm.

S No.	Particulars
-------	-------------

7. User's Certificate of Cable enclosed

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Note :

1. Continuation sheets of like size and format may be used as per the Sub-vendor's requirement and shall be annexed to this Attachment-3K.
2. Sub-vendor is required to attach necessary documents like copies of work order, completion certificates, agreements, drawings etc. in support of the details furnished above.

Sub : Sub-Qualifying Requirement of HT Cables

In support of supplier experience as indicated in Technical specification, clause no. 5.10 of Chapter 04, "Provenness", Volume II. We declare that we have manufactured and supplied the following cables prior to the date of bid opening.

- (i) Atleast 50 KM of XLPE insulated power cables of 6.35/11 KV or higher voltage grade, executed in one or more orders.
- (ii) Atleast one (1) KM of flame retardant low smoke cables of any voltage level.
- (A) The details of above (i) are given as under* :

Sl.No.	Particulars	
1.	Client name and its address, fax no. & telephone no.	
2.	Name & Designation of the responsible person in client's organisation	
3.	Name, Address, telephone no. & fax no. of the user of the cables	
4.	Name & designation of the responsible person in user's organisation	
5.	Contract No. and date	
6.	Details of XLPE insulated power cables of 6.35/11 KV or higher voltage grade	
	(i) Manufactured	Yes/No
	(ii) Supplied	Yes/No

S No.	Particulars
(iii)	Rated voltage of cable KV
(iv)	Type and size of Cable
(v)	Total Quantity supplied prior to the date of bid opening Km
7.	User's Certificate of Cable enclosed

(B) The details of above (ii) are given as under :

S No.	Particulars
1.	Client name and its address, fax no. & telephone no.
2.	Name & Designation of the responsible person in client's organisation
3.	Name, Address, telephone no. & fax no. of the user of the cables
4.	Name & designation of the responsible person in user's organisation
5.	Contract No. and date
6.	Details of Flame Retardant Low Smoke cables of any voltage level
(i)	Manufactured Yes/No

S No.	Particulars	
(ii)	Supplied	Yes/No
(iii)	Rated Voltage of Cable	.....KV
(iv)	Type and size of Cable	
(v)	Total Quantity supplied prior to the date of bid opening	..... Km

7. User's Certificate of Cable enclosed

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Note :

- Continuation sheets of like size and format may be used as per the Sub-vendor's requirement and shall be annexed to this Schedule.
- Sub-vendor is required to attach necessary documents like copies of work order, completion certificates, agreements, drawings etc. in support of

* If the quantity ordered is less than 50 Km in one order than please furnish the details for other orders in same format.

Sub : Sub-Qualifying Requirements for the DG Sets

A) In support of Supplier Experience as indicated in Technical Specification clause 5.11 of Chapter 04, "Provenness" , Volume II, we furnish details of DG Sets as below :-

Sl. No.	Item Description	Installation No.1	Installation No.2
(i)	Details of DG sets		
(a)	Name of Bidder/Sub-vendor		
(b)	Name of the client		
(c)	Complete Address of client, phone no. & fax no.		
(d)	Name of responsible person in client's organisation		
(e)	Location of Plant/installation where DG sets supplied		
(f)	No. of DG sets supplied		
(g)	Rating of DG sets (not less than 1500 KVA)		
(h)	Make of alter motor in the supplied DG set		
(i)	Make of Engine in the supplied DG set		
(j)	Date of commissioning		
(k)	No. of years of successful operation prior to the date of Techno-Commercial bid opening		

S No.	Item Description	Installation No.1	Installation No.2
(I)	Documentary evidence/ Certificate in support of above is enclosed	Yes*/*No	Yes*/*No

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

* Strike off whichever is not applicable.

Sub : Sub-Qualifying Requirements for the 400 kV Switchyard

We/ Our sub vendor have Designed, Manufactured, Supplied, Erected / Supervised erection, Commissioned/ Supervised Commissioning of one (1) Gas Insulated Switchgear (GIS) Installation having at least Six (6) bays of 400 kV or above voltage class with a short circuit rating of not less than 50 kA for 1 second which are in successful operation for at least two (2) years prior to the date of techno-commercial bid opening as per stipulated requirements mentioned at Clause no. 5.14.1 of Chapter 04, "Provenness" , Volume II of Bidding documents. The details of above are as under:

Sl. No.	Item Description	Installation(s)
1	Client name and its address	
2	Name & Location of the Substation/ Switchyard	
3	Name and designation of the Contact person(s) of client Organization with Address, Telephone, Fax and email etc.	
4	Name of Contract	
5	Order ref. & Date	
6	Scope of work executed by us for aforesaid Contract includes :	
	i) Design	Yes*/ No*
	ii) Construction/ Erection	Yes*/ No*
	iii) Testing	Yes*/ No*
	iv) Commissioning	Yes*/ No*
7	Details of 400 kV or above Bays	
	a) Voltage level (in kV)	
	b) No. of bays	

Sl. No.	Item Description	Installation(s)
	c) Whether Gas Insulated Substation or not	Yes*/ No*
8	Date of Commissioning	
9	Date of commencement of successful operation	
10	No. of years in successful operation as on date of techno-commercial bid opening	
11	Certificate(s) from the client(s) & copy of LOA/P.O. are enclosed along with the bid at Annexure-... to this Attachment-3K	Yes*/ No*

NOTE :

1. For the purpose of qualifying requirements, one no of bay shall be considered as a bay used for line /transformer /reactor/ bus coupler/ bus transfer or bus section and comprising of at least one circuit breaker, two disconnectors and single phase current transformers.
2. Bidder may give details of more than one installation for Owner's reference, if he so desires.

* Bidder to strike-off whichever is not applicable.

Sub : Sub-Qualifying Requirements for the 400 KV Surge Arrestor

Dear Sirs,

For 400 KV Surge Arrestors : In order to satisfy the requirement as indicated in Technical Specifications, Clause No. 5.14.5, of Chapter 04, "Provenness" , Volume II, We declare that M/s is a manufacturer who have manufactured and supplied atleast fifteen (15) nos. of single phase Surge Arrestors suitable for **Gas** Insulated Substation/Switchyard of 400 KV or above class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening. The details are given below :

S No.	Description	
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address alongwith Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation / Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Single phase Surge Arrestors supplied	

S No.	Description	
(ii)	Voltage Level (in KV)	
(iii)	Whether suitable for Air insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at Sr. No. 6 to 10 at Annexure to this Attachment-3K	
(Use separate sheet for each experience/Contract)		

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub : Sub-Qualifying Requirements for the 220 KV Circuit Breaker

Dear Sirs,

For **220 KV Circuit Breakers** : In order to satisfy the requirement as indicated in Technical Specifications, Clause No. 5.14.6 Chapter 04, "Provenness" , Volume II of Bidding Documents, we declare that M/s is a manufacturer who have manufactured and supplied minimum five (5) nos. of three phase circuit breakers suitable for Air Insulated Substation/Switchyard of **220 KV** or above class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening.

The details are given below :

S No.	Description	Installation
-------	-------------	--------------

For 220 KV Circuit Breakers

- 1 Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.
- 2 Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.
- 3 Name & Location of the Substation/ Switchyard
- 4 Name of Contract
- 5 Contract Reference No. & Date
6. Scope of the work for the aforesaid Contract includes
 - (i) Manufacture Yes*/No*
 - (ii) Type Test Yes*/No*
 - (iii) Supply Yes*/No*

S No.	Description	Installation
7.	(i) No. of 3 Phase Circuit Breakers Supplied	
	(ii) Voltage Level (in KV)	
	(iii) Whether suitable for Gas insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of Techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at Sr.No. 6 to 10 at Annexure..... to this Attachment-3K	
	(Use separate sheet for each experience/Contract)	

Date : (Signature).....
 Place : (Printed Name).....
 (Designation).....
 (Common Seal).....

**Sub : Sub-Qualifying Requirements for the 400 KV Instrument Transformers
(Current Transformers/ capacitor Voltage Transformer as applicable)**

For 400 KV Instrument Transformers : In order to satisfy the requirement of as indicated in Technical Specification, Clause No. **5.14.2** of Chapter 04, "Provenness" , Volume II, we declare that M/s..... is a manufacturer who has manufactured and supplied minimum fifteen (15) nos. of single phase Instrument Transformers suitable **for Gas** Insulated Substation/Switchyard of 400 KV or above class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening. The details are given below.

S No.	Description	Installation
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation/ Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Single phase Current Transformers Supplied	

S No.	Description	Installation
(ii)	No. of Single phase Capacitor Voltage Transformers Supplied	
(iii)	Voltage Level (in KV)	
(iv)	Whether suitable for Gas insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of Techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at Sr. No. 6 to 10 at Annexure..... to this Attachment-3K	
(Use separate sheet for each experience/Contract)		

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

**Sub : Sub-Qualifying Requirements for the 220 KV Instrument Transformers
(Current Transformers/ capacitor Voltage Transformer as applicable)**

For **220 KV** Instrument Transformers : In order to satisfy the requirement of as indicated in Technical Specification, Clause No. 5.14.7 of Chapter 04, "Provenness" , Volume II, we declare that M/s.....is a manufacturer who has manufactured and supplied minimum fifteen (15) nos. of single phase Instrument Transformers suitable **for Air** Insulated Substation/Switchyard of **220 KV** class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening. The details are given below.

- S.No.	Description	Installation
-		
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation/ Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Single phase Current Transformers Supplied	

S.No.	Description	Installation
(ii)	No. of Single phase Capacitor Voltage Transformers Supplied	
(iii)	Voltage Level (in KV)	
(iv)	Whether suitable for Gas insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of Techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at Sr. No. 6 to 10 at Annexure..... to this Attachment-3K	
(Use separate sheet for each experience/Contract)		

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Sub :Sub-Qualifying Requirements for the 220 KV Disconnecter

For **220KV** Disconnecter in order to satisfy the requirement as indicated in Technical Specifications, Clause No. 5.14.8, Chapter 04, "Provenness" , Volume II. We declare that M/s..... is a manufacturer who have manufactured and supplied at least five (5) nos. of three phase Disconnectors suitable for **Air Insulated** Substation/Switchyard of **220** KV class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening.. The details are given below :

S No.	Description	Installation
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation/ Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Three phase Disconnectors supplied	
	(ii) Voltage Level (in KV)	

S No.	Description	Installation
	(iii) Whether suitable for Gas insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at S No. 6 to 10 at Annexure..... to this Attachment-3K	

(Use separate sheet for each experience/Contract/Manufacturer)

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Sub: Sub-Qualifying Requirements for the 220 kV Surge Arrestors

For **220 KV** Surge Arrestors : In order to satisfy the requirement as indicated in Technical Specifications, Clause No. 5.14.9, of Chapter 04, "Provenness" , Volume II, We declare that M/ s is a manufacturer who have manufactured and supplied at least fifteen (15) nos. of single phase Surge Arrestors suitable for **Air Insulated** Substation/ Switchyard of **220 KV** class which are in successful operation for a minimum period of two (2) years as on the date of techno-commercial bid opening. The details are given below :

S No.	Description	
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation / Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Single phase Surge Arrestors supplied	
	(ii) Voltage Level (in KV)	

S No.	Description	Installation
(ii)	No. of Single phase Capacitor Voltage Transformers Supplied	
(iii)	Voltage Level (in KV)	
(iv)	Whether suitable for G A S insulated Substation/Switchyard	Yes*/No*
8.	Date of Commissioning	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of Techno-commercial Bid opening	
11.	Client(s) certificate(s) enclosed in support of stated experience at Sr. No. 6 to 10 at Annexure..... to this Attachment-3K	
(Use separate sheet for each experience/Contract)		

- Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common Seal).....

Sub : Sub-Qualifying Requirements for the Sub-Station Automation System & Protective Relays

(i) **For GENERATOR PROTECTION RELAYS, BAY PROTECTION UNIT INCLUDING THE BUS BAR PROTECTION, PMU AND ENERGY METERING SYSTEM** : In order to satisfy the requirement of Supplier experience as indicated in Technical Specifications, Clause No. 5.15 of Chapter 04, "Provenness" , Volume II. We declare that M/s is a manufacturer who have manufactured and supplied the offered type of devices for respective equipment, which are in successful operation in a 500 MW or above unit / 400 KV class Substation/ Switchyard for a minimum period of two (2) year prior to the date of techno-commercial bid opening. The details are given below :

S No.	Description	Installation
1	Name and Address of Manufacturer and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation/ Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) Supply	Yes*/No*
7.	(i) No. of Generator Protection Relays supplied	

S No.	Description	Installation
	(ii) Capacity of generators (in MW)	
	(iii) No. of Bay Protection Units for Switchyards	
	(iv) No. of Bus bar protection system for switchyards	
	(v) No. of Energy metering system supplied	
	(vi) Voltage Level of Substation/ Switchyard (in KV)	
8.	Date of Commissioning	
	(i) Generator Protection Relays	
	(ii) Bay protection unit for Switchyard	
	(iii) Bus bar protection system for Switchyard	
	(iv) Energy Metering System	
9.	Date of commencement of successful operation	
10.	No. of years in Successful operation as on date of Bid opening	
	(i) Generator Protection Relay	
	(ii) Bay protection unit for Switchyard	
	(iii) Bus bar protection system for Switchyard	
	(iv) Energy Metering System	

S No.	Description	Installation
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11. Client(s) certificate(s)s enclosed in support of stated experience at Sr. No. 6 to 10 is enclosed at Annexure..... to this Attachment-3K

(Use separate sheet for each experience/Contract)

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

(ii) Substation Automation System : In order to satisfy the requirement of Supplier experience as indicated in Technical Specifications, Clause No. 5.15 of Chapter 04, "Provenness" , Volume II, we declare that M/s, have offered the Substation Automation System with distributed architecture and is in successful operation in at least one (1) Substation/Switchyard of not less than **220 KV** class for a minimum period of **two (2) year** prior to the date of Techno-Commercial bid opening. The details are given below :

S No.	Description	Installation
1	Name and Address of Supplier and Name of contact person with email ID, Telephone & Fax Nos.	
2	Client's Name & its Address along with Name of contact person with email ID, Telephone & Fax Nos.	
3	Name & Location of the Substation/ Switchyard	
4	Name of Contract	
5	Contract Reference No. & Date	
6.	Scope of the work for the aforesaid Contract includes	
	(i) Manufacture	Yes*/No*
	(ii) Type Test	Yes*/No*
	(iii) HMI software provided	
8.	(i) Whether the above Substation Automation System with distributed Architecture	*Yes/*No
	(ii) Voltage level of Substation/ Switchyard (in KV)	

S No.	Description	Installation
9.	Date of Commissioning	
10.	Date of commencement of successful operation	
11.	No. of years in Successful operation as on date of techno-commercial Bid opening	
12.	Client(s) certificate(s) enclosed in support of stated experience at Sr. No. 6 to 11 at Annexure..... to this Attachment-3K	

(Use separate sheet for each experience/Contract)

Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

Note : Continuation sheets of like size and format may be used as per Sub-vendor's requirement and shall be annexed to this Attachment.

* Please Strike off whichever is not applicable.

**EPC PACKAGE FOR
1 x 800 MW Super Critical Expansion Unit
Deen Bandhu Chhotu Ram Thermal Power Plant**

Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW

**Experience details of Sub-vendor seeking qualification as per clause
4.00.00 of Chapter 04, "Provenness", Volume II of Bidding Document)**

Bidder's Name & Address :

To
Chief Engineer (Projects)
HPGCL
Haryana

1.00.00 C&I Equipment/Systems (BOP C&I DDCMIS)

1.01.00 We confirm that we meet the provenness requirements specified in Cl. No.6.0 of provenness requirements in the Chapter 04, "Provenness", Volume II of Bidding Documents. In this regard we declare that we have engineered, supplied and commissioned BOP C&I part of Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of a power station having unit rating 660 MW or above, the details of which are given below:

S No.	Item Description	Plant No.1
-------	------------------	------------

1. Name of Power Station
(Location and Address)

2. Name of the Owner of Power
Station with full Address

Fax. No.

Telephone No.

e-mail address

3. Name of Package/Contract along
with Order/LOA No. & Date

S No.	Item Description	Plant No.1
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at S No. 4, Name & Address of the Organisation which placed order for reference plant system on the Bidder	
6.	Unit Rating (MW)	
7.	Whether coal fired station	*Yes/No
8.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	
8a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
8b.	Whether the control system includes	
	(a) Modulating control for Steam Generator (SG)	*Yes/No
	(b) Modulating control for feed water/ condensate cycle	*Yes/No
	(c) Binary control of the auxiliaries for Steam Generator (SG)	*Yes/No

S No.	Item Description	Plant No.1
	(d) Binary control of the auxiliaries for Turbine Generator (TG)	*Yes/No
8c.	Actual date of commissioning	
9.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award / Contract Agreement / Order enclosed	*Yes/No

1.02.00 We confirm that we meet the provenness requirements specified in **CI Clause 6.0** of provenness requirements in the Chapter 04, "Provenness" , Volume II of Bidding Documents. In this regard we declare that the offered BOP C&I DDCMIS is the same or of the same series which is operating successfully for BOP C&I application or SG C&I application or TG C&I application in at least one (1) unit of power station having unit rating of 200 MW or above for a period of not less than one (1) year as on the date of techno-commercial bid opening and the offered BOP C&I DDCMIS have been commissioned in at least one (1) unit of a power station having unit rating of 660 MW or above as on the date of techno-commercial bid opening the details of which are given below :

S No	Item Description	Plant No.1
1.	Name of Power Station (Location and Address), where the offered control system is operating success- fully for a period of one (1) year as on date of techno-commercial bid opening for the following	
	(a) Name of the Owner of Power Station with full Address	
	Fax No. & Telephone No.	
	(b) Unit Rating (MW)	
	(c) Whether coal fired station	*Yes/No
	(d) The above power station includes the following controls of BOP C&I, SG C&I and TG C&I as follows :	
	(i) Whether the control system for BOP C&I includes the following:	*Yes/No
	* Modulating control for Steam Generator (SG)	

Sl No	Item Description	Plant No.1
*	Modulating control for feed water/condensate cycle	
*	Binary control of the auxiliaries for Steam Generator (SG)	
*	Binary control of the auxiliaries for Turbine Generator (TG)	
(ii)	SG C&I includes the following :	*Yes/No
*	Burner management system of coal fired units.	
*	Boiler protection of coal fired units.	
(iii)	TG C&I includes the following	*Yes/No
*	Steam Turbine Electro Hydraulic Control	
*	Turbine Protection System	

2. Name of Power Station (Location and Address), where the offered control system has been commissioned

(a) Name of client with full Address
Fax No. & Telephone No.

(b) Unit Rating (MW)

(c) Whether coal fired station *Yes/No

(d) Whether the control system includes the following :-

* Modulating control for Ste

S No	Item Description	Plant No.1
	* Modulating control for feed water/condensate cycle	*Yes/No
	* Binary control of the auxiliaries for Steam Generator (SG)	*Yes/No
	* Binary control of the auxiliaries for Turbine Generator (TG)	*Yes/No
(e)	Actual Date of Commissioning	
(f)	No of years in successful operation as on the date of bid opening	
3.	(a) Name of the Control System offered for BOP C&I DDCMIS	.....
	(b) Name of the Control system provided in above Reference Plant	
	(i) For reference at Sl. No.1 above	.....
	(ii) For reference at Sl. No. 2 above	.....
(c)	Name of the Control System of reference at Sl. No. 1 and Sl. No. 2 above is same as being offered for BOP C&I DDCMIS	*Yes/No
(d)	Whether the Control System of reference at Sl. No. 1 and Sl. No. 2 above is of the same series as being offered for BOP C&I DDCMIS	*Yes/No

S No	Item Description	Plant No.1
4.	Following documents are enclosed in support of meeting the stipulated provenness requirements for the reference plant	
(a)	Relevant portion of Letter of Award/Contract agreement/Order	*Yes/No
(b)	End user Certificate	*Yes/No
(c)	Sample of configuration diagram, Functional Grouping Diagram, Bill of Material	*Yes/No

2.00.00 C&I Equipment/Systems (SG C&I DDCMIS)

2.01.01 We confirm that we meet the provenness requirements specified **Clause 6.0** of provenness requirements in the Chapter 04, "Provenness" , Volume II of Bidding Documents. In this regard we declare that we have engineered, supplied and commissioned SG C&I part of Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of power station having unit rating of 660 MW or above, the details of which are given below :

S No.	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address Fax No. Telephone No. e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name & Address of the Organisation which placed order for reference plant system on the Bidder.	
6.	Unit Rating (MW)	
7.	Whether coal fired station	*Yes/No

S No.	Item Description	Plant No.1
8.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	
8a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
8b.	Whether the control system includes	
	(a) Burner management System of coal fired units	*Yes/No
	(b) Boiler protection of coal fired units	*Yes/No
8c.	Actual date of commissioning	
9.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award / Contract Agreement / Order enclosed	*Yes/No

2.01.02 We confirm that we meet the provenness requirements specified in **Cl. No.6.0** of provenness requirements in the Chapter 04, "Provenness", Volume II of Bidding Documents. In this regard we declare that we have engineered, supplied and commissioned BOP C&I part of Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of a power station having unit rating of 660 MW or above and we have collaborated / associated with M/ s..... (Name of Associate/Collaborator) whose address is and who have engineered, supplied and commissioned SG C&I Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of a power station having unit rating of 660 MW or above, the details of which are given below :

(a) Details of SG C&I DDCMIS supplier

S No	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address	
	Fax No.	
	Telephone No.	
	e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name & Address of the Organisation which placed order for reference plant system on the Bidder.	

S No.	Item Description	Plant No.1
6.	Unit Rating (MW)	
7.	Whether coal fired station	*Yes/No
8.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	
8a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
8b.	Whether the control system includes	
	(a) Modulating Control for Steam Generator (SG)	*Yes/No
	(b) Modulating Control for feed water / condensate cycle	*Yes/No
	(c) Binary control of the auxiliaries for Steam Generator (SG)	*Yes/No
	(d) Binary control of the auxiliaries for Turbine Generator (TG)	*Yes/No
8c.	Actual date of commissioning	
9.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award/ Contract Agreement/ Order enclosed	*Yes/No

S No	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address Fax No. Telephone No. e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name & Address of the Organisation which placed order for reference plant system on the Bidder.	
6.	Unit Rating (MW)	
7.	Whether coal fired station	*Yes/No
8.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	

S No.	Item Description	Plant No.1
8a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
8b.	Whether the control system includes	
	(a) Burner Management System of coal fired units	*Yes/No
	(b) Boiler Protection of coal fired units	*Yes/No
8c.	Actual date of commissioning	
9.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award/Contract Agreement/ Order enclosed	*Yes/No

2.02.00 We confirm that we meet the qualifying requirements specified in **Cl. No.6.0** of provenness requirements in the Chapter 04, "Provenness", Volume II of Bidding Documents. In this regard we declare that the offered SG C&I DDCMIS is the same or of the same series which is operating successfully for BOP C&I application or SG C&I application or TG C&I application in at least one (1) unit of power station having unit rating of 660 MW or above for a period of not less than one (1) year as on the date of techno-commercial bid opening and the offered SG C&I DDCMIS have been commissioned in at least one (1) unit of a power station having unit rating of 660 MW or above as on the date of techno-commercial bid opening the details of which are given below :

S No.	Item Description	Plant No.1
1.	Name of Power Station (Location and Address), where the offered control system is operating successfully for a period of one (1) year as on date of techno-commercial bid opening for the following	
	(a) Name of the Owner of Power Station with full Address	
	Fax No. & Telephone No.	
	(b) Unit Rating (MW)	
	(c) Whether coal fired station	*Yes/No
	(d) The above power station includes the following controls of BOP C&I, SG C&I and TG C&I as follows :	
	(i) Whether the control system for BOP C&I includes the following:	*Yes/No
	* Modulating control for Steam Generator (SG)	

S No.	Item Description	Plant No.1
	* Modulating control for feed water/condensate cycle	
	* Binary control of the auxiliaries for Steam Generator (SG)	
	* Binary control of the auxiliaries for Turbine Generator (TG)	
(ii)	SG C&I includes the following :	*Yes/No
	* Burner management system of coal fired units	
	* Boiler protection of coal fired units	
(iii)	TG C&I includes the following	*Yes/No
	* Steam Turbine Electro Hydraulic Control	
	* Turbine Protection System	
2.	Name of Power Station (Location and Address), where the offered control system has been commissioned.	
(a)	Name of client with full Address Fax No. & Telephone No.	
(b)	Unit Rating (MW)	
(c)	Whether coal fired station	*Yes/No

S No.	Item Description	Plant No.1
	(d) Whether the control system includes the following :-	
	* Burner Management System of coal fired units	*Yes/No
	* Boiler protection of coal fired units	*Yes/No
3.	(a) Name of the Control System offered for SG C&I DDCMIS	.....
	(b) Name of the Control system provided in above Reference Plant	
	(i) For reference at Sl. No.1 above	.....
	(ii) For reference at Sl. No.2 above	.....
	(c) Name of the Control System of reference at Sl. No. 1 and Sl. No.2 above is same as being offered for SG C&I DDCMIS	*Yes/No
	(d) Whether the Control System of reference at Sl. No. 1 and Sl. No. 2 above is of the same series as being offered for SG C&I DDCMIS	*Yes/No
	(e) Actual Date of Commissioning	
	(f) No of years in successful operation prior to the date of techno-commercial bid opening	

S No.	Item Description	Plant No.1
4.	Following documents are enclosed in support of meeting the stipulated provenness requirements for the reference plant	
	(a) Relevant portion of Letter of Award/Contract agreement/Order	*Yes/No
	(b) End user Certificate	*Yes/No
	(c) Sample of configuration diagram, Functional Grouping Diagram, Bill of Material etc.	*Yes/No

3.00.00 C&I Equipment/Systems (TG C&I DDCMIS)

3.01.01 We confirm that we meet the provenness requirements specified in **CI. No. 6.0** of provenness requirements in the Chapter 04, "Provenness", Volume II of the Bidding Documents. In this regard we declare that we have engineered, supplied and commissioned TG C&I part of Distributed Digital Control, Monitoring & Information system (DDCMIS) in at least one (1) unit of power station having rating of 660 MW or above, the details of which are given below:

S No.	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address Fax No. Telephone No. e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name & Address of the Organisation which placed order for reference plant system on the Bidder.	
6.	Unit Rating (MW)	

S No.	Item Description	Plant No.1
7.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	
7a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
7b.	Whether the control system includes	
	(a) Steam Turbine Electro Hydraulic Control	*Yes/No
	(b) Turbine Protection System	*Yes/No
7c.	Actual date of commissioning	
8.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award/Contract Agreement/ Order enclosed	*Yes/No
	(b) Details of his Associate for TG C&I DDCMIS	

3.01.02 We confirm that we meet the provenness requirements specified in **CI. No.6.0** of provenness requirements in the Chapter 04, "Provenness", Volume II of the Bidding Documents. In this regard we declare that we have engineered, supplied and commissioned BOP C&I part of Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of a power station having unit rating of 660 MW or above and we have associated/collaborated with M/s (Name of Associate/Col- laboratory) whose address is and who have engineered, supplied and commissioned TG C&I Distributed Digital Control, Monitoring & Information System (DDCMIS) in at least one (1) unit of power station having unit rating of 660 MW or above, the details of which are given below :

(a) Details of TG C&I DDCMIS Supplier

S No.	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address	
	Fax No.	
	Telephone No.	
	e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	
5.	In case the Bidder is not the Contractor at Sl.No.4, Name & Address of the Organisation which placed order for reference plant system on the Bidder	

S No.	Item Description	Plant No.1
6.	Unit Rating (MW)	
7.	Control & Instrumentation Systems Distributed Digital, Control Monitoring & Information System (DDCMIS) / Distributed Control System (DCS)	
7a.	Scope of work included in the bidder's order	
	(a) Engineering	*Yes/No
	(b) Supply	*Yes/No
	(c) Commissioning	*Yes/No
7b.	Whether the control system includes	
	(a) Steam Turbine Electro Hydraulic Control	*Yes/No
	(b) Turbine Protection System	*Yes/No
7c.	Actual date of commissioning	
8.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award/Contract Agreement/ Order enclosed	Yes/No
	(b) Details of his Associate for TG C&I DDCMIS	

3.02.00 We confirm that we meet the provenness requirements specified in **CI. No.6.0** of provenness requirements in the Chapter 04, "Provenness", Volume II of Bidding Documents. In this regard we declare that the offered TG C&I DDCMIS is operating successfully for BOP C&I application or SG C&I application or TG C&I application in at least one (1) unit of power station having unit rating of 660 MW or above for a period of not less than one (1) year as on the date of techno-commercial bid opening and the offered TG C&I DDCMIS have been commissioned in at least one (1) unit of power station having unit rating of 660 MW or above as on the date of techno-commercial bid opening the details of which are given below :

S No.	Item Description	Plant No.1
1.	Name of Power Station (Location and Address), where the offered control system is operating successfully for a period of one (1) year as on date of techno-commercial bid opening for the following	
	(a) Name of the Owner of Power Station with full Address	
	Fax No. & Telephone No.	
	(b) Unit Rating (MW)	
	(c) Whether coal fired station	*Yes/No
	(d) The above power station includes the following controls of BOP C&I, SG C&I and TG C&I as follows :	
	(i) Whether the control system for BOP C&I includes the following:	*Yes/No
	* Modulating control for Steam Generator (SG)	

S No.	Item Description	Plant No.1
	* Modulating control for feed water/condensate cycle	
	* Binary control of the auxiliaries for Steam Generator (SG)	
	* Binary control of the auxiliaries for Turbine Generator (TG)	
(ii)	SG C&I includes the following :	*Yes/No
	* Burner management system of coal fired units	
	* Boiler protection of coal fired units	
(iii)	TG C&I includes the following	*Yes/No
	* Steam Turbine Electro Hydraulic Control	
	* Turbine Protection System	
2.	Name of Power Station (Location and Address), where the offered control system has been commissioned	
(a)	Name of client with full Address Fax No. & Telephone No.	
(b)	Unit Rating (MW)	
(c)	Whether coal fired station	*Yes/No

S No.	Item Description	Plant No.1
	(d) Whether the control system includes the following :-	
	* Steam Turbine Electro Hydraulic Control	*Yes/No
	* Turbine Protection System	*Yes/No
3.	(a) Name of the Control System offered for TG C&I DDCMIS	.....
	(b) Name of the Control system provided in above Reference Plant	
	(i) For reference at S.No.1 above	.....
	(ii) For reference at Sl.No.2 above	.....
	(c) Name of the Control System of reference at S No. 1 and Sl.No.2 above is same as being offered for TG C&I DDCMIS	*Yes/No
	(d) Whether the Control System of reference at S No. 1 and Sl.No.2 above is of the same series as being offered for TG C&I DDCMIS	*Yes/No
	(e) Actual Date of Commissioning	
(f)	No of years in successful operation as on the date of bid opening	
4.	Following documents are enclosed in support of meeting the stipulated provenness requirements for the reference plant	
	(a) Relevant portion of Letter of Award/Contract agreement/Order	*Yes/No

S No.	Item Description	Plant No.1
(b)	End user Certificate	*Yes/No
(c)	Sample of configuration diagram, Functional Grouping Diagram, Bill of Material etc.	*Yes/No

4.00.00 C&I EQUIPMENT/SYSTEMS (ENGINEERING OF CONTROL & INSTRUMENTATION SYSTEM)

4.01.00 We confirm that we meet the qualifying requirements specified in **CI. No.6.0** of provenness requirements in the Chapter 04, "Provenness" , Volume II of Bid- ding Documents. In this regard we declare that we have carried out Engineering of Control and Instrumentation System of the complete plant including offsite plants of at least one (1) unit of a coal fired power station having unit rating 660 MW or above, the details of which are given below:

[In case the Bidder does not have the engineering experience of the complete plant as described above, then the Bidder shall get the Control and Instrumentation engineering of the remaining plant area (s) done through any of its sub vendor(s) / supplier(s) or through Engineering firm(s) who meets the above requirement for the respective plant area(s) and all the following de- tails are to be filled separately for respective sub vendor(s) / supplier(s) / Engineering firm(s).]

S No	Item Description	Plant No.1
1.	Name of Power Station (Location and Address)	
2.	Name of the Owner of Power Station with full Address Fax No. Telephone No. e-mail address	
3.	Name of Package/Contract along with Order/LOA No. & Date	
4.	Name & Address of the Contractor on whom the order for executing the reference plant system was placed by the Owner of the reference plant	

S No	Item Description	Plant No.1
5.	In case the Bidder is not the Contractor at Sl. No. 4, Name & Address of the Organisation which placed order for reference plant system on the Bidder	
6.	Unit Rating (MW)	
7.	Whether coal fired station	*Yes/No
8.	Engineering of control and Instrumentation system	
8a.	Scope of work included in the bidder's order	
	(a) Engineering of main plant	*Yes/No
	(b) Engineering of offsite plant	*Yes/No
8b.	whether the Engineering includes	
	(a) Preparation of basic logic / loop diagrams (not just the implementations), I/O List, Drive list, Instrument list etc for each of the plant areas of the complete plant including offsite systems based upon Flow schemes / Write ups by the OEM(s)	*Yes/No
	(b) Engineering of power supply system for DDCMIS, Process connection and piping, SWAS, Control Valves.	*Yes/No
	(c) Instrumentation, cable engineering including preparation of Interconnection Cable Diagram, Cable schedule etc	*Yes/No

S No	Item Description	Plant No.1
8c.	Actual date of commissioning	
9.	Following documents are enclosed in support of meeting the stipulated Qualifying Requirements	
	(a) Relevant portion of Letter of Award/Contract Agreement/ Order enclosed	*Yes/No

5.00.00 INSTRUMENTS (PRIMARY & SECONDARY)

- (i) Type of Instrument
- (ii) Make / Model
- (iii) Name of Power Station
(Location & Address)
- (iv) Unit Size (MW)
- (v) Commissioning date

Whether above instruments have atleast one (1) year satisfactory operation as on date of bid opening in one (1) power station having unit rating of 200 MW or above.

Yes/No

- (vi) Client's certificate attached

Yes/No

5.01.00 SWAS EQUIPMENT

- (i) Make / Model
- (ii) Name of Power Station
(Location & Address)
- (iii) Unit Size (MW)
- (iv) Commissioning date
- (v) Whether above SWAS equipment have atleast one (1) year satisfactory operation as on date of techno-commercial bid opening in one (1) power station having unit rating of 200 MW or above
- (vi) Client's certificate Attached

Yes/No

Yes/No

S No.	Item Description	Plant No.1
6.00.00	POWER SUPPLY SYSTEM (24 V DC SYSTEM)	
(i)	Make/Model	
(ii)	Client Name & Address	
(iii)	Name of Industry (Power Gen Station/Tele- communication/Others)	
(iv)	Rating in Amps	
(v)	Commission Date	
(vi)	Whether above system have atleast one (1) year satisfactory operation prior to date of techno-commercial bid opening in any industry or telecommunication application with a rating of 500A or above	Yes/No Yes/No
(vii)	Client's certificate Attached	Yes/No

S No.	Item Description	Plant No.1
7.00.00	POWER SUPPLY SYSTEM (UPS)	
(i)	Make/Model	
(ii)	Name of Power Station (Location & Address)	
(iii)	Rating of UPS (phase, kVA)	
(iv)	Commission Date	
(v)	Whether above UPS have atleast one (1) year satisfactory operation prior to date of techno-commercial bid opening in one (1) power station for a rating of Single Phase 105KVA or above	Yes/No
(vi)	Client's certificate Attached	Yes/No

S No.	Item Description	Plant No.1
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8.00.00 CCTV SYSTEM

- (i) Make/Model/Version of Camera & Software
- (ii) Client Name & Address
- (iii) Name of Industry (Power plant, cement plant, petroleum refinery, steel plant, cola mine)
- (iv) Number of cameras
- (v) Whether above offered combination of camera & video management software for CCTV have atleast one (1) year satisfactory operation as on date of techno-commercial bid opening in large industrial set up viz power plant, cement plant, petroleum refinery steel plant, coal mine having minimum installation of total forty (40) nos. cameras Yes/No
- (vi) Client's certificate Attached Yes/No

- Date : (Signature).....

Place : (Printed Name).....

(Designation).....

(Common seal).....

**FORM OF DEED OF JOINT UNDERTAKING TO BE PROVIDED ALONGWITH BOP
C&I DDCMIS SUPPLIER, SG C&I AND / OR TG C&I DDCMIS SUPPLIER
AS PER CLAUSE 6.1 OF Chapter 04, "Provenness" , Volume II**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY CONTRACTOR, *HIS *SUB-
VENDOR FOR BOP C&I DDCMIS MEETING THE REQUIREMENTS SPECIFIED AT
CLAUSE NO. 6.1 OF CHAPTER 04, "PROVENNESS" , VOLUME II ALONGWITH THE
COL- LABORATOR/ASSOCIATE (SG C&I AND / OR TG C&I DDCMIS SUPPLIER AS
PER CLAUSE 6.1 OF CHAPTER 04, "PROVENNESS" , VOLUME II) FOR SUCCESSFUL
PER- FORMANCE OF COMPLETE DDCMIS, IN WHICH THE COLLABORATOR/
TECHNOLOGY LICENSER AND THE BIDDER ARE JOINTLY AND SEVERALLY
LIABLE TO THE OWNER TO PERFORM ALL THE CONTRACTUAL OBLIGATIONS
INCLUDING THE TECHNICAL GUARANTEES FOR COMPLETE DDCMIS**

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

*M/sa Company incorporated underhaving its
Registered Office at(hereinafter called the "Sub-Vendor for BOP C&I
DDCMIS", which expression shall include its successors, administrators, executors and
permitted as- signs) AND

*M/sa Company incorporated underhaving its
Registered Office at(hereinafter called the "Collaborator/Associate for
SG C&I DDCMIS", which expression shall include its successors, administrators,
executors and permitted assigns) AND

*M/sa Company registered under thehaving its Registered
Office at(hereinafter called the "Associate/Collaborator", which expression shall
include its successors, administrators, executors and permitted assigns), in favour HPGCL, a
Government of Haryana Undertaking incorporated under the Companies Act, 1956, having its
Registered Office at Punchkula (hereinafter called "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 at
Deen Bandhu Chhotu Ram Thermal Power Plant** (hereinafter referred to as "Plant") vide
its Bidding Document No. 03/HPGCL/DCRTPP/EPC/800MW

AND WHEREAS vide Para 2 of clause 6.1 of Chapter 04, "Provenness" , Volume II of bidding

documents, it has been specified that bidder who fully meets the required experience for BOP C&I DDCMIS specified in Para 1 of clause 6.1 of Chapter 04, "Provenness", Volume II of bidding documents, may also supply SG C&I and/or TG C&I DDCMIS provided he collaborates/Associates with DDCMIS/DCS Manufacturer(s) who fully meets the requirements specified at Para 1 of clause 6.1 of Chapter 04, "Provenness", Volume II of bidding documents for SG C&I and/or TG C&I DDCMIS respectively as on the date of Techno-commercial bid opening.

WHEREAS M/s (Contractor) has submitted its proposal in response to the aforesaid Invitation for Bid by the Owner bearing No. dated for the EPC Package for **1 x 800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant** against the Owner's Bidding Documents.

AND WHEREAS M/s.....(*Contractor/*his sub-vendor) meet the requirements specified at clause no. 6.1 of Chapter 04, "Provenness", Volume II for BOP C&I,*SG C&I,*TG C&I DDCMIS and have an on-going collaboration / Association agreement prior to the date of placement of order of DDCMIS with *M/s..... (hereinafter referred to as Collaborator/Associate) who is a manufacturer of SG C&I DDCMIS and/or with *M/s .. (hereinafter referred to as Collaborator/Associate) who is a manufacturer of TG C&I DDCMIS and meets the requirements as specified in clause no. 6.1 of Chapter 04, "Provenness", Volume II. The Contractor*and *his Sub-Vendor and the Collaborator(s)/ Associate(s) 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 successful performance of the DDCMIS and be jointly and severally liable to perform all contractual obligations for the DDCMIS for **1 x 800 MW Super Critical Expansion Unit at Deen Bandhu Chhotu Ram Thermal Power Plant** fully meeting the stipulated technical requirements, guaranteed parameters and characteristics as per the Bidding Documents, in the event the bid is accepted by the Owner resulting into a Contract (hereinafter called the "Contract").

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER :

1. We the Associate(s)/Collaborator(s) and the Contractor *and *his Sub-Vendor, do hereby declare and undertake that we shall be jointly and severally responsible to the Owner for the execution and successful performance of the complete DDCMIS and all the contractual obligations including the technical guarantees for the complete DDCMIS.
2. In case of any breach of the Contract committed by the Contractor *and *his Sub-Vendor, we the Associate(s)/Collaborator(s) do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the DDCMIS and undertake to carryout all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor's obligations stipulated under the Contract. Further, if the Owner sustains any loss or damage on account of any breach of the Contract for the DDCMIS, we the Associate(s)/ Collaborator(s) and Contractor *and *his Sub-Vendor jointly and severally undertake to promptly indemnify and pay such loss/damages caused to the Owner on its writ-ten

demand without any demur, reservation, Contest or protest in any manner whatsoever. This is without prejudice to any rights of the Owner against the Contractor/ his Sub-Vendor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Owner to first proceed against the Contractor/ *his Sub-Vendor before proceeding against the Associate(s)/Collaborator(s) 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 Contractor.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:

(a) We the Associate(s)/Collaborator(s) shall be fully responsible for complete design, manufacture, supply, installation so as to ensure satisfactory, reliable, safe and trouble free performance of DDCMIS.

Further, the Associate(s)/Collaborator(s) shall depute their technical experts from time to time to the Contractor's/his sub-vendor's /Owner's project site as required by the Owner and agreed to by Contractor *and *his Sub-Vendor/Collaborator/Associate to facilitate the successful performance of the DDCMIS as stipulated in the aforesaid Contract.

Further, the Associate(s)/Collaborator(s) shall ensure proper design, manufacture, installation, testing and successful performance of the DDCMIS under the said Contract in accordance with stipulations of Bidding Documents and if necessary, the Associate(s)/Collaborator(s) shall advise the Contractor/ *his Sub-Vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

(b) In the event the Associate(s)/Collaborator(s) and the Contractor *and *his Sub-Vendor fail to demonstrate that the DDCMIS meets the guaranteed parameters and demonstration parameters as specified in the contract, the Associate(s)/Collaborator(s) and the Contractor and *and *his Sub-Vendor shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Owner.

(c) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the DDCMIS and payment of financial liabilities and penalties and fulfillment of all other contractual obligations as provided under the contract shall be the joint and severally responsibility of the Contractor *and *his Sub-Vendor and Associate(s)/ Collaborator(s).

4. We, the Contractor *and *his Sub-Vendor and the Associate(s)/Collaborator(s) do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the defect liability period of the last

equipment covered under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days of satisfactory completion of such defect liability period. In case of delay in completion of defect liability period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this 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 *his Sub-Vendor and Associate(s)/Collaborator(s) 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 Contract.
6. In case of Award, in addition to the Contract Performance Security furnished by the Contractor, the Associate(s)/Collaborator(s) *and *Contractor's Sub-Vendor shall each 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 equal to **INR 30 Million (Rupees Thirty 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 valid till ninety (90) days beyond the end of defect liability period of the last 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 the period of such delay. 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 in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Haryana shall have exclusive jurisdiction.
8. We, the Associate(s)/Collaborator(s) and the Contractor *and *his Sub-Vendor agree that this Undertaking shall form an integral part of the Contracts from the date of signing of this Deed of Joint Undertaking. We further agree that this Undertaking shall continue to be enforceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of signing of this Deed of Joint Undertaking.

IN WITNESS WHEREOF, the Associate(s)/Collaborator(s) and the Contractor *and *his Sub-Vendor 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.

.....
(Signature Name)

.....
(Official Address)

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

Name.....

Designation.....

Common Seal of the
Company.....

For M/s
(*Contractor's Sub-Vendor)

2. WITNESS

.....
(Signature Name)

.....
(Official Address)

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

Name.....

Designation.....

Common Seal of the
Company.....

For M/s
(Associate/Collaborator)

1. WITNESS

.....
(Signature Name)

.....
(Official Address)

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

Name.....

Designation.....

Common Seal of the
Company.....

For M/s
(Associate/Collaborator)

2. WITNESS

.....
(Signature Name)

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

.....
(Official Address)

Name.....

Designation.....

Common Seal of the
Company.....

Note: Power of Attorney of the person signing on behalf of Associate/Collaborator and Bidder is to be furnished by Bidder.

* Contractor shall strike out, 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.