

**COMMISSION FOR AIR QUALITY MANAGEMENT  
IN NATIONAL CAPITAL REGION AND ADJOINING AREAS**  
17<sup>th</sup> Floor, Jawahar Vyapar Bhawan (GTC Building)  
Tolstoy Marg, New Delhi-110001

F. No. A-11018/01/ 2021-CAQM/35

Dated: 28.06.2023

**ADVISORY FROM THE COMMISSION**

**Subject: Regulations for use of DG sets in NCR.**

Sir,

As is well established, amongst other contributors, uncontrolled use of Diesel Generator (DG) sets is a major contributing factor for deterioration of air quality in the entire National Capital Region.

2. Till the winter season of 2022, in wake of generally prevailing adverse air quality in NCR, the Commission vide its Directions No. 54-57 dated 08.02.2022, while generally banning the use of DG sets in NCR during the restrictions under the Graded Response Action Plan (GRAP), detailed out the following emergency purposes / services for which DG sets could be used, even under the period of ban imposed under the GRAP:

- (i) Elevators / Escalators / Travelators etc. in various installations.
- (ii) Medical Services (Hospital/Nursing Home/Health care facilities) including units involved in manufacturing of life saving medical equipment/devices, drugs and medicines.
- (iii) Railway Services / Railway Stations.
- (iv) Metro Rail Corporation & MRTS Services, including trains and stations.
- (v) Airports and Inter-State Bus Terminals (ISBTs).
- (vi) Sewage Treatment Plants.
- (vii) Water pumping Stations.
- (viii) Projects related to national security, defence & of national importance.
- (ix) Entities involved in telecommunications and IT/ data services.

3. The above noted dispensation / relaxation towards limited use of DG sets was to avoid disruption to emergent services in the backdrop of limited certified technologies/ devices being available towards abatement of high levels of air pollution from such DG sets.

4. Over the period, through detailed technical deliberations and consultations with the concerned stakeholders, the Commission evolved the means for substantial emission reduction from use of DG sets through

transition of existing DG sets to a dual fuel mode (Gas + Diesel) and retro-fitment of Emission Control Devices to substantially lower the PM levels etc. The Commission since issued various directions from time to time in this regard viz. Direction No. 68 dated 14.09.2022 read along with its related orders and Direction No. 71 dated 09.02.2023.

5. Arising from a comprehensive review of the matter to abate air pollution from DG sets, in modification of all extant directions / orders / guidelines on the regulations for DG sets, the Commission vide Direction No. 73 dated 02.06.2023 issued a revised Schedule for regulated operations of DG sets across all sectors in the NCR including Industrial, Commercial, Residential and office establishments etc. which would come in force in the entire NCR strictly w.e.f 01.10.2023.

6. It was accordingly also directed that retro-fitment of dual fuel kits or ECDs, wherever warranted as per the revised schedule, must be targeted to be completed latest by 30.09.2023, failing which the use of the Diesel genset shall not be permitted under any circumstances, anywhere in the entire NCR including for use in essential services etc.

7. In the above backdrop, it is essential that conversion to dual fuel mode and / or retro-fitment of ECDs is earnestly targeted to be completed in all sectors in the NCR including industrial, commercial, residential and office establishments etc. latest by 30.09.2023, as:

(i) There are a number of agencies / suppliers for dual fuel kits, with some of the OEMs of DG sets also providing technical support.

(ii) By far, major residential / commercial / industrial pockets in NCR have access to PNG infrastructure and supply. Even where a dedicated supply of gas may not be feasible / viable, gas availability through cascades / cylinders is a convenient option.

(iii) Certified agencies are now available for RECDs in the DG set capacity range of 125 – 500 kW. Certification of RECDs for DG sets in the capacity range 500 – 800 kW is also expected soon and between July to September, 2023 there would be ample time to plan for the retro-fitment.

8. The aforesaid guidelines may be given wide publicity for implementation, including through advertisements, radio jingles, interaction with associations etc. particularly for the sectors as listed in para 2 above detailing out the emergency / essential services for which DG sets (even

without any emission control and pollution abatement measures) were hitherto permitted to operate during periods of restriction under the GRAP. **Hospitals, residential, office complexes, commercial entities etc. need particular attention in the matter.**

9. All respective agencies / departments in the GNCTD/ NCR state governments may also be advised suitably to disseminate these guidelines and sensitize all the stakeholders in this regard.

*Arvind*  
(Arvind Nautiyal)  
Member Secretary

Email: [arvind.nautiyal@gov.in](mailto:arvind.nautiyal@gov.in)

To,

1. Chairman, DPCC
2. Chairman, HSPCB
3. Chairman, RSPCB
4. Chairman, UPPCB

Copy to:

The Chief Secretary, Government of NCT of Delhi  
The Chief Secretary, Government of Haryana  
The Chief Secretary, Government of Rajasthan  
The Chief Secretary, Government of Uttar Pradesh  
Chairman, CPCB.  
The Chairperson and all Members, CAQM.

*Arvind*  
(Arvind Nautiyal)  
Member Secretary

**COMMISSION FOR AIR QUALITY MANAGEMENT  
IN NATIONAL CAPITAL REGION AND ADJOINING AREAS**

17th Floor, Jawahar Vyapar Bhawan (STC Building)  
Tolstoy Marg, New Delhi-110001

F. No. A-11018/01/ 2021-CAQM/15322-15331 Dated: 29.09.2023

**Subject: Directions under Section 12 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021 – Review of regulations for use of DG sets in NCR.**

WHEREAS, Ministry of Environment, Forest and Climate Change, Government of India, in exercise of the powers conferred under Section 3 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act 2021, has constituted the Commission for Air Quality Management in National Capital Region and Adjoining Areas (hereinafter referred to as the Commission);

WHEREAS, under Section 12 (1) of the Act, the Commission is vested with powers to take all such measures, issue directions, etc., as it deems necessary or expedient for the purpose of protecting and improving the quality of the air in the National Capital Region and Adjoining Areas;

WHEREAS, Section 12 (2) (ix) of the Act empowers the Commission to issue directions in writing to any person, officer, or any authority and such person, officer or authority shall be bound to comply with such directions;

WHEREAS, Section 12(2)(iv) of the Act empowers the Commission to lay down parameters for discharge of emissions from various sources whatsoever that have implications on the air quality in the region;

3emd

WHEREAS, Section 12(2)(v) of the Act also empowers the Commission to impose restrictions and regulate operations or processes that have implications on air quality in the region;

WHEREAS, the Commission has repeatedly taken up the matter relating to air pollution with the State governments of Haryana, Rajasthan, Punjab, Uttar Pradesh and Government of NCT of Delhi and various organizations concerned of the Central and State Governments/ GNCTD and has issued various Directions, Advisories and Orders for effective implementation of measures for abating air pollution in NCR, from time to time;

WHEREAS, the Commission has observed and has been sensitizing all stakeholders that, amongst others, large-scale unregulated use of Diesel Generator (DG) sets is a major contributing factor for deterioration of air quality in the region;

WHEREAS, in wake of generally prevailing adverse air quality in NCR during the winter season, the Commission, through directions No. 54-57 dated 08.02.2022, followed by Direction No. 68 dated 14.09.2022 and its related orders called for regulated use of DG Sets in the NCR, particularly during the periods of restrictions under the GRAP, subject to adopting emission control measures /devices/ systems such as retrofitted Emission control devices (ECDs) and dual fuel mode (gas and diesel), amongst other means of emission control;

WHEREAS, large number of DG sets operating in the region, even during the periods other than restrictions under the GRAP, cause heavy air pollution and are a matter of concern and thus, with a view to regulating the use of DG Sets even for such periods, the Commission issued Direction No. 71 for expeditious conversion of DG Sets to dual fuel mode, in areas where gas infrastructure and supply is available;

WHEREAS, the Commission from time to time reviewed the progress and status in this matter, in line with various directions issued by it;

*3end*

WHEREAS, the Commission revisited / reviewed some provisions of the extant directions on the regulated use of DG sets and issued a revised Direction No. 73 dated 02.06.2023, to be applicable across all sectors in the NCR including Industrial, Commercial, Residential and Office establishments etc., as well as permitting more time to implement the schedule w.e.f. 01.10.2023.

WHEREAS, preparatory actions were initiated by various stakeholders towards emission control from DG sets through retro-fitted ECDs and / or dual fuel systems, a number of representations were still being made to the Commission, including deliberations / meetings with various stakeholders in this context, wherein the following were highlighted:

- i. Issues related to availability of certified RECDs and agencies for all capacity ranges and vintages of DG sets.
- ii. Issues related to availability / delays in PNG infrastructure and supply, purely for DG sets.
- iii. Techno-commercial issues, logistics and time involved for fitment of RECDs / conversion to dual fuel mode.
- iv. Issues related to availability of DG sets to the latest standards as in MoEFCC notification No. GSR 804(E) dated 03.11.2022 (CPCB-IV).
- v. No means for emission control in under 19 kW capacity range of DG sets (neither RECDs nor dual fuel mode are available / suited).
- vi. Issues related to use of DG sets for emergency services.

Owing to the above, a number of stakeholders broadly requested for the following:

- (a) Extension of the deadline of 30.09.2023, as laid down in Direction No. 73, by about 3 months.
- (b) Stipulating a condition of '**OR**' instead of '**AND**' towards fitment of RECDs and conversion to dual fuel system, for all categories of DG sets above 19kW capacity.
- (c) Permitting DG Sets of >800 kW capacity to be run uninterruptedly for the durations of power supply failure, subject to compliance of



standards as in Direction No. 73 dated 02.06.2023, even during restrictions under GRAP.

- (d) Permitting such DG sets of < 125 kW capacity to be run for emergency services, even during the restrictions under the GRAP, where either certified ECDs are presently not available at all or where gas infrastructure and supply is also not available to enable running them in a dual fuel mode.

NOW, THEREFORE, in due consideration of the contentions and submissions made by various stakeholders, issues in ground level implementation, availability of RECDs / dual fuel systems / new gensets to CPCB -IV standards and various other techno-commercial considerations put forth by them, the Commission, pursuant to a comprehensive review and in supersession of all extant directions / orders / guidelines on the regulations for DG sets, now directs for adoption of the following Schedule for regulated operations of DG sets (only as a backup against regular power supply failures) across all sectors in NCR including Industrial, Commercial, Residential and Office establishments etc.:

<b>S. No.</b>	<b>Capacity Range of DG sets</b>	<b>System to be adopted for control of emissions</b>	<b>Regulations for use</b>
1.	Power generating sets of all capacities running on LPG/ Natural Gas/ Bio-gas/Propane/Butane	None	No restrictions (Even during periods under GRAP)
2.	Power generating sets of all capacities up to 800 kW to standards as per MoEFCC notification No. GSR 804(E) dated 03.11.2022	None	No restrictions. (Even during periods under GRAP)

*2and*

3.	800 kW and above	Any emission control mechanism, strictly subject to compliance of emission standards as indicated below. *	No restrictions (Even during periods under GRAP)
4.	125 kW to less than 800 kW	Dual fuel mode <b>OR</b> Retro-fitted ECDs through certified vendors / agencies	No restrictions (Even during periods under GRAP)
5.	19 kW to less than 125 kW	Dual fuel mode	No restrictions (Even during periods under GRAP)  DG Sets not working in a dual fuel mode, only owing to non-availability of gas infrastructure and supply, shall be permitted only for emergency services as stipulated in this direction.
6.	Portable DG sets (below 19 kW)	Presently no specific means of emission control are available in this category / capacity range of DG sets.	No restrictions during the periods, other than restrictions under GRAP.  Not to be generally permitted during periods of restriction under GRAP. These shall, however, be permitted even during periods under GRAP only for emergency services as stipulated in this direction.

*2014*



**\*Standards for stack emissions for 800 kW and above capacity DG sets**

S.No	Parameter	Emission Standards
i.	PM (at 15% O <sub>2</sub> )	50 mg / Nm <sup>3</sup>
ii.	NO <sub>x</sub> (at 15% O <sub>2</sub> )	650 mg / Nm <sup>3</sup>
iii.	CO (at 15% O <sub>2</sub> )	100 mg / Nm <sup>3</sup>
iv.	Minimum DG Stack height	<p>30 meters <b>OR</b> minimum 6 meters above the height of the building where DG set is installed, whichever is higher.</p> <p><b>For example</b>, if the building height where such DG set is installed is 20 meters, minimum stack height for DG set should be 30 meters from ground level;</p> <p>While, if the building height itself is 27 meters, the minimum stack height for the DG set should be 33 meters from the ground level.</p>

The regulated schedule for operation of DG sets issued vide Direction No. 73 dated 02.06.2023 comes to effect from 01.10.2023. The revised schedule as above further eases out the means of implementation and addresses practical difficulties and techno-commercial concerns of various stakeholders and thus the revised schedule for regulation of DG sets would be in force in the entire NCR w.e.f. 01.10.2023.

Notwithstanding the revised schedule as above, in the interest of not disrupting emergency services and permitting sufficient time for adopting the stipulated emission control mechanism in such existing DG Sets, the Commission, hereby, as a one-time exception, permits DG Sets for all capacity ranges (which have still not been equipped with emission control devices / systems as per the above noted schedule), to be run only for emergency services in the NCR as listed below, even under periods of restrictions under the GRAP, **only up to 31.12.2023** and strictly subject to adherence to the above noted schedule / measures for emission control thereafter:

- (i) Elevators / Escalators / Travelators etc. in various installations; Commercial entities / residential societies shall, however, ensure that operation of DG sets and supply

and

therefrom is purely limited to operation of elevators / escalators / travelators etc. and not for any other activities of commercial entities / residential societies.

- (ii) Medical Services (Hospital/Nursing Home/Health care facilities) including units involved in manufacturing of life saving medical equipment/devices, drugs and medicines.
- (iii) Railway Services / Railway Stations.
- (iv) Metro Rail Corporation & MRTS Services, including trains and stations.
- (v) Airports and Inter-State Bus Terminals (ISBTs).
- (vi) Sewage Treatment Plants.
- (vii) Water pumping Stations.
- (viii) Projects related to national security, defence & of national importance.
- (ix) Telecommunications and IT/ data services.

It is further reiterated that appropriate emission control mechanism shall be put in place on or before 31.12.2023, in respect of DG sets being used in above listed emergency services, to avoid action under the relevant provisions of laws / rules / regulations / directions etc., thereafter.

NCR State PCBs/ DPCC shall ensure compliance of above noted directions and regularly monitor the field level implementation.

— sd —  
(Arvind Nautiyal)  
Member- Secretary

To

1. The Chief Secretary, Government of NCT of Delhi
2. The Chief Secretary, Government of Haryana
3. The Chief Secretary, Government of Rajasthan
4. The Chief Secretary, Government of Uttar Pradesh

Copy to:

1. Chairman, DPCC
2. Chairman, HSPCB
3. Chairman, RSPCB
4. Chairman, UPPCB
5. Chairman, CPCB.
6. The Chairperson and all Members, CAQM.

— sd —  
(Arvind Nautiyal)  
Member- Secretary



No.11/33/2020-Th-II  
Government of India  
Ministry of Power

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Shram Shakti Bhawan, Rafi Marg,  
New Delhi dated 3<sup>rd</sup> July, 2023

**Annexure-P2**

**OFFICE MEMORANDUM**

**Subject:- Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE at 03:30 PM on 22.06.2023 to review 51 GW Thermal Capacity Addition- reg.**

The undersigned is directed to forward herewith a copy of Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE at **03:30 PM** on **22.06.2023** at Conference Room, 2<sup>nd</sup> Floor, Shram Shakti Bhawan, Rafi Marg, New Delhi to review 51 GW Thermal Capacity Addition, for further necessary action.

(Sunil Kumar Sah)

Under Secretary to the Government of India  
Tele: 2371-9710


To:

1. Secretary, MoEF&CC, Indira Paryavaran Bhavan, Jor Bagh Road, Block 17, Lodhi Colony, New Delhi
2. Chairman, CEA, Sewa Bhavan, R K Puram, New Delhi.
3. Additional Chief Secretary (Energy), Govt. of Tamil Nadu, Secretariat, Fort St. George, Chennai - 600009.
4. Principal Secretary, Energy Department, Government of Andhra Pradesh, AP Secretariat, Room No.147, Ground Floor, Building 2, Velagapudi, Dist - Guntur, Andhra Pradesh.
5. Secretary (Energy), Govt. of Chattisgarh, Chhattisgrah Mantralay Mahanadi Bhavan, Atal Nagar, Naya Raipur, Chhattisgarh.
6. Principal Secretary (Energy), Govt. of Gujarat, Block No. 4, 5th Floor, New Sachivalaya, Gandhinagar.
7. Principal Secretary (Power), Government of Haryana, 39, 8th Floor, Haryana Civil Sectt., Chandigarh.

8. Additional Chief Secretary (Energy), Government of Karnataka, 236, 2nd Floor, Vikasa Soudha, Dr B.R Ambedkar Street, Bangalore.
9. Secretary (Energy), Govt. of Madhya Pradesh, VB-2, Vallabh Bhawan Annex, Bhopal, Madhya Pradesh
10. Principal Secretary (Energy) Government of Maharashtra, 4th Floor, Mantralaya, Mumbai.
11. Additional Chief Secretary (Energy), Government of Odisha, Department of Energy 2nd Floor, Kharavel Bhawan Gopabandhu Marg, Keshari Nagar, Bhubaneswar, Odisha 751001
12. Secretary (Energy), Government of Rajasthan, Vidyut Bhavan, Janpath, Jaipur, Rajasthan
13. Secretary (Energy), Govt. of Telangana, Room No. 328A, D- Block, 2nd Floor, Telangana Secretariat, Hyderabad
14. Secretary (Energy), Government of Uttar Pradesh, Babu Bhavan, Lucknow, Uttar Pradesh.
15. Additional Chief Secretary, Department of Power, Government of West Bengal, Bidyut Unnayan Bhavan (5th Floor), 3/C, LA Block, Sector-III Salt Lake City, Kolkata
16. CMD, BHEL, BHEL House, Siri Fort, New Delhi.
17. CMD, NTPC Limited, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi.
18. CMD, DVC, NBCC Towers, Bhikaji Cama Palace, New Delhi.
19. CMD, SJVN Limited, Shakti Sadan, Shanan, Shimla, Himachal Pradesh
20. CMD, THDCIL, Corporate Office, Pragatipuram, Rishikesh, Uttarakhand
21. Chairman, NLCIL, G7GF+R8P, Pocket A, Okhla Phase I, Okhla Industrial Estate, New Delhi
22. Principal DG, PIB, Shastri Bhavan, New Delhi.

Copy to:

PS to Minister of Power & NRE/PS to MoS for Power & HI/Sr. PPS to Secretary (Power)/ PPS to JS (Thermal)/PPS to EA/PS to DS (Thermal), Ministry of Power



(Sunil Kumar Sah)

Under Secretary to the Government of India

Tele: 2371-9710

**Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 22.06.2023 at 03:30 PM to review 51 GW Thermal Capacity Addition.**

List of Participants is given at **Annexure**.

2. At the outset, Secretary (Power) welcomed Hon'ble Minister of Power & NRE and all the participants. Hon'ble Minister of Power enquired about the status of Additional Planned capacity and their tentative award schedule. He made it clear that all under construction plants should be expedited to the extent feasible and the timelines should be adhered to, without any slippages, so that the units are operationalized as per the declared commercial operation date (COD).

3. Chairperson CEA informed that 25760 MW Additional Thermal Candidate capacity is planned. Out of 25760 MW-Candidate Capacity, Central Sector (15300 MW) & State Sector (10460 MW) is planned for construction & likely to be commissioned between years 2026-2030. Further, out of this planned capacity, 9840 MW capacity is already under bidding process.


Chairperson, CEA suggested the following categorisation of Plants:

- i. Category I - Pit Head (less Than 100 Kms from the Linked Mine)
- ii. Category II - Non Pithead (Upto 500 Kms from the Linked Mine)
- iii. Category III- Others (More Than 500 Kms from the Linked Mines)

4. Hon'ble Minister apprised that Government has taken a policy decision that all the additional Capacity of thermal Power generation should be set up near the coal sources. Central Government will not encourage GENCO's (Central/State/IPPs) to set up thermal units at a distance of more than 500 Kms from the coal source, as it is easier to transmit electricity than transporting coal and also due to the logistical issues & constraints associated with railways network like track capacity, rack availability etc which will take time to overcome. Therefore, in this context the proposal of GENCOs for setting up generation units far away from coal mines (at distance greater than 500 Kms) shall be revisited.

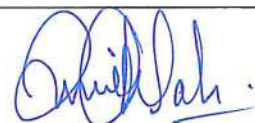
4.1. The discussion points on plant wise Thermal Capacity addition program (2026-30) is provided below:-

Sl. No.	Project Name	Issue/ Status	Decision
<b>Central Sector(15300 MW)</b>			
<b>Category –I (Pit Head -less Than 100 Kms from the Linked Mine)</b>			
<b>NTPC</b>			
1	Lara STPP-II, Chhattishgarh (2x800 MW)	It was apprised that <ul style="list-style-type: none"> <li>• DPR- Ready</li> <li>• Tender document- Prepared</li> </ul>	It was noted that project is <b>ON TRACK</b> .NTPC



		<ul style="list-style-type: none"> <li>• ToR Approval-Approved</li> <li>• NIT-18.11.2022</li> <li>• EIA report-Approved</li> <li>• Bidsubmission- 3.3.2023, Tech. bid-opening. Bid evaluation in progress.</li> <li>• Public Hearing- 20.2.2023</li> <li>• Award May-23</li> <li>• EC status- Feb,2023</li> <li>• Commissioning- U-1:July 2027 U-2:Jan 2028</li> <li>• Land available.</li> <li>• Coal available from Talaipalli Mines.</li> <li>• Water- Commitment of 68 MCM is available, reconfirmation from state received on 06.12.22.</li> </ul> <p>100% PPA is available.</p>	<p>briefed the current project status.</p> <p>Environmental Clearance has been recommended by EAC on 02.06.2023. Formal EC is awaited.</p> <p><b>Award Targeted by July 2023.</b></p> <p>This project to be considered for foundation stone laying by December 2023.</p>
2	Singrauli -III, UP (2X800 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>• DPR- Ready</li> <li>• Tenderdocument-under progress</li> <li>• ToR Approval-</li> <li>• NIT- Specification/tender Document are under progress, NIT to be re-initiated.</li> <li>• Award: <b>Dec,2023</b></li> <li>• EC granted on 13.07.2020.</li> <li>• Commissioning- U-1:Mar,2028 U-2: Sep 2028</li> </ul> <p>Land Available, however there is encroachment on part of the land. Based on the state govt. advice NTPC is in process to provide disturbance allowance to evacuate land.</p>	<p>It was noted that project is <b>ON TRACK</b>.</p> <p>NTPC may expedite the land encroachment issue and keep <b>Award Target by Nov 2023</b>.</p> <p>This project to be considered for foundation stone laying by December 2023.</p>

		<p>60 families have accepted &amp; signed.</p> <p>Coal available from NCL EC granted on 13.07.2020. Allocation of 48 Cusecs is available from Rihand Reservoir.</p>	
3	Darlipali-II, Odisha (1x800 MW)	<ul style="list-style-type: none"> <li>•DPR by March-23</li> <li>•ToR Approval-Application for TOR for EIA study submitted on 07.02.23</li> </ul> <p>Land Partially available Coal Linkage-CEA recommended coal linkage under Shakti B(i) and discussed in SLC on 21.2.23 , MOM awaited.</p> <ul style="list-style-type: none"> <li>•DPR: <b>June,2023</b></li> <li>•Award <b>Mar'2024</b></li> <li>•Commissioning-2028-29</li> </ul> <p><b>About 296 Acres of land needs to be diverted / acquired.</b> (Forest – 161,Private – 97,Govt Land - 38)</p> <p>170 Acres of land for compensatory Afforestation has been identified and approval obtained from Tehsildar, Sundargarh. DFO has to accord acceptance for the same. After acceptance of DFO, the EC shall be applied.</p> <p>ACS Odisha apprised that process of handover of identified land will be expedited and handover may be done in July 2023.</p> <p>NTPC conveyed that 7 cusecs surplus water is</p>	<p>It was noted that project is <b>ON TRACK.</b></p> <p>NTPC is advised to pursue EC and Forest clearance parallely to save time.</p> <p><b>Award Targeted by Mar-24</b></p>



		available from existing plant. Application for additional 17 cusec water allocation shall be submitted after HLCA clearance.	
4	Sipat-III, Chhattishgarh (1x800 MW)	<p>NTPC apprised that based on MOM of review meeting dated 09.11.2022 chaired by Hon'ble Minister of Power &amp; Renewable Energy, NTPC is going ahead with USC project.</p> <p>NTPC informed following status of Project (USC): Land available. Coal linkage-CEA recommended coal linkage under Shakti B(i) and discussed in SLC on 21.2.23 , MOM awaited</p> <ul style="list-style-type: none"> <li>•DPR- under approval <b>June-23</b></li> <li>•ToR Approval- EIA report is finalised and shall be submitted shortly.</li> <li>•Award <b>Dec-23</b></li> <li>•<b>Commissioning: 2028-29</b></li> </ul> <p>Water requirement could be met with existing water allocation.</p>	<p>It was noted that project is <b>ON TRACK</b>.</p> <p><b>Award Targeted by Dec-23.</b></p> <p>This project to be considered for foundation stone laying by December, 2023.</p>
<b>NLC</b>			
5	Talabira STPS, Sambalpur, Odisha 3x800 (2400)	<p>EC granted on 02.02.2021 Technical bid opened on 12.07.2022. Under evaluation. Award-On acquisition of land , Aug,23</p> <ul style="list-style-type: none"> <li>• Comm. : Mar.2027</li> <li>• Comm. : Sept.2027</li> <li>• Comm. : Mar.2028</li> </ul> <p>Total Land recommended</p>	<p>It was noted that project is <b>ON TRACK</b></p> <p>CMD, NLC stated that land for project is likely to be available by Oct-2023 and Bid shall be opened as soon as land is available.</p>



		<p>by IPICOL is 1694 Ac.</p> <p>Total land applied for acquisition so far is 1563.80 Ac.</p> <p>As on date land acquired: 174 Acres (Govt. land). Balance land likely be available by Oct.,2023.</p> <p>Payment of Rs. 478.54 Cr to IDCO towards land acquisition made on 17.02.2023, against demand letter 12.12.2022.</p> <p>Payment of Rs.31.55 Cr made to IDCO towards acquisition of Govt land (174 Ac.).</p> <p>Payment of Rs 9.25 Cr made IDCO for administrative charge for private land 471.33 Ac &amp; 153.88 Ac on 20.04.23.</p> <p>Coal availability is from Talabira Mines. Water allocation is also available.</p>	<p><b>Award is targeted By Oct 2023.</b></p> <p>This project to be considered for foundation stone laying by December, 2023.</p>
6	TPS-II 2nd Expansion, Cuddalore District. 2x660 (1320)	<p>EC granted. Lignite based. Fuel Tie-up from basket of Mines in Neyveli including Mine III is available</p> <ul style="list-style-type: none"> <li>• NIT issued in Oct.,2022 (Pre-bid meeting: 09.11.22)</li> <li>• Bid Submission: <b>24-05-2023</b></li> <li>• Award- Aug-2023</li> <li>• Comm. : Oct-2027</li> <li>• Comm. : April-2028</li> </ul> <p>It was apprised that the project is brown field and hence land is available.</p>	<p><b>CMD, NLC stated that this project is first of its kind Supercritical lignite based project.</b></p> <p><b>It was decided that the technology part be reviewed, at CEA level, as there may be problem in future regarding availability of spares due to lack of vendors and maintenance may become difficult. Sub Critical Lignite plants</b></p>

		<p>TANGEDCO consented to acquire entire power. MoP has given the consent for the same. Water availability is also there.</p>	<p>are of proven technology.</p> <p><b>It was further decided that the Policy regarding development of only Super Critical Thermal plants may be reviewed for lignite based plants.</b></p> <p><b>It was decided that CEA shall study the issue and review the policy, if required.</b></p> <p><b>However, NLC may try to complete the ongoing tendering process for this project with arrangements of assured local supply of spares.</b></p> <p><b>Award is Targeted By-Sept 2024</b></p>
<b>DVC</b>			
7	Ragunathpur, WB (2x660 MW)	<ul style="list-style-type: none"> <li>• DPR: 10.10.2022</li> <li>• NIT: 31.03.2023</li> <li>• <b>EC: 30.09.2023</b></li> <li>• <b>Award: 01.10.2023</b></li> <li>• Coal Linkage: CCL within 100KM</li> <li>• U-1 Commissioning: <b>Oct.27</b></li> <li>• U-2 Commissioning: <b>Apr.28</b></li> </ul> <p>NTPC is appointed as consultant for preparation of DPR &amp; Pre-award activities.</p> <p>Application for public hearing has been submitted on 13.06.2023</p>	<p>It was noted that project is <b>ON TRACK</b></p> <p><b>DVC</b> informed that NIT for EPC Package issued on 28.04.2023.</p> <p><b>Award Targeted by Oct-2023.</b></p> <p>This project to be considered for foundation stone laying by December, 2023.</p>

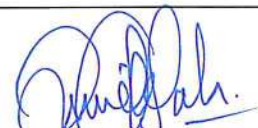


		<p>and is likely to happen after Panchayat Elections scheduled in July 2023.</p> <p>Land is available and water allocation for all the 3 plants has been obtained from DVRRC. Coal Linkage of 4.3 MMT of CIL is available with DVC. Allocation of Mines is pending and is being followed up with CIL. Rail connectivity is also available for the plant.</p>	
8	Durgapur, WB (1x800 MW)	<ul style="list-style-type: none"> <li>• <b>DPR:30.09.2023</b></li> <li>• <b>NIT: 30.01.2024</b></li> <li>• <b>EC: 31.08.2024</b></li> <li>• <b>Award: 01.09.2024</b></li> <li>• Coal Linkage: ECL (75 km)</li> <li>• <b>Commissioning: Aug.28</b></li> <li>•</li> </ul> <p>DVC Conveyed that the dismantling of decommissioned units needs to be taken up. Tender has been floated for value assessors for fixing the reserve price.</p> <p>Tender for appointment of consultant for DPR preparation shall be completed in Sept 2023 and thereafter EC process shall be taken up.</p> <p>It was apprised that the Coal Linkage allocation is not in place. CIL has to be approached for allocation of coal. Also, DVC shall be participating in the coal mine auction.</p>	<p>It was noted that project is <b>ON TRACK</b></p> <p>Chairman, DVC informed that Dismantling and Scrap Disposal Contract shall be awarded by 15 July 2023. The dismantling work shall take around 18 months.</p> <p>NIT for project shall be floated by Nov-23 &amp; <b>Award is Targeted by Sept 2024</b></p>



		It was recommended to conduct the underground geological survey. The DPR shall be finalized after this.	
9	Koderma , Jharkhand (2x800 MW)	<ul style="list-style-type: none"> <li>• <b>DPR: 25.04.2023</b></li> <li>• <b>NIT: 31.05.2023</b></li> <li>• <b>EC: 15.02.2024</b></li> <li>• <b>Award: 16.02.2024</b></li> <li>• CCL within 100-200KM</li> <li>• <b>Comm. : Feb-28</b></li> <li>• <b>Comm. : Aug-28</b></li> </ul> <p>Consultant appointed on 24.03.2023 for EC.</p> <p>NTPC appointed as consultant for preparation of DPR and Pre-award activities.</p> <p>DVC conveyed that Land is available and water allocation has been done by DVRRC.</p> <p>Chairman, DVC informed that EPC Tender has been floated and contract shall be awarded as soon as EC is granted.</p>	<p>It was noted that project is <b>ON TRACK</b> and <b>Award to be targeted by Dec-2023</b></p> <p>This project to be considered for foundation stone laying by December, 2023.</p>
<b>Category-II (Non Pithead (Upto 500 Kms from the Linked Mine))</b>			
<b>NTPC</b>			
10	Meja II , UP (3x800 MW)	<ul style="list-style-type: none"> <li>• Planned Project configuration changed for 2x660 to 8x300</li> <li>• DPR: Sept 2023,</li> <li>• Application for TOR: July 2023</li> <li>• Award: Sep, 2024</li> </ul> <p>Present linkage for Stage-I is from NCL / CCL</p> <p>NTPC conveyed that Land is available and water allocation needs to be done. (30 Cusecs required with ACC and 5</p>	<p>It was noted that project is <b>ON TRACK</b></p> <p><b>Award Targeted by Sep-24.</b></p>

		<p>Cusecs is Available)</p> <p>Coal linkage available for 2x600. To be tied up for enhanced capacity. The feasibility of Coal movement needs is being explored presently.</p> <p>Thereafter process of EC shall be taken up.</p>	
<b>SJVNL</b>			
11	Buxar ,Bihar 1*660 (extension)	<ul style="list-style-type: none"> <li>• DPR: prepared under approval</li> <li>• <b>NIT:31.07.2023</b></li> <li>• <b>EC: 30.09.2023</b></li> <li>• <b>Award: March 2024</b></li> <li>• Commissioning- 2028-29</li> <li>• 250 acre land acquisition to be completed.</li> </ul> <p>SJVNL apprised that approx. 250 acre land is required for ash dyke which is difficult under new guidelines, remaining land is presently available.</p> <p>Coal linkage has been recommended in SLC(LT) on 16.06.2023.</p> <p>After EC cabinet has to be approached for investment approval.</p> <p>Provision of water availability needs to be taken from Ganga water authority.</p>	<p><b>SJVN informed that SJVN informed that DPR is under approval. Ensuring availability of Land and water still under discussion stage.</b></p> <p><b>It was decided to approach Ministry of Finance for enhancing the delegation of power to the Board of Miniratna CPSEs for Brownfield projects pre-approved by MoP and with no budgetary support required so that any investment approval regarding these need not go to CCEA in order to save time.</b></p> <p><b>Award Targeted for Dec-2023</b></p>



**ADDITIONAL CANDIDATE COAL PLANTS FOR DEVELOPMENT IN FUTURE****Central Sector : 4380 MW****Category-I (PIT HEAD): Central : 2400 MW**

Sr. No	Developer	Project name	Capacity	Distance from mines
1	NLC	TALABIRA STPS	1*800	<100 KM
2	MBPP	MBPP SUNDERGARH	2*800=1600	<100 KM
<b>TOTAL</b>			<b>2400</b>	

**Category-II (Non-Pit Head): Central : 1980 MW**

Sr. No	Developer	Project name	Capacity	Distance from mines
1	NTPC	NTPC NABINAGAR (NPGC)-II	3X660=1980	250 - 500 Kms
<b>TOTAL</b>			<b>1980</b>	

4.2. **State Plants-** plant wise Thermal Capacity addition program (2026-30) is provided below:

Sl. No.	Project Name	Issue/ Status	Decision
<b>Category -I (Pit Head -less Than 100 Kms from the Linked Mine)</b>			
<b>Chhattisgarh</b>			
1	Super Critical Power Plant at Korba West, Korba, Chhattisgarh (2X660 MW)	<ul style="list-style-type: none"> <li>• It was apprised that</li> <li>• Land available.</li> <li>• Coal-CEA recommended coal linkage under Shakti B(i)</li> <li>• Water-No (Application to be submitted to GoCG after EC)</li> <li>• DPR- Ready</li> <li>• ToR Approval- TOR granted on 23.3.2023</li> <li>• Consultant appointed for EIA study.</li> <li>• EC status- Application submitted on 09.02.23.</li> <li>• EAC sub Committee visited plant on</li> </ul>	<p>It was noted that project is <b>ON TRACK</b></p> <p><b>NTPC is to be awarded consultation contract. Bid is in process.</b></p> <p><b>Award is targeted by Dec-2023</b></p>

Sl. No.	Project Name	Issue/ Status	Decision
		19.05.2023 • <b>Award- March-2024</b> • Commissioning-U-1: <b>Mar-2029</b> • CommissioningU-2: <b>Mar 2030</b>	
<b>Odisha</b>			
2	OPGC Expansion Project St-III (2x660 MW)	<ul style="list-style-type: none"> <li>• It was apprised that</li> <li>• Land available.</li> <li>• Coal-Available</li> <li>• Water-No (Application to be submitted for 2800 M3/hr)</li> <li>• DPR- Ready</li> <li>• ToR Approval- July 2023</li> <li>• EIA Report- Feb 2024</li> <li>• EC status- March 2024.</li> <li>• <b>Award- May-2024</b></li> <li>• Commissioning-U-1:<b>Mar-2029</b></li> <li>• CommissioningU-2:<b>Mar 2029</b></li> </ul>	<p>It was noted that project is <b>ON TRACK</b></p> <p><b>NTPC is to be awarded consultation contract pre bid activities. Bid is in process.</b></p> <p><b>Award is targeted by May 2024</b></p>
<b>Maharashtra</b>			
3	Chandrapur SuperThermal Power Station Maharashtra MSPGCL (1x660 MW)	<p>DPR yet to be prepared, only feasibility study is carried out.</p> <p>It was informed that current Unit shall come in place of yet to be retired 210 MW units.</p> <p>Mahagenco informed that, they are also actively considering to install 800 MW unit instead of 660 MW unit. Feasibility study (transportation of Generator rotor of 800 MW unit) is expected to complete in 15 days subsequent to which sizing of unit will be finalised.</p>	<p>Project is <b>on Track. Expected Bid Submission by July-2023</b></p> <p><b>CMD NTPC suggested to reconsider the decision of retire 200 MW unit and instead perform R&amp;M as it is more economical and small units ads flexibility to the system.</b></p> <p><b>It was decided that since R&amp;M &amp; LE cost is only 2-3 cr/MW against 8-9 Cr/MW for new plant. Hence the retirement of the</b></p>

Sl. No.	Project Name	Issue/ Status	Decision
			old unit may be reconsidered, New unit may be planned in addition but not as a replacement of old unit.
<b>Madhya Pradesh</b>			
4	Amarkantak Thermal Power Station, Anuppur MadhyaPradesh MPPCL (1x660 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>• DPR- Approved.</li> <li>• <b>Tender document- 31-07-2023</b></li> <li>• <b>NIT-31.08.2023</b></li> <li>• EIA report-Report submitted</li> <li>• Bid submission-15.10.2023</li> <li>• <b>Award- Feb-2024</b></li> <li>• <b>EC status- accorded on 1<sup>st</sup> May-2023</b></li> <li>• Commissioning-U-1:2027-28</li> </ul> <p>Forest land of 6.171 Ha. within the MPPGCL's Plant Boundary, need to be acquired by MPPGCL. Revised Online Application has been submitted in Jan'22.</p> <p>Chief Conservator of Forest, Bhopal vide letter Dtd 24.04.2023; has recommended <b>to MoEF, Bhopal</b> for acquisition of balance 6.171 Ha forest land; situated within power house premises.</p>	<p>It was noted that project is <b>on track</b> and expected project award by <b>Feb-24</b>.</p> <p><b>It was informed that M/s NTPC has been appointed as Project Consultant.</b></p> <p><b>Award to be Targeted- by Dec 2023.</b></p>
5	Satpura TPP U-12, Phase-V, Sarni, MadhyaPradesh MPPGCL (1x660 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>• DPR- Approved.</li> <li>• Tender document- <b>July-2023</b></li> <li>• NIT- <b>Aug-2023</b></li> <li>• EIA report-Report submitted</li> <li>• <b>Bid submission-Oct-23</b></li> <li>• Award- <b>Mar-24</b></li> </ul>	<p>It was noted that project is <b>ON TRACK</b></p> <p><b>It was informed that M/s NTPC has been appointed as Project Consultant.</b></p>



Sl. No.	Project Name	Issue/ Status	Decision
		<ul style="list-style-type: none"> <li>EC status- Under process Commissioning-U-1:2027-28.</li> </ul> <p><b>It was informed that EC is under active consideration of MOEF&amp;CC and desired document/study report will be submitted in next 2/3 month to MOEF&amp;CC.</b></p>	<b>Award Targeted by March 2024</b>
<b>Telangana</b>			
6	Singareni Thermal Power Plant (Stage-II), (1x800 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>DPR- completed</li> <li>NIT- 17-11-2022</li> <li>EIA report-Completed</li> <li>Bid submission-Bid opened 02.03.2023</li> <li>Bid: Under Evaluation, Negotiations with L1 bidder M/s BHEL is under progress.</li> <li>EC status- Accorded</li> <li>Commissioning-U-1:50 Months from the date of investment approval or issuance date of letter of award (LOA) for main contract whichever is earlier.</li> </ul>	<p>It was noted that project is <b>ON TRACK.</b></p> <p><b>Award Targeted by Aug-2023</b></p>
<b>Category-II (Non Pithead (Upto 500 Kms from the Linked Mine)</b>			
<b>Maharashtra</b>			
<i>Non-Pit Head Details:</i>			
7	Koradi Project, Nagpur, Maharashtra, MSPGCL (2x660MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>DPR- Ready</li> <li><b>Tender document-June-2023</b></li> <li><b>NIT-July-2023</b></li> <li><b>Bid submission-Feb-2024</b></li> <li><b>Award Feb-2024</b></li> <li>Commissioning- U-1: Dec 2027</li> <li>U-2: Jun 2028</li> </ul> <p>It was informed that Public hearing has been completed on 29-05-</p>	<p>It was noted that project is <b>ON TRACK.</b></p> <p>It was decided to issue tender parallel which EC process and award the project as soon as EC is granted.</p> <p><b>Award is targeted by Nov 2023</b></p> <p>This project to be considered for foundation stone laying</p>

Sl. No.	Project Name	Issue/ Status	Decision
		2023. EC is under consideration	by December, 2023.
<b>Category-III(Non Pithead (More than 500 Kms from the Linked Mine))</b>			
<b>Gujarat</b>			
8	Ukai Thermal Power Station Tapi, U-7 Gujarat, GSCECL 1*800 (800)	It was apprised that <ul style="list-style-type: none"> <li>• DPR- Ready</li> <li>• Tender document-Oct-2023</li> <li>• NIT- Nov-2023</li> <li>• Bid submission-Jan-2024</li> <li>• Award-May-24</li> <li>• EC status-Accorded</li> <li>• Award: Dec 2023</li> <li>• Commissioning- U-1: <b>May 2028</b></li> </ul>	<b>It was reiterated that the govt decision is that new coal based plants should be close to the coal source and not more than 500 KMs away. The project may not be considered.</b>
<b>Rajasthan</b>			
<i>Non-Pit Head Details:</i>			
9	CHHABRA TPS U-7 & 8 Rajasthan, (2X660 MW)	It was apprised that <ul style="list-style-type: none"> <li>• DPR- completed</li> <li>• NIT-</li> <li>• <b>Bid submission-</b></li> </ul> <p>It was informed that This project is link with the captive coal mine (Parsa East Kente Basin &amp; Extension Coal Block).</p> <p>The distance from the linked mine is around 800 Kms.</p>	<b>It was reiterated that the govt decision is that the new coal based plant should be close to the coal source and not more than 500 KMs away. The projects may not be considered.</b>  Govt of Rajasthan submitted that these expansion projects are critical to meet electricity demand of Rajasthan
10	KALISINDH TPS Rajasthan, (1x800 MW)	It was apprised that <ul style="list-style-type: none"> <li>• DPR- completed</li> <li>• ToR- Approved on 24-03-23.</li> </ul> <p>It was informed that This project is link with the captive coal mine (Parsa East Kente Basin &amp; Extension Coal Block).</p> <p>EIA study at site has been started on 15.03.2023 by M/s BHEL, PCRI Haridwar.</p>	It was suggested that the states away from coal mines may consider setting up plants in coal bearing states like Chattisgarh and Jharkhand.

Sl. No.	Project Name	Issue/ Status	Decision
<b>Haryana</b>			
11	Extension Unit of DeenBandhu Chhotu Ram Thermal Power Project, Haryana (1X800 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>• DPR- completed</li> <li>• NIT- 16-01-2023</li> <li>• <b>Bid submission- 28.06.2023</b></li> </ul>	<p><b>It was reiterated that the govt decision is that the new coal based plant should be close to the coal source and not more than 500 KMs away. The project may not be considered.</b></p> <p>Advisor (Energy) to Hon'ble CM of Haryana informed that the proposed extension is in place of Panipat TPS that they are going to surrender in entirety. He further submitted that present structure of transmission charges are such that it proves economical to set up thermal plants near the load centre instead of setting up at the Pit-head (Cost comparison- Rs 3.23/Kwh at load centre versus Rs 3.43/Kwh at the Pit-head).</p> <p>It was pointed out that the issue was not only of transport costs but physical logistic constraints. The present track carrying capacity is not even sufficient for the present requirement. This plant can be examined when the track capacity and loading capacity increases.</p>



Sl. No.	Project Name	Issue/ Status	Decision	
			Further, Secretary (Power) asked CEA to perform a detailed study, cost of coal transport versus ISTS charges, before arriving at any decision.	
<b>Additional Candidate Coal plants for Development in Future (MW) State Sector</b>				
<b>Pit Head Details : State : 1600 MW</b>				
S. N	State	Project Name	Capacity (MW)	Mines Distance
1	Karnataka	Godhna TPS, Champa, CG	2X800 MW	<100 KM
<b>Total</b>			<b>1600 MW</b>	

#### 4.4. Status of Stressed Projects with potential of capacity addition (2850 MW)

S.N	Project name	Capacity (MW)	Status	Category (Mine Distance)
1	Athena , CG	1200	Domestic coal based plant, Owned by Vedanta. CEA informed that project is likely to come in 2026-2030	Category-I (within 100 Km from Mines)
2	Monnet Power	1050	Domestic coal based plant, Owned by Jindal. CEA informed that project is likely to come in 2026-2030	Category-I (within 100 Km from Mines)
3	SKS Power	600	NCLT, CIRP under process Bid Evaluation is under progress. CEA informed that project is likely to come in 2026-2030	Category-I (within 100 Km from Mines)
<b>Total</b>		<b>2850 MW</b>		

## 5. Under Construction Thermal Power Projects:

The under construction coal/lignite projects were discussed. Member (Thermal), CEA informed that 25440 MW (36 units) thermal capacity from Central (12580 MW, 18 units) and State Sector (12860 MW, 18 units) are under construction and all the 'Units' are likely to be commissioned, as per schedule by FY 2027-28.

6. Sector-wise 'Thermal Power Projects under construction' was discussed as mentioned below:

### 6.1 Central Sector-Thermal Power projects under construction.

#### (i) Barh STPP, Stage-I, Unit- 2 & 3 (2x660 MW):

CEA informed that overall progress of Unit-2 is 97% and Unit-3 is 87% and trial run schedule for Unit-2 & 3 indicated as Jun'23 and Jun'24 has been revised to July'23 and July'24 respectively. The status was noted.

NTPC informed that Unit-2 full load has already been achieved on 09.06.23 and the unit is presently generating power. **Unit-2 will be commissioned in July'23.**

NTPC informed that some equipments/parts, including Generator Stator which is critical for commissioning, for Unit#3 have been missing and order has been placed for the same, however, there has been a delay in supply of the items from Russia due to ongoing conflict between Russia and Ukrain. Around 70% materials have reached the site. Due to non-availability of equipments, best effort target for commissioning of Unit-3 kept at July'24.

#### (ii) Telangana TPP, St-I, Unit-1&2(2x800 MW):

NTPC informed that Unit-1 had already been synchronized and load was raised up to 515 MW. However, the Unit is presently under shut down to attend a technical issue. BHEL representative informed that work of repair / restoration is under progress and completion of same is anticipated by 27.06.23, subsequent to which, activities for full load operation shall be initiated.

**It was decided that Unit-1 to be commissioned in Jul'23 and Unit-2 shall be commissioned by Aug'23.** The status was noted.



**(iii) North Karanpura TPP, Unit- 2&3 (2x660 MW):**

CEA informed that overall progress of Unit-2 is 92% and Unit-3 is 81% and the trial run is scheduled in Nov'23 and Jun'24 respectively. The status was noted.

**NTPC informed that the progress is in line for meeting and the best effort target for commissioning Unit-2 has been kept at Oct'23.**

Readiness of ATS for the project was discussed wherein NTPC stated that 1<sup>st</sup> part of the ATS NKSTPP-Chandwa line, 400 KV, D/C is completed which is sufficient to cater the power evacuation of two units. The 2<sup>nd</sup> part of the ATS NKSTPP-Gaya line, 400 KV, D/C is 51% completed as on date and this line is required for the power evacuation of the 3<sup>rd</sup> Unit. There is a forest clearance issue in this line. It was agreed to follow up the matter with Chief Secretary, Govt of Jharkhand.

**(iv) Patratu TPP, Unit- 1, 2 & 3 ( 3x800 MW) :**

CEA informed that overall progress of Unit-1 is 65%, Unit-2 is 60% and Unit-3 is 44% and the trial run is scheduled in Jul'24, Dec'24 and Mar'25 respectively. The status was noted.

NTPC informed that major constraint for this project is construction of Transmission lines being executed by State Transco i.e. JSUNL. The Progress of works on 400 kV Patratu-Patratu line is slow and the balance two lines i.e. Patratu – Koderma and Patratu – Chandil are yet to be awarded.

Hon'ble Minister enquired about the dependency on the State Transmission lines though Patratu is a Central sector generating station. It was informed that since Jharkhand is main beneficiary (85% power allocated), it is constructing its own Transmission lines to draw power from the plant.

Hon'ble Minister directed that in case of ISGS/CSGS provision of constructing ISTS should also be there in addition to State's Transmission lines and this policy should be applicable to all CSGS and IPP.

**(v) Talcher TPP, St-III, Unit- 1 & 2 ( 2x660 MW) :**

Trial run schedule for Unit-1 & 2 indicated as Nov'26 and May'27 respectively was noted.

NTPC informed that civil works in Boiler and TG area has started, however, work progress is getting adversely affected due to the following issues:

- a. Closure of Road passing through Talcher Thermal Plant stage III project (Jagannath-Anand Bazar Road) affecting main plant civil works.
- b. Completion of Railway Road over bridge connecting NH 149 to the project by Roads & Bridges Department, GoO to facilitate material movement to the Project site.
- c. Relocation of Bi-weekly Haat from entrance gate of Project (Anand Bazar).

Secretary (Power) assured to take up the issues with Government of Odisha

**(vi) Buxar TPP, St-I, Unit- 1 & 2 ( 2x660 MW):**

CEA informed overall progress of Unit-1 is 80% and Unit-2 is 65% and the trial run scheduled in Dec'23 and Mar'24 was revised to Mar'24 and July'24 respectively. The revised status was noted.

SJVNL informed that project is on track, however, there is problem in land acquisition for railway siding and hence alternate feasible route for coal transportation has been envisaged. The contingency plan has been made to achieve the target date of trial run of Unit-1.

**(vii) Ghatampur TPP, Unit- 1, 2 & 3 ( 3x660 MW):**

CEA informed that overall progress of Unit-1 is 90%, Unit-2 is 78% and Unit-3 is 73% and the trial run scheduled in Jul'23, Oct'23 and Dec'23 was revised to Oct'23, Dec'23 and Apr'24 respectively. The status was noted.

NUPPL informed that initially there was slow work progress in BoP area but the same has been addressed and BoP works are progressing. As a result of that rolling & synchronization of Unit#1 has been planned by end of Jun'23.

**(viii) Khurja STPP, Unit- 1 & 2 ( 2x660 MW):**

CEA informed that overall progress of Unit-1 is 68% and Unit-2 is 61% and the trial run is scheduled in Feb'24 and Aug'24 respectively. The status was noted.

THDC informed that the project is on schedule. It was informed that major beneficiary of this project is U.P. (60% energy to U.P.) and to draw the power UPPTCL is doing LILO works for their Aligarh-Shamli Transmission line, 400 KV, D/C at Khurja. Apart from the State Transmission line, ISTS (PGCIL) line is also available for the project.

Hon'ble Minister directed that all CSGS/ISGS should mandatorily be linked with ISTS lines and to avoid the Transmission charges connectivity has to be optimum.

## **6.2 State Sector-Thermal Power projects under construction.**

### **(i) North Chennai STPP, Stage-III, Unit-1 ( 1x800 MW) :**

Trial run schedule for Unit-1 indicated as Oct'23 was noted.

TANGEDCO informed that for coal feeding, alternate arrangement is being made to meet trial run schedule. Coal firing is likely to be taken up in Aug/Sep'23.

### **(ii) Ennore SEZ STPP, Unit- 1 & 2 ( 2x660 MW) :**

CEA informed that overall progress of Unit-1 is 63% and Unit-2 is 63% and the trial run scheduled in Jul'24 and Sep'24 was revised to Apr'25 and July'25 respectively. The status was noted.

TANGEDCO informed that the project might get delayed by three months due to poor manpower mobilization by BHEL. BHEL informed that civil work contractor has been replaced and the delay was mainly due to re-tendering of works of CHP, AHP and fire protection system. BHEL further informed that coal stock yard clearance is to be provided by TANGEDCO to start the work as there is a hold by NGT on account of water supply line and coal conveyer passing through mangroves in the coastal area. BHEL stated that they require 18 months' time to complete the work once the stay of Hon NGT is vacated. TANGEDCO informed that they will be able to get the approval of Hon NGT in another 1 month's time.

### **(iii) Udangudi STPP, Unit- 1&2 ( 2x660 MW) :**

CEA informed that overall progress of Unit-1 is 68% and Unit-2 is 65% and the trial run scheduled in Mar'24 and Jun'24 was revised to Sep'24 and Jan'25 respectively. The status was noted.

TANGEDCO informed that due to re-tendering of CHP/AHP package there is a delay in project. It was further informed that GIS switch yard work has slow progress. BHEL informed that civil agency has been replaced and readiness of switchyard will be aligned with boiler light up schedule.

Hon'ble Minister advised TANGEDCO to go for pit-head plants in other States like Chattisgarh and Jharkhand instead of setting up plants at a distance of more than 500 kms from the linked coal mine. He informed that MoP will not encourage any plant outside the radius of 500 km from



the coal mine. The idea is to transmit electricity and not transport the coal as besides cost issues it also involves logistical issues.

**TANGEDO requested to rationalize Long Term Access (LTA) transmission charges policy and align it with the objective of MoP to encourage pit-head plants.**

**Hon'ble Minister asked TANGEDCO to submit a proposal on rationalization of LTA transmission charges for consideration of MoP.**

**(iv) Jawaharpur STPP, Unit – 1 & 2 ( 2x660 MW) :**

CEA informed that overall progress of Unit-1 is 91% and Unit-2 is 86%, trial run schedule for Unit-1 & Unit-2 was indicated as Sep'23 and Jan'24. The status was noted.

Hon'ble Minister enquired about the previous targets for the project. CEA informed that Unit-1 was to be completed by June'23. UPRUVNL informed that there was a delay in readiness of AHP due to non-sequential supply of material, however, the same has been resolved and the generation will start from July'23. They also assured to achieve trial run for Unit-2 by Dec'22.

**(v) Obra-C TPP, Unit- 1 & 2 ( 2x660 MW) :**

CEA informed that overall progress of Unit-1 is 90% and Unit-2 is 75%, trial run schedule for Unit-1 & 2 indicated as Jun'23 and Jan'24 was revised to Sep'23 and Apr'24 respectively. The status was noted.

UPRVUNL informed that generation from Unit-1 will start from July'23. However, Unit-2 may take some time due to delay in material supply. UPRVUNL assured that Unit-2 will come April'24.

**(vi) Panki TPP Ext., Unit- 1 ( 1x660 MW) :**

CEA informed that overall progress of Unit-1 is 76%, trial run schedule for Unit-1 indicated as Mar'23 was noted.

UPRVUNL informed that due to delay in material supply readiness of AHP/CHP package is hampering. Boiler light up is planned in Jul'23.

**Hon'ble Minister asked CEA to include all completion dates with respect to: Original Sanction; 1<sup>st</sup> Revision; 2<sup>nd</sup> Revision etc in the presentation as well as Note showing therein every change in targeted completion date in order to identify shifting of goal post and ascertain the reasons thereof.**

**Hon'ble Minister also expressed displeasure over CE level officers attending the meeting. He instructed to make sure that CMD of the Genco should attend the meeting.**

**(vii) Dr. Narla Tata Rao TPS, Unit- 8 ( 1x800 MW) :**

CEA informed that overall progress of Unit-8 is 86% and the trial run is scheduled on Jul'23. The status was noted.

**(viii) Yadadri TPP, Unit- 1,2,3,4&5 ( 5x800 MW) :**

CEA informed that overall progress of Unit-1 is 79%, Unit-2 is 79%, Unit-3 is 72%, Unit-4 is 75% and Unit-5 is 70% and trial run is scheduled on Dec'23, Dec'23, Sep'24, Aug'24 and Nov'24 respectively. The status was noted

TSGENCO informed that project is progressing well, Unit- 1 & 2 will come by Dec' 23. However, in compliance of Hon NGT order while disposing PIL filed by an NGO, fresh EC is required for the plant. They have applied for the same through PARIVESH portal, however, MoEF&CC has not issued additional TOR till date and hence EC is pending. TSGENCO requested MoP for its support on the issue.

**Secretary (Power) informed that a DO letter was sent in May'23 to MoEF&CC for expediting the issue. He assured to take up the matter with MoEF&CC.**

**(ix) Bhusawal SCTPP, Unit- 1 ( 1x660 MW) :**

CEA informed that overall progress of Unit-1 is 87% and the trial run is schedule on Oct'23. The status was noted.

Mahagenco informed that there is delay in supply of some piping materials required for steam blowing and then synchronization. BHEL assured that all these materials will be available at site by mid of July'23.

**(x) Sagardighi TPP, St-III, Unit- 1 ( 1x660 MW):**

CEA informed that overall progress of Unit-1 is 49% and the trial run is scheduled in Sept'24. The status was noted.

WBPDCCL informed that there is problem of material supply from BHEL side. BHEL informed that they have committed to supply the material by Sept'24. They informed that the dispatch plan has been shared with WBPDCCL and assured that they will not deviate from the timeline.

WBPDCCL was apprehensive of the commitment, they stated that there are some materials (power cycle piping) that are yet to be imported from China. These materials will first reach at BHEL plants and after machining

those materials will be dispatched to site. WBPDCCL informed that the original schedule for the trail run was Jan'24 but the same has been revised to Sept'24.

BHEL explained that the original schedule was Jan'24 but they have asked for Covid related time extension and if the same is granted by WBPDCCL, they will complete well before time.

**Hon'ble Minister asked WBPDCCL to consider the same. He asked BHEL to meet the timeline as no further relaxation will be granted.**

**The following directions were also given by HMOP:-**

**a). MoP to approach MoEF to dispense with requirement of public hearing for brown field expansion project.**

**b). CEA to undertake vendor development exercise and also review PQ requirement for BOP.**

\*\*\*\*\*

A handwritten signature in blue ink, appearing to be 'M. K. Singh', is located in the lower right quadrant of the page.

ANNEXURE

**List of participants at the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 22.06.2023 at 03:30 PM to review 51 GW Thermal Capacity Addition-reg.**

Sl.No.	Name	Designation
<b>Ministry of Power</b>		
1.	Shri R.K. Singh	Hon'ble Minister for Power & NRE, in Chair
2.	Shri Alok Kumar	Secretary
3.	Shri Pankaj Agrawal	OSD
4.	Shri Piyush Singh	Joint Secretary (Thermal)
5.	Shri Jithesh John	Economic Advisor, MoP
6.	Shri Anoop Singh Bisht	Director (Thermal)
7.	Shri Sunil Kumar Sah	Under Secretary (Thermal)
<b>CEA</b>		
8.	Shri Ghanshyam Prasad	Chairperson
9.	Shri Praveen Gupta	Member (Thermal)
10.	Shri M.P. Singh	CE (TPP&D)
11.	Shri J.N. Prasad	Chief Engineer
12.	Shri Aman Khare	SA-Incharge (TPMD)
13.	Shri Ankit Khasa	Assistant Director
14.	Shri Asif Iqbal	Assistant Director
MoEF		
15.	Dr. Saurabh Upadhyay	Scientist 'C'
<b>NTPC</b>		
16.	Shri Gurdeep Singh	CMD
17.	Shri U.K. Bhattacharya	Director (Projects)
18.	Shri S.N. Tripathi	Executive Director
19.	Shri A.K. Chhabra	ED (Project Management)
20.	Shri Mohit Atrey	AGM
21.	Shri Santosh Kumar	DGM
<b>DVC</b>		
22.	Shri R.N. Singh	Chairman
22.	Shri M. Raghuram	Member (Technical)
24.	Shri Akhilesh Kumar	Resident Director
<b>THDC</b>		
25.	Shri R.K. Vishnoi	CMD
<b>SJVNL</b>		
26.	Shri N.L. Sharma	CMD
27.	Shri Sushil Kumar	Director (Electrical)

	Sharma	
28.	Shri S.K. Garg	CEO, STPL
29.	Shri H. K. Singh	DGM, STPL
<b>BHEL</b>		
30.	Shri J.P. Singh	General Manager
31.	Shri R.P.S. Sisodia	General Manager
32.	Smt. Alka Wadhwa	General Manager
<b>GSECL</b>		
33.	Shri Ravi Shankar	Managing Director
<b>CSPGCL</b>		
34.	Shri Sanjiv Kumar Katiyar	Managing Director
<b>MPPGCL</b>		
35.	Shri Manjeet Singh	Managing Director
36.	Smt. Rehana Beg	Resident Engineer
<b>TSGENCO</b>		
37.	Shri M. Sachidanandam	Director (Projects)
38.	Shri P.V.Srinivas	Chief Engineer / TPC
<b>MSPGCL</b>		
39.	Shri Abhay Harne	Director (Projects)
<b>MSEBHCL</b>		
40.	Shri Prafulla Pathak	Executive Director
<b>UPRVUNL</b>		
41.	Shri Ashok Saxena	Chief Engineer, PPMM
42.	Shri A.S. Katiyar	Chief Engineer, PPMM
<b>KPCL</b>		
43.	Shri S. Krishna Murthy	Chief Engineer
44.	Shri S. N. Sharma	Resident Officer
<b>HPGCL</b>		
45.	Shri P.K. Das	Chairman
46.	Shri R. K. Verma	Director (Technical)
47.	Shri C.D. Chawla	Chief Engineer (Project)
<b>SCCL</b>		
48.	Shri D Satyanarayana Rao	Director (Electrical & Mechanical)
49.	Shri Avnish Dubey	SE (Electrical & Mechanical)
<b>NLCIL</b>		
50.	Shri M. Venkatachalam	Director (Power)
51.	Shri Dinesh kumar	General Manager
52.	Shri M.S. Ranawat	Dy. Chief Engineer
<b>TANGEDCO</b>		
53.	Shri Rajesh Lakhoni	CMD
<b>APGENCO</b>		
54.	Shri KVN Chakradhar	MD

	Babu	
<b>PIB</b>		
55.	Shri Dheep Joy	Joint Director



**HARYANA POWER GENERATION CORPORATION LIMITED**  
Regd. Office – C-7, Urja Bhawan, Sector-6, Panchkula  
Corporate Identity Number: U45207HR1997SGC033517  
 Website: [www.hpgcl.org.in](http://www.hpgcl.org.in) E-mail- [ceprojects@hpgcl.org.in](mailto:ceprojects@hpgcl.org.in)  
 Telephone No. 0172-5022424

From

Managing Director,  
HPGCL, Panchkula.

To

The Chairman  
Central Electricity Authority  
Sewa Bhawan, Rama Krishna Puram, Sector-1  
New Delhi-110066

Memo No: 558/CE/Projects/HPGCL

Dated: 27.06.2023

**Subject: Setting up of 1x800 MW Supercritical Expansion Unit at DCRTTP, Yamunanagar.**

This is with reference to the meeting held on 22.06.2023 under the Chairmanship of the Hon'ble Minister of Power&NRE, Govt. of India, and the subsequent telephonic discussions with the Chairman of Haryana Power Utilities regarding setting up of 1x800 MW coal based Supercritical Expansion Unit at DCRTTP, Yamunanagar. In this regard, following facts are brought to your kind notice: -

1. The existing contracted capacity of power of Haryana is 13,524.77 MW. The expected power demand during summer peak season is 13463 MW and during winter lean season is 8016 MW. Currently, 8282.23 MW (61.24 %) is being arranged from outside the State, while 5242.54 MW (38.76 %) is being managed through internal generation. It is further submitted that the expected demand in the year 2030 shall be 19,000 MW and by that time the internal generation will reduce from 5242.54 MW to 4532.54 MW on account of phasing out of 710 MW entire capacity of PTPS, Panipat. Thus, this will further result in an increased ratio of power import from outside the State and necessitates internal capacity addition, as otherwise it may create state network stability issues. Central Electricity Authority in its meeting dated 12.04.2021 also advised Haryana to go for capacity addition in view of the power requirement by 2029-30.
2. Haryana had also got a study conducted on network stability and voltage stabilization through CPRI. The relevant extract of CPRI report is reproduced as under:

*“ The state generators are cheaper as compared to some of the Interstate generators on landed cost basis. Thus, running of the state generators with Interstate generators is*

*advisable to have more benefit in reducing power procurement cost and improve system reliability and optimizing PoC charges to reduce the burden on consumer for future.*

*Decrease in bus voltage at large no. of buses is observed in simulation, when majority power is imported from outside Haryana. However for off-peak loading, there is increase in bus voltage more than 5%. So it advisable to utilize local available generation in Haryana for reactive power support for voltage regulation during peak and off-peak operating scenario.*

*It is also observed that there is marginal increase in losses, when there is % increase in power imported from outside Haryana State due to transportation of power over longer electrical distances."*

3. During meeting with the Hon'ble Minister of Power&NRE on 22.06.2023, it was specifically apprised by Haryana that considering all aspects of cost to consumer basis, in the present scenario, the state-based plants are more beneficial compared to pit head plants. The cost comparison is based on following assumptions: -

- a) Plant Load Factor (PLF) considered as 85%.
- b) PoC charges per unit of power as per actual PoC charges paid as per RTA (Rs 2116 Crore) in a Financial Year for the total power procured under long term PPAs (22679 MUs), which effectively works out to be Rs 0.933 per Unit.
- c) Transmission loss and inter-state transmission tariff as per prevailing norms.
- d) Host state like Chhattisgarh is pressing for 5% to 7.5% power on ECR basis through Implementation Agreement, while Odisha is pressing for 14% / 12% as per its policy dated 8<sup>th</sup> August 2008. Therefore, the opportunity cost of non-availing of that much power from the pit head plant has been loaded.

Based on above assumptions, the following is the cost comparison of Pit Head vs State based unit:

S.No	Description	State Based Unit (Rs per Unit)	Pit Head Based Unit (Rs per Unit)
A	Transportation of coal	1.50	0.45
B	Poc charges impact	-	0.933
C	Free power to state on ECR basis	-	As per state rule @ 5%*
D	PoC losses	-	@3.20%
E	Any other cess as applicable to state	-	---
F	ECR (pure on coal without transportation)	1.73	1.73
G	Total (landed cost) $\frac{\{(A+B+D+E+F)\}}{(1-C)} \div (1-D)$	3.23	3.385

\* As per Lanco PPA having 5% implementation agreement with Chhattisgarh.



4. It is pertinent to mention here that HERC is allowing State Generator an ROE of 10%, whereas CPSUs/IPPs/power plants whose tariff is determined through CERC, are availing an ROE of 15.5%. In monetary terms, the difference amounts to Rs 92.40 crores annually excluding tax which yields to a saving of Rs 2310 Crore (Rs 2807 Crore including tax) @ 30% of equity and Project cost @ Rs 7 Cr per MW.
5. It is also brought to your kind notice that Haryana has given consent for procurement of following power from various sources for the next five years:
- a) Thermal (CPSUs) - 1500 MW.
  - b) Nuclear (CPSUs) - 1400 MW.
  - c) Hydro (CPSUs) - 1424 MW.
  - d) Solar - 2174 MW.
  - e) Wind - 1280 MW.

All these power sources are located outside the state. It is our firm opinion that apart from the technical problems stipulated in the CPRI report, there will be a substantial difference in the landed cost of power (considering Fixed Charge/ECR/Transmission charges and losses) between a power plant set up within the state and a pithead plant. Based on the assumptions at S.No 3 & 4 above, it is estimated that there will be saving of approximately Rs 185 crores per year and Rs 4625 crores over the entire useful life of the project.

6. It is worth to apprise that as the variation in load demand between peak season and lean season would be more than 40%, thus any capacity addition outside the state is likely to remain backed down during lean season and this shall have considerable impact on PoC charges and will increase the overall power procurement cost to be borne by the consumers of the State. It is therefore beneficial to have in house generation to avoid adverse impact on PoC charges during lean season which in turn will help to reduce the overall power procurement cost for the State.


7. Besides above, a substantial saving would be there for the State in setting up a brownfield expansion unit at DCRTTP Yamuna Nagar on account of availability of land, water, railway infrastructure, raw water reservoir, raw water intake channel and ash dyke etc. for the new plant. Moreover, there is no R&R issue at DCRTTP Yamuna Nagar which is big challenge nowadays in power sector.

8. It is also submitted that a global tender for the proposed project at DCRTTP Yamuna Nagar on EPC basis stands floated in January 2023, response to pre-bid queries of BHEL and L&T have been uploaded and techno-commercial bids shall be opened on 10.08.2023. Terms of Reference also stands issued by MoEF&CC in March 2023 and accordingly the requisite

studies are being carried out at the project site. The work is likely to be awarded by December, 2023.

9. Hon'ble Chief Minister, Haryana has announced the project in this budget speech in the session and accordingly a provision of Rs 330 Crore has been kept as equity contribution in the current financial year.

In view of the foregoing, your esteemed office is requested to look into the above submissions of Haryana favourably and go ahead be given for 1x800 MW Supercritical Expansion Unit at DCRTPP, Yamunanagar, please.



Chief Engineer/Projects  
for Managing Director  
HPGCL Panchkula

CC:

1. SPS to Chairman/HPU for the kind information of Chairman/HPU please.
2. OSD/Tech to MD/HPGCL for the kind information of MD/HPGCL please.
3. Director/Tech-1 for kind information please.
4. Director/Tech-2 for kind information please.

No. CEA-EC-11-19(17)/76/2023-FCA Division/365

भारत सरकार  
Government of India  
विद्युत मंत्रालय  
Ministry of Power  
केन्द्रीय विद्युत प्राधिकरण  
Central Electricity Authority  
वित्तीय एवं वाणिज्यिक मूल्यांकन प्रभाग  
Financial & Commercial Appraisal Division

Sewa Bhawan, New Delhi  
11<sup>th</sup> Aug 2023

To

Principal Secretary (Power/Energy),  
Government of Gujarat/Rajasthan/Haryana

**Subject: Comparison of Railway Freight Charges vis-à-vis Inter State Transmission System (ISTS) Charges for deciding on location of thermal Generating Stations (Pit head or non-Pit head)**

Sir,

I am directed to convey that in accordance with advice of Ministry of Power, an exercise has been undertaken to compare the railway freight vis-à-vis ISTS charges for four proposed Plants i.e. 660 MW Chhabra TPS (Rajasthan), 800 MW Kalisindh TPS (Rajasthan), 800 MW Ukai TPS (Gujarat) and 800 MW Yamuna Nagar TPS (Haryana) in three different time-frame i.e. Present day (July 2023), 2026 and 2030. A brief note on the same is enclosed.

It is requested that comments, if any, may be shared with CEA within next 7 days.

Encl: As above

Yours faithfully,

*Prakash*  
11/08/2023

(चन्द्र प्रकाश)

सहायक निदेशक (एफ एंड सीए)

Tele-01126732414

**Copy to:**

- 1) Member (Thermal), Central Electricity Authority, New Delhi
- 2) Joint Secretary (Thermal), Ministry of Power, New Delhi

**Note on comparison of Railway Freight Charges vis-à-vis Inter State Transmission System (ISTS) Charges for deciding on location of thermal Generating Stations (Pit head or non Pit head)**

At Pit head thermal generating station, coal is available from the nearby mines, but the power generated by the Plant will be transmitted to the load centre, and thus leads to applicability of ISTS transmission charges and losses. Whereas, any non-pit head thermal plant will serve the nearest load centre within the state implying no ISTS transmission charges and losses, but it has to get the coal from the mines and thus, will incur railway freight for transportation of coal. Any decision on whether a coal based thermal generating station, will be located at pit head or non-pit head will primarily depend on comparison of railway freight vis-à-vis ISTS charges.

An exercise has been undertaken to compare the railway freight vis-à-vis ISTS charges for four proposed Plants i.e. 660 MW Chhabra TPS (Rajasthan), 800 MW Kalisindh TPS (Rajasthan), 800 MW Ukai TPS (Gujarat) and 800 MW Yamunagar TPS (Haryana) in three different time-frame i.e. Present day (July 2023), 2026 and 2030.

**Assumptions**

**A) Railway Freight for transportation of coal for Non-pit head stations**

i) While carrying out the estimation of railway freight, coal mines and their distance from the beneficiary States have been taken as under:

Plant Name	Capacity (MW)	Distance from Mine (km)
Chhabra TPS, Raj	660	830 (PEKB)
Kalisindh TPS, Rajasthan	800	1080 (PEKB)
Ukai TPS, Gujarat	800	1150 (SECL)
	800	700 (WCL)
Yamuna Nagar TPS, Haryana	800	1300 (CCL)
	800	1050 (NCL)

ii) Station Heat Rate taken as 2250 kcal/kwh, GCV of coal as 3850 kcal/kg, price of coal as Rs 1709/tonne (G12).

iii) Transportation cost of coal (railway freight) varies with distance and existing railway freight effective from 31.10.2018 as per **Annexure-I** has been taken. Transportation loss taken as 0.8% (as per CERC Norm).

iv) Considering the past trend of increase in Railway Freight, 4% annual escalation (simple) has been applied to the existing railway freight to arrive at projected railway freight for 2026 and 2030.

**B) ISTS Charges and Losses to be paid by beneficiary State for drawing power from Pit head Plant**

i) Grid Controller of India vide notification dated 25.06.2023 issued "Notified transmission charges payable by Designated Inter State Transmission Customers for the billing month of July 2023" (copy at **Annexure-II**). LTA charges (Rs/MW/month) of the concerned beneficiary States have been derived by dividing the total transmission charges payable by the State with total LTA of the States.

ii) ISTS charges payable by the concerned State for drawing power from pit head plant has been arrived at by multiplying installed capacity of the Plant with LTA charges of the State (Rs/MW/month) and then per unit transmission charges have been computed by dividing the ISTS charges with the energy generated by the Plant at 65% and 85% PLF.

iii) ISTS losses have been assumed at 4% and cost of power lost due to ISTS losses have been derived by average generation cost of Rs. 3.63 per unit.

iv) Average LTA charges (Rs/MW/month) payable in 2026 and 2030 have been taken as per projection of Central Transmission Utility of India and then, the same has been normalized for specific State in the ratio of present average LTA charge (Rs/MW/month) and present LTA charge of the State.

**Findings**

Based on above, comparison of railway freight vis-à-vis ISTS charges for the above four thermal Plants have been worked out and is enclosed at **Annexure-III.**

\*\*\*\*



AN ISO: 9001, ISO: 14001 & ISO: 45001  
CERTIFIED COMPANY

## Haryana Power Generation Corporation Limited

Regd. Office- C-7, Urja Bhawan, Sector-6, Panchkula  
Corporate Identity Number: U45207HR1997SGC033517  
Website: [www.hpgcl.org.in](http://www.hpgcl.org.in) TeleFax No. 0172-5022424

From

Chief Engineer / Projects,  
HPGCL, Panchkula.

To

The Chairman,  
Central Electricity Authority,  
Sewa Bhawan, R.K. Puram, Sector-1,  
New Delhi-110066

Memo No: 647/CE/P/0-3(DCTM) 800400/25  
Dated: 21/8/23

**Subject: Comparison of Railway Freight Charges vis-s-vis Inter State Transmission System (ISTS) Charges for deciding on location of thermal Generating Stations (Pit head or non – Pit head).**

Please refer to your office letter no. CEA-EC-11-19(17)/76/2023-FCA Division/365 dated 11.08.2023, furnishing the comparison of Railway Freight vis-a-vis Inter State Transmission System (ISTS) Charges for deciding on location of thermal Generating Stations and requesting for comments of the State.

HPGCL appreciates your office for putting up the true picture of comparison of Railway Freight vis-a-vis ISTS charges, which justifies the stance of Haryana for setting up a State based plant.

However, it is submitted that pit head projects would also have some freight component depending on their distance from coal mines. Therefore, the impact of railway freight for pit head projects also needs to be accounted in Annexure-III (appended with your above referred letter) for correct comparison with non-pit head projects. The impact of freight for pit head projects at various distances would be as under:

Location of the Project from pithead (Km)	Railway Freight (Rs/Ton)	Specific Coal Consumption (Grams/Kwh)	Cost Impact per Unit (Rs/Kwh)	Cost impact per unit considering ISTS transmission losses @4%
I	II	III	IV	V
101-125	390	560	0.22	0.23
201-275	673	560	0.38	0.40
426-500	1055	560	0.59	0.61

It may be seen from the above table that the additional cost of power as per Col-V needs to be added in the total cost of power for pit head plants for correct comparison.

Keeping the above in view, the tables of Annexure-III of your letter, have been revisited by adding the value of Col.-V of above table in three different scenarios as under:-

Contd - 2

**1) Pit Head Plants at a distance of 101-125 Km**

Plant Name	Capacity (MW)	Distance from mine (Kms)	Additional cost implication for non-pithead (railway freight of coal)	Additional cost implication for Pit-head (ISTS Charges & losses) & additional cost implication as per Col-V of above table (Rs/Unit) @85% PLF	Additional cost implication for Pit-head (ISTS Charges & losses) (Rs/Unit) @65% PLF
Yamuna Nagar	800	1300 (CCL)	1.79	1.59	2.02
TPS Haryana	800	1050 (NCL)	1.46	1.59	2.02

**2) Pit Head Plants at a distance of 201-275 Km**

Plant Name	Capacity (MW)	Distance from mine (Kms)	Additional cost implication for non-pithead (railway freight of coal)	Additional cost implication for Pit-head (ISTS Charges & losses) & additional cost implication as per Col-V of above table (Rs/Unit) @85% PLF	Additional cost implication for Pit-head (ISTS Charges & losses) (Rs/Unit) @65% PLF
Yamuna Nagar	800	1300 (CCL)	1.79	1.76	2.23
TPS Haryana	800	1050 (NCL)	1.46	1.76	2.23

**3) Pit Head Plants at a distance of 426-500 Km**

Plant Name	Capacity (MW)	Distance from mine (Kms)	Additional cost implication for non-pithead (railway freight of coal)	Additional cost implication for Pit-head (ISTS Charges & losses) & additional cost implication as per Col-V of above table (Rs/Unit) @85% PLF	Additional cost implication for Pit-head (ISTS Charges & losses) (Rs/Unit) @65% PLF
Yamuna Nagar	800	1300 (CCL)	1.79	1.97	2.50
TPS Haryana	800	1050 (NCL)	1.46	1.97	2.50

Accordingly, if the above aspect along with power demand scenario of the State of Haryana, is considered, where the power demand drops to 60 % in non-peak season, it is justified to have the project in the State. This would help to reduce the concluded liabilities in terms of LTA which in turn would reduce the Average Power Purchase Cost for the consumers of the State.

In addition to above, the followings other aspects are also in favour of State based Project: -

- a. The difference of tariff components of HERC & CERC as per their current Tariff Regulations, has a major impact on the fixed cost per unit of power. The difference of permissible Return on Equity (RoE) & initial spares between HERC & CERC would lead to a saving of Rs 121 Crore per annum for State based project which translates into saving of fixed cost by Rs 0.203 per KWh at normative.

Contd. 3



- b. CPRI, Bangalore in its studies for the State of Haryana has categorically mentioned that some internal power generating sources are needed for reactive power support and to manage the losses in the State grid.
- c. The State always proceeds for capacity addition based on the cost of power considering all aspects (Fixed Cost / Energy Charge Rate / Wheeling Cost / Losses etc.) on yearly basis in order to reduce the APPC. Thus, any capacity addition evaluation (viz Hydro/Thermal/RE/Nuclear) is carried out by the State considering demand supply scenario, impact on APPC, period of shortfall (peak/Off peak) etc.
- d. The State of Haryana has contracted approx. 1424 MW of Hydro power as future capacity addition through CPSUs. However low CUF of Hydro Power Projects would substantially impact its ISTS charges and would lead to higher APPC in future. Thus, for balancing of the same, in-house generation would facilitate the management of APPC to a little extent. Thus, marginal cost savings will be more for the State based projects with less concluded liabilities in terms of ISTS Charges.
- e. State based plant would have substantially less Project Cost due to savings in respect of land cost, common auxiliaries and absence of R&R issues.

In view of the foregoing, your esteemed office is requested to consider the above aspects favourably and go ahead be given for 1x800 MW Ultra Supercritical Expansion Unit at DCRTTP, Yamuna Nagar please.



Chief Engineer / Projects,  
HPGCL, Panchkula.

Copy to:

1. OSD to Chairman/HPGCL for kind information of Chairman/HPGCL, please.
2. OSD(Tech.) to MD/HPGCL for kind information of MD/HPGCL, please.
3. Director Technical-I, HPGCL, Panchkula.
4. Director Technical-II, HPGCL, Panchkula.



HPGCL  
AN ISO: 9001, ISO: 14001 & ISO: 45001  
CERTIFIED COMPANY

## Haryana Power Generation Corporation Limited

Regd. Office- C-7, Urja Bhawan, Sector-6, Panchkula  
Corporate Identity Number: U45207HR1997SGC033517  
Website: [www.hpgcl.org.in](http://www.hpgcl.org.in) TeleFax No. 0172-5022424

From

Chief Engineer / Projects,  
HPGCL, Panchkula.

To

The Chairman,  
Central Electricity Authority,  
Sewa Bhawan, R.K.Puram, Sector-1,  
New Delhi-110066

Memo No: 7/2/CH-16/CE/P/U-3/DCRTPP/800MW/25  
Dated: 23.8.2023

**Subject:** Comparison of Railway Freight vis-a-vis Inter State Transmission System (ISTS) charges for deciding on location of thermal Generating Stations (Pit head or non-Pit head) - Additional submissions thereof.

**References:** 1) This office memo no. 558/CE/Projects/HPGCL dated 27.06.2023  
2) This office memo no. 647/CE/P/U-3/DCRTPP/800MW/25 dated 21.08.2023.  
3) Meeting through VC on 22.08.2023 under the chairmanship of Secretary (Power), Govt. of India.

This is in continuation to our submissions vide memo referred 1) & 2) above and the subsequent meeting on the subject cited matter with Secretary (Power), Gol referred 3) above, wherein the concerned States were asked to provide additional submissions, if any, on the power point presentation of CEA within two days.

In this regard, your kind attention is invited on the following submissions in respect of proposed plant at Yamuna Nagar please:-

1 CEA has demonstrated the following comparison of Railway Freight of coal vis-à-vis ISTS charges for 2030 scenario for the proposed 800 MW plant at Yamuna Nagar:-

TABLE-A				
Plant Name	Capacity	Distance from mine	Additional cost implication for Non-Pithead (Railway Freight of coal)	Additional cost implication for Pithead (ISTS Charges & losses)
	(MW)	(Km)	(Rs/Unit)	(Rs/Unit)
Yamuna Nagar TPS, Haryana	800	1300 (CCL)	1.79	1.73
	800	1050 (NCL)	1.46	1.73

Perusal of above reveals that the cost implication of railway freight of coal from NCL is cheaper by twenty-seven (27) paise per unit vis-à-vis ISTS charges & losses for pithead plant whereas the railway freight for CCL mines is marginally higher by six (06) paise per unit.

2 In the following table, weighted average freight per unit has been calculated if coal linkage from both sources (CCL & NCL) is blended in different ratios for Yamuna Nagar plant:-

Contd - 2

CCL		NCL		Weighted Average Freight (Rs/Unit)
Railway Freight (Rs/Unit)	Blending (%)	Railway Freight (Rs/Unit)	Blending (%)	
1.79	0	1.46	100	1.46
1.79	20	1.46	80	1.53
1.79	40	1.46	60	1.59
1.79	60	1.46	40	1.66
1.79	80	1.46	20	1.72
1.79	100	1.46	0	1.79

Perusal of above reveals that non-pithead plant at the proposed location of HPGCL is justified even for marginal blending of CCL coal with 20% NCL coal. However, higher coal linkage of NCL (beyond 20%) for Yamuna Nagar Plant would lead to substantial financial savings.

3 Haryana Electricity Regulatory Commission (HERC) has capped the Return on Equity (RoE) for the State Genco's @ 10%. On the other hand, any IPP or CPSUs outside the State falls under the jurisdiction of CERC and attracts RoE @15.5% as per Chapter-8 of CERC Tariff Regulation for 2019-24 notified on 07.03.2019 (Annexure-I) along with Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess. Similarly, CERC has capped initial spares @ 4% whereas HERC permits the same @ 2.5%.

Accordingly, the financial implication per unit of power on account of different policies of CERC & HERC for a generating company is worked out in the following table, based on the assumption that project cost would be @ Rs 7 Crore/MW irrespective of its location with 30% equity: -

Tariff Component	CERC (Rs in Crores)	HERC (Rs in Crores)	Net Annual Saving (Rs in Crore)		Savings for Plant life of 25 years (Rs in Crore)
			(Without MAT)	(With MAT)	
RoE	260.4	168	92.4	117.78	2944
Initial Spares	224	140	84		84
Total Savings					3028

It may be seen from above that setting up a plant at the load centre would entail annual saving of Rs 121 Crore i.e. 1210 Million (3028/25) for HPGCL. Annual generation @ normative PLF (85%) is 5956.8 Million Units. Therefore, saving per unit in fixed cost, on this account only, would be Rs 0.20 per unit (1210/5956.8).

4. In view of submissions at para 3 above, the revised comparison of Railway Freight of coal vis-à-vis ISTS charges & losses considering savings in terms of RoE & initial spares for Yamuna Nagar plant would be as under: -

Plant Name	Capacity	Distance from mine (Km)	Additional cost implication for Non-Pithead (Railway Freight of coal) after adjusting impact of RoE & Initial spares (Rs/Unit)	Additional cost implication for Pithead (ISTS Charges & losses HERC) (Rs/Unit)
	(MW)			
Yamuna Nagar TPS, Haryana	800	1300 (CCL)	1.79-0.20= 1.59	1.73
	800	1050 (NCL)	1.46-0.20= 1.26	1.73

5 Further, the additional financial implication on account of the notifications of states having coal mines viz Odisha & Chhattisgarh that generating companies setting up plants in these states would provide 5% power at ECR. A copy of Gazette notification of Orissa Govt. is attached as **Annexure-II**. Haryana is presently bearing the same under Lanco Amarkantak PPA having plant at Chhattisgarh.

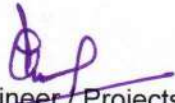
This has financial implication on fixed cost and the same needs to be loaded on the beneficiary State which is required to arrange alternate power for the said 5% shortfall in quantum. On account of this, the pit head plant in these States falls under the composite scheme and have the jurisdiction of CERC.

6 Besides above, a substantial saving would be there for the State in setting up a brownfield expansion unit at Yamuna Nagar due to availability of land, water, common auxiliaries like railway infrastructure, raw water reservoir, raw water intake channel, ash dyke etc. and the absence of any R&R issues for the new plant. Moreover, use of tertiary treated water is also being planned for the plant by the state.

7 In view of the above, it may be seen that even after blending of CCL coal with NCL, any offset left in respect of freight vs ISTS can be managed with savings yielded under the fixed cost on account of savings under tariff components as explained in preceding paras.

In view of the foregoing, favourable consideration of your esteemed office is requested for the above submissions of HPGCL and go ahead may be given for the proposed project at Yamuna Nagar. Further, allocation of coal linkage from NCL may also be recommended to Ministry of Coal for the proposed project of HPGCL at Yamuna Nagar in the interest of consumers of the State.

DA/As Above

  
Chief Engineer / Projects,  
HPGCL, Panchkula.

Copy to:

1. PS to Secretary (Power), GoI for kind information of Secretary (Power) please.
2. OSD to Chairman/HPU for kind consideration of Chairman/HPU please.
3. OSD(Tech.) to MD/HPGCL for kind information of MD/HPGCL please.
4. Director Technical-I, HPGCL, Panchkula.
5. Director Technical-II, HPGCL, Panchkula.

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

NEW DELHI

No.L-1/236/2018/CERC

Dated 7<sup>th</sup> March, 2019**NOTIFICATION**

In exercise of powers conferred under section 178 of the Electricity Act, 2003 (36 of 2003) read with Section 61 thereof and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations, namely:

**CHAPTER - 1****PRELIMINARY**

1. **Short title and commencement.** (1) These regulations may be called the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- (2) These regulations shall come into force on 1.4.2019, and unless reviewed earlier or extended by the Commission, shall remain in force for a period of five years from 1.4.2019 to 31.3.2024:

## CHAPTER - 8

COMPUTATION OF ANNUAL FIXED COST

30. **Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the

requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

- iii. in case of a thermal generating station, with effect from 1.4.2020:
  - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
  - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

**31. Tax on Return on Equity.** (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

#### Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1-0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY

2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;



# The Orissa Gazette

EXTRAORDINARY  
PUBLISHED BY AUTHORITY

No. 1534, CUTTACK, TUESDAY, AUGUST 12, 2008/ SHRAVAN 21, 1930

## ENERGY DEPARTMENT

### NOTIFICATION

The 8th August 2008

No.8960-OPGC-PPD-TH-97/07/E.-1. Orissa has natural advantage like coal reserves and water availability for encouraging pit head generation of power, which is the most economical source of Thermal Power. So far, 13 MoUs and PPAs have been signed prior to the 30th September 2006 by the State Government with Independent Power Producers (IPPs). Meanwhile, new Tariff Policy of Ministry of Power, Government of India stipulates that all future requirement of power should be procured competitively by distribution licensees except in case of expansion of existing projects. Presently, several other power plants are in the process of coming up in the State through new Independent Power Producers (IPPs), CPSUs like NTPC & NLC and Ultra Mega Power Project (UMPP) route.

2. In view of the above, to formulate procedures and policy guidelines, the task force on power sector held a meeting on the 18th April 2008 and made a number of recommendation on power plants pertaining to 4 critical areas namely; (A) Policy Guidelines for future IPPs who have not signed MoUs, (B) Review of PPA with IPPs who have already signed MoU, (C) Policy Guidelines for establishment of Ultra Mega Power Projects (UMPP), (D) Policy Guidelines for establishment of power plants by CPSUs like NTPC, NLC etc. The task force submitted their recommendations to the State Government and the same were examined by the State Government.

92.33  
92.40  
184.73

3. After careful consideration of the recommendations of the task force, Government have been pleased to decide the following key features of proposed MoU with future IPPs, with existing IPPs and with UMPPs vis-à-vis existing provisions:

Existing MoU of Orissa	Proposed MoU with future IPPs (2)	Proposed MoU with existing IPPs (3)	Proposed MoU with UMPP (4)
<p>(1) The power generated in excess of 80% PLF from the power plant will be made available to the State at variable cost plus incentive.</p>	<p>(i) This condition will be deleted.</p>	<p>(i) 7% power at variable cost will be made available to the State by the IPPs who have been allocated coal blocks within the State. Others will provide 5% power at variable cost. The variable cost will be determined by the OERC.</p> <p>(ii) No change.</p>	<p>(i) This condition will be deleted.</p>
<p>(ii) Infirm power will be made available to the State at variable cost.</p>	<p>(ii) No change.</p>	<p>(ii) No change.</p>	<p>(ii) This condition will be deleted.</p>
<p>(iii) A nominated agency(s) authorized by the State Govt. will have the right to purchase upto 25% of power sent out from the Thermal Power Plant, as per the tariff to be determined by the Regulatory Commission.</p>	<p>(iii) A nominated agency(s) authorized by the State Govt. will have the right to purchase 14% of the power sent out from the Thermal Power Plant at variable cost from the IPPs who have been allocated coal blocks within the State. Others will provide 12% power at variable cost. The tariff for such power will be determined by the OERC.</p> <p>(iv) No change.</p>	<p>(iii) No change.</p>	<p>(iii) A nominated agency (s) authorized by the State Govt. will have the right to purchase upto 50% of power from the UMPPs to be set up through competitive biddings, at the lowest bid price only.</p>
<p>(iv) An annual contribution @6 paise per unit of the energy sent out, from the plant, but not sold in the State to be made by the developer towards Environment Management Fund.</p>	<p>(v) No change.</p>	<p>(iv) No change.</p>	<p>(iv) This condition will be deleted.</p>
<p>(v) Rehabilitation of the land outstees will be in accordance with the new Rehabilitation policy approved by the GoO.</p>	<p>(v) No change.</p>	<p>(v) No change.</p>	<p>(v) No change.</p>
<p>(vi) Nothing mentioned.</p>	<p>(vi) Nothing mentioned.</p>	<p>(vi) Nothing mentioned.</p>	<p>(vi) UMPP should contribute 5% profit for peripheral development fund.</p>

4. Government after careful consideration have also been pleased to accept the following additional recommendations of the task force on each of the cases mentioned at Para-2:

**(A) POLICY GUIDELINES FOR FUTURE IPPS WHO HAVE NOT SIGNED MoUs**

i) Application for new IPPs will be considered on a case to case basis. The cases of renewable energy based power projects (Hydro, Wind, Bio-mass, Solar etc.) will also be entertained.

**(B) REVIEW OF PPA WITH IPPs WHO HAVE ALREADY SIGNED MoU**

i) The MoUs signed earlier may be modified accordingly including the PPAs signed by GRIDCO with concerned IPPs. However, modification of above provision in MoU will be done by GRIDCO & the IPP on mutual consent.

ii) The progress of existing IPPs will be reviewed strictly as per the conditions of MoU.

**(C) POLICY GUIDELINES FOR ESTABLISHMENT OF UMPP**

i) UMPP set up through its SPV is required to sign MoU with the State Government for necessary support in getting various clearances and assistances in R&R measures as per State Government policy.

ii) All other terms and conditions of Government of India with respect to development of UMPPs will be applicable.

iii) Allocation of 1300 MW power to State out of proposed UMPP project of 4000MW near Bhedabahal was accepted as the decision made earlier by MoP.

**(D) POLICY GUIDELINES FOR ESTABLISHMENT OF POWER PLANTS BY CPSUs LIKE NTPC & NLC**

i) Government of India guidelines on sharing of power shall be followed and the tariff will be as per CERC guidelines.

ii) State Government will get 10% home state share from the plant in addition to around 20% share through Gadgil formula by Ministry of Power, Government of India.

iii) Government of India will be approached for 15% discretionary power from NTPC, Kaniha while agreeing to the proposal of NTPC in Ib valley.

iv) NTPC/ CPSUs will not contribute @6 paise per unit of the energy sent outside the State from the plant towards Environment Management Fund.

v) However, NTPC/ CPSUs should contribute 5% from the profit for peripheral development fund.

vi) NTPC / CPSUs will follow their own R&R policy in consultation with State Govt. which should not be inferior to the R & R policy of the State Govt.

vii) NTPC/ CPSUs will apply to the nodal agency, IPICOL and other State Government agencies for obtaining necessary Government approval.

viii) Land and water requirement should be as per new CEA Guideline.

By Order of the Governor

SURESH CHANDRA MAHAPATRA

Commissioner-cum-Secretary to Government



An ISO:9001, ISO:14001 & OHSAS:18001

**HARYANA POWER GENERATION CORPORATION LIMITED**

**Regd. Office – C-7, Urja Bhawan, Sector-6, Panchkula**

**Corporate Identity Number: U45207HR1997SGC033517**

Website: [www.hpgcl.org.in](http://www.hpgcl.org.in)  
Telephone No. 0172-5022431, 5022441

E-mail- [hpgecoalblock@gmail.com](mailto:hpgecoalblock@gmail.com)  
Fax No. 0172-5022431, 5022441

From,

Chief Engineer/Fuel,  
HPGCL, Panchkula.

To,

Chief Engineer/Projects,  
HPGCL, Panchkula

Memo No: 1061/Ch-15 /CEF-351

Date: 20/09/2023

**Subject: - Coal Linkage for 800 MW Ultra Super Critical Unit at DCRTPP- regarding.**

Please refer your office memo No. 785/Ch-49/CE/PROJECTS/U-3/DCRTPP/05 dt 15.09.2023 regarding subject cited matter.

In this regard, it is intimated that HPGCL has applied for 'Bridge Linkage' for expansion Unit 1x800 MW at DCRTPP, Yamuna Nagar vide letter dated 07.08.2023 to MoC as per the 'Bridge Linkage policy guideline dated 08.02.2016

A meeting of the Standing Linkage Committee (Long Term) for Power Sector to consider the requests for linkages to Central/State Sector Power Plants and to review the status of coal linkages/ LoAs and other related matters was held on 19.09.2023 and the same was attended by Director/Technical, HPGCL alongwith Xen/Fuel(CBD). In the meeting, the matter regarding 'Bridge Linkage' for expansion Unit 1x800 MW at DCRTPP, Yamuna Nagar was discussed and the committee has considered and agreed to recommend to competent authority. The Minutes of Meeting/Letter of assurance are yet to be circulated and the same will be shared with your office as and when received.

This is for your kind information please.

Chief Engineer/Fuel,  
HPGCL, Panchkula.

CC: Director/Technical, HPGCL , Panchkula for kind information please.

Diary No. 1897  
Dated 21/09/23  
SE/Elect.  
SE/Mech.  
SE/Civil  
US/Projects.

CE/Projects  
20/9/23

Mu  
22/9  
XEN/E-ii  
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22/9

**108**  
No. 7/1/2018(Part-1)-P&P  
Government of India / Bharat Sarkar  
Ministry of Power / Vidyut Mantralaya  
(P&P Desk)


Shram Shakti Bhawan, New Delhi-110001,  
New Delhi, Dated the 25<sup>th</sup> October, 2023

**OFFICE MEMORANDUM**

**Sub: Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 27.09.2023 at 05:00 PM to review capacity addition upto 2031-32 - reg.**

The undersigned is directed to refer to the subject mentioned above and to forward herewith the copy of Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE at 5:00 PM on 27.09.2023 at Shram Shakti Bhawan, Rafi Marg, New Delhi to review Capacity Addition upto 2031-32 for information and further necessary action please.

2. This issues with the approval of Hon'ble Minister of Power & NRE.

  
(Kushwant Kumar)  
Assistant Director  
Email: kushwant.007@gov.in

To,

1. Chairperson, CEA, Sewa Bhawan, New Delhi (with a request to share the minutes of the meeting to concerned States/ States Utilities for information and necessary action please).
2. JS (Hydro),
3. JS (Thermal),

Copy to:

1. PS to HMOP
2. APS to HMoSP
3. PS to Secretary (P),
4. Sr. PPS to AS (AT)
5. PPS to EA, MoP

**Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 27.09.2023 at 05:00 PM to review capacity addition upto 2031-32.**

A meeting was organized under the chairmanship of Hon'ble Minister of Power & NRE to review "**Capacity addition up to 2031-32**". The meeting was attended by Secretary (Power) and other senior officials of the Ministry, CEA, CPSEs under MoP and State Govt. Officials. **List of Participants is given at Annexure.**

**2. Hon'ble Minister of Power stated** that energy security of country is the national priority and to ensure adequate and reliable power supply to the consumers in the country, sufficient coal-based capacity needs to be installed by 2030. Accordingly, CEA has made projections (with different scenario) for requirement of additional thermal capacity addition which is scheduled to be operationalized by 2032.

**3.** CEA informed that as per National Electricity Plan, Thermal Generation Capacity Requirement by 2032 is 261.5 GW in alternate Scenario whereas in stressed scenario likely thermal generation capacity requirement is 275.5 GW and 282.7 GW by the year 2030 and 2032 respectively. Currently 212 GW thermal capacity is available, and 1.8 GW thermal capacity likely to be retired by 2030. Therefore at least 72 GW additional thermal capacity is required by 2032.

**4.** It was informed that 27,180 MW capacity is under construction and includes Central Sector (12,720 MW), State Sector (12,860 MW) & *Private Sector (1,600 MW)* and is likely to be commissioned between years 2023-2030. Further, 31,000 MW thermal capacity is under various stages of development out of which 11,960 MW capacity is already under bidding process. It was brought out that the planned 31 GW capacity includes primarily the pit head projects and projects within 500 km radius from coal source. However, due to the rapidly increasing demand for power in the country, there is an urgent need to add capacity quickly. One way to achieve this is by adding new units to existing power plants, as the necessary land, water, infrastructure for fuel transport, transmission lines, etc. are already available at the existing power plant site. Therefore, the Ministry is supporting the States to construct additional units even if they are located more than 500 kilometers away from the nearest coal source. Further, since the plant is located near the load center, there will be less congestion on the ISTS.

5. It was further mentioned that in addition to the candidate thermal capacity of 31 GW as mentioned above, about 28,400 MW Additional Thermal Candidate capacity has been tentatively identified. Out of 28,400 MW Capacity, Central Sector (12,000 MW), UMPP Sites (6,400 MW), Private (7,000 MW) & Stress project capacity (3,000 MW) is identified and planned for construction & likely to be commissioned between years 2028-2032.

6. Hon'ble Minister of Power enquired about the thermal capacity addition plan and its tentative award schedule. It was stressed that all the under construction/planned units should be expedited to the extent feasible and the timelines should be adhered to, without any slippages, so that the units are operationalized as per the declared commercial operation date (COD).

7. The discussion points on plant wise Capacity addition program (2026-32) are provided below:

## **A) Thermal power projects**

### **7.1 Under Construction Thermal Power Projects**

The under-construction coal/lignite projects were discussed. It was informed that 27,180 MW (38 units) thermal capacity from Central (12,720 MW, 18 units), State Sector (12,860 MW, 18 units) and Private Sector (1,600 MW, 2 units) are under construction and all the 'Units' are likely to be commissioned, as per schedule by FY 2028-29.

**8. Sector-wise Thermal Power Projects under construction were discussed as mentioned below:**

### **8.1 State Sector-Thermal Power projects under construction.**

#### **i) North Chennai STPP, Stage-III, Unit-1 (1 X 800MW):**

It was informed that overall progress of 'Unit-1' is 94% and is targeted for commissioning in Jan'2024.

TANGEDCO apprised that there were delays in completion of AHP & CHP works but now the works are in progress. FGD installation work is in initial stages hence, Unit COD shall be done without FGD. Steam blowing to be completed by Oct'2023.

BHEL informed that COD will take place 60 days after completion of Steam blowing activity. Unit COD will likely take place in Jan-2024.



**ii) Ennore SEZ STPP, Unit- 1 & 2 (2x660 MW):**

It was informed that overall progress of Unit-1 is 65% and Unit-2 is 66% and the trial run is scheduled in Apr'25 and July'25 respectively. The status was noted.

BHEL informed that coal stock yard clearance is to be provided by TANGEDCO to start the work as there is a hold by Hon'ble NGT on account of water supply line and coal conveyer passing through mangroves in the coastal area. BHEL stated that they require '25 months' time to complete the work once the stay is vacated by Hon'ble NGT. TANGEDCO informed that in external coal handling plant area, erection of structure for 1.5 KM is held up due to Hon'ble NGT Order and they will be able to get the approval of Hon'ble NGT in another 1 months' time.

**iii) Udangudi STPP, Unit- 1&2 (2x660 MW):**

It was informed that overall progress of Unit-1 is 72% and Unit-2 is 69% and the trial run is scheduled in Sep'24 and Jan'25 respectively. The status was noted.

TANGEDCO informed that due to re-tendering of CHP/AHP package there is a delay in the project. It was further informed that GIS switch yard work has slow progress. BHEL informed that civil agency has been replaced and readiness of switchyard will be aligned with boiler light up schedule.

BHEL further informed that in view of the upcoming thermal capacity addition plan, there is an urgent need to develop/ increase CHP/AHP vendor base as very few vendors are available.

**Hon'ble Minister directed CEA to undertake CHP/AHP vendor development exercise.**

**iv) Jawaharpur STPP, Unit - 1&2 (2x660 MW):**

It was informed that overall progress of Unit-1 is 92% and Unit-2 is 87%, trial run schedule for Unit-1 & Unit-2 indicated as Sep'23 and Jan'24 was revised to Nov'23 and Apr'24 respectively. The status was noted.

UPRUVNL informed that U#1 coal synchronization successfully completed on 22-09-2023 and likely to achieve full load in Oct'23.

**v) Obra-C TPP, Unit- 1 & 2 (2x660 MW):**

It was informed that overall progress of Unit-1 is 92% and Unit-2 is 78%, trial run schedule for Unit-1 & 2 indicated as Jun'23 and Jan'24 was revised to

Oct'23 and Apr'24 respectively. The status was noted.

UPRVUNL informed that generation from Unit-1 will start from Oct'23. However, Turbine Generator installation of unit-2 is yet to start, and the issue is being resolved with GE for achieving the committed timelines. **UPRVUNL assured that Unit-2 will come in Jun'24.**

**vi) Panki TPP Ext., Unit- 1 (1x660 MW):**

It was informed that overall progress of Unit-1 is 79%, trial run schedule for Unit-1 indicated as Mar'24 was revised to Sep'24. The status was noted. CEA apprised that there is a slippage in **commissioning of U#1 of Panki TPP Ext.**

UPRVUNL informed that due to delay in material supply, readiness of AHP/CHP package is hampering. Boiler light up planned in Jul'23 was revised to **Oct'23**

**UPRVUNL** submitted that the performance of BHEL's sub vendor DCPIS who is executing the AHP is not adequate, and work is stopped since last 6 months. The work progress in DM plant is not satisfactory. Further, the Manpower mobilization of BHEL is inadequate.

**BHEL informed** that Generator Transformer supply is a major issue and they are expecting to dispatch 3 GTs by end of November'23. Thereafter, 3 Months time is required to complete unit for synchronization. Hence Unit shall be ready for Oil Synchronization by **Feb'2024**. Further, the SCR works are yet to be completed due to delay in SCR confirmation and therefore, all coal mills cannot be taken into service till the SCR erection is complete. Unit will be ready **for coal synchronization by March 2024** however, maximum load up to 200 MW may only be achieved. For achieving full load **SCR erection** has to be completed which is planned for completion in Jun 2024 and **Commissioning of the unit is targeted by Sept' 2024.**

**BHEL** further intimated that balance works shall take 4 months to complete. In AHP, BHEL is supporting the vendor financially and work has started. The system shall be ready by **March 2024.**

**vii) Dr. Narla Tata Rao TPS, Unit- 8 (1x800 MW):**

It was informed that overall progress of Unit-8 is 86% and the trial run scheduled on Jul'23 was revised to **Jan'24**. The status was noted.

**APGENCO** apprised that the **coal firing** has been done in **June'23**. Due to fire accident in panels further progress has been delayed. APGENCO further intimated that the progress of AHP and CHP vendor is not up to the mark.

**BHEL** informed that Boiler and Turbine is in the scope of BHEL and BoP is awarded to BGR by APGENCO. Due to fire accident in control room, 6 **DCS** panels were damaged and need full replacement. The firefighting arrangement was not ready as it comes under the scope of BoP vendor. BHEL informed that replacement of panels may take 60 days.

The unit was coal synchronized in June 2023 with half coal mills and achieved 240 MW. Coal input for remaining mill has been recently provided to BHEL by CHP Vendor and it will take time up to Dec 2023 for **all** coal mill readiness for full load operations. **The Unit has been targeted for commissioning in Jan'2024.**

**viii) Yadadri TPP, Unit- 1,2,3,4&5 (5x800 MW):**

It was informed that overall progress of Unit-1 is 86%, Unit-2 is 87%, Unit-3 is 79%, Unit-4 is 82% and Unit-5 is 78% and trial run is scheduled in **Dec'23, Dec'23, Sep'24, Aug'24 and Apr'25** respectively. The status was noted.

TSGENCO informed that project is progressing well, Unit- 1 & 2 will come by **Dec' 23**. However, in compliance of Hon'ble NGT order while disposing PIL filed by an NGO, fresh EC is required for the plant. They have applied for the same through PARIVESH portal, however, MoEF&CC has not issued additional TOR till date and hence EC is pending.

**CEA** apprised that Environment Clearance has been challenged by an NGO due to change in source of coal i.e. from 50:50 Domestic-Imported coal to 100 % Domestic Coal. Such change in coal source will also lead to other structural changes like increased ash dyke area owing to higher ash content in domestic coal. Besides, the plant is also nearer to a wildlife sanctuary. Therefore, NGT directed MoEF&CC in Sept 2022 to reassess the environmental impact and to give a separate term of reference and complete the study in 9 months. **Due to EC under challenge, only construction is permitted and commissioning activities are not allowed.**

**TSGENCO** apprised that Unit -1 & 2 are scheduled for Dec 2023 trial run and if NGT issue is settled then the trial run shall be done as scheduled. Boiler, AHP and CHP is designed to handle 50:50 imported and domestic/

up to 100% domestic coal. TSGENCO requested for TOR from MoEF&CC so as to enable them to apply in PARIVESH portal for further processing. The environmental studies are ready but as the ToR is not granted TSGENCO is not able to apply for further process.

Additional Secretary **MoEF&CC** apprised that their Policy Division has examined the matter as per their OM dated 11.11.2020 on Coal Linkages and have recommended for some additional studies in Nov 2022. Meanwhile, the OM itself has been challenged in NGT wherein Hon'ble NGT has **directed** to revisit the aforesaid OM. Accordingly, the OM under question is being examined by MoEF&CC. **It was further informed that term of reference for Yadadri plant and examination of aforesaid OM issue are likely to resolve within 1 month time.**

**ix) Bhusawal SCTPP, Unit- 1 (1x660 MW) :**

It was informed that overall progress of Unit-1 is 90% and the trial run scheduled in Oct'23 was revised to **Dec'23**. The status was noted.

**MAHAGENCO** informed that Steam blowing & Synchronization to be completed by **Oct'2023** and there is slow progress observed in AHP and CHP area.

**MAHAGENCO** apprised that the coal synchronization is planned for Oct 2023 and it will require another 30-40 days for full load Operation. **Accordingly, COD is targeted for Dec' 2023 as CHP and AHP shall be fully ready by that time only. FGD shall be ready by March 2024.**

**x) Sagardighi TPP, St-III, Unit- 1 (1x660 MW):**

It was informed that overall progress of Unit-1 is 53% and the trial run scheduled in Sept'24 was revised to **Jan'25**. The status was noted.

WBPDCCL informed that there is problem of material supply from BHEL side. BHEL informed that they have committed to supply the material by Sept 24. They informed that the dispatch plan has been shared with WBPDCCL and assured that they will not deviate from the timeline.

**8.2 Central Sector-Thermal Power projects under construction.**

**(i) Barh STPP, Stage-I, Unit-3 (660MW):**

It was informed that overall progress of 'Unit-3' is 88% and is targeted for commissioning in **July'2024**.

NTPC informed that Unit#1 and Unit#2 are already under commercial

operation.

NTPC briefed the work progress of U#3 and apprised the issue of availability of Generator Stator for commissioning of Unit#3. It was also informed that to save the execution time work has already started with the Dummy stator diverted from NTPC Sipat Station.

Based upon latest assessment of availability of said Stator at Barh site, target for Unit#3 commissioning by **Aug'24** was **decided**. The status was noted.

**(ii) Telangana TPP, St-I, Unit-1&2(2x800 MW):**

It was informed that overall progress of 'Unit-2' is 96% and is targeted for commissioning in **Nov'2023**.

NTPC informed that Unit#1 was already commissioned on 05.09.2023 and will start commercial operation from 28.09.2023.

Regarding U#2, NTPC informed that Repair work of **FRH/FSH** in Unit#2 is in progress and same shall be completed by **Oct'2023** and commissioning by **Nov'2023**.

BHEL also confirmed that the Progress is as per the requirement for **full load operation in Oct'2023** and Unit Commissioning by Nov'2023. The status was noted.

**(iii) NTPC -North Karanpura, Unit-2&3 (2x660 MW)**

It was informed that overall progress of 'Unit-2' is 92% and 'Unit-3' is 81% and is targeted for commissioning in **Nov'2023 and Jun'2024** respectively. The status was noted.

NTPC informed that the progress is in line for meeting the commissioning requirement of Unit#2 in **Nov'2023**.

NTPC informed that subsequent to visit of Secretary (Power), GoI, there is considerable progress in CCL land issue and NTPC is working on the available fronts provided by CCL.

Readiness of ATS for the project was also discussed. CEA informed that evacuation of 02 units will not be any bottleneck and readiness of NK-Gaya line will be matching with Unit#3 commissioning.

NTPC informed that regarding North Karanpura TPP's land issue, there is delay in handing over of encumbrance free balance 32.5 acres land by

NTPC for the construction of external CHP. NTPC further, informed that for 21 acres of forest land, stage-1 clearance was received in Nov-2021 for which NOC is yet to be obtained from **District Collector** for 7.38 acres. CCL has to resolve the issue with land owners for handing over the land to NTPC.

**(iv) Patratu TPP, Unit- 1, 2 & 3 ( 3x800 MW) :**

It was informed that overall progress of Unit-1 is 67%, Unit-2 is 64% and Unit-3 is 48% and the trial run is scheduled in **Jul'24, Dec'24** and **May'25** respectively. The status was noted.

NTPC informed that the project progress is being expedited. However, readiness of ATS is very critical for the project.

NTPC informed that major constraint for this project is construction of Transmission lines being executed by State Transco i.e. JUSNL. The Progress of 400 kV Patratu-Patratu line is slow due to forest clearance issue and it was also informed that Survey work has started on both the balance lines i.e. Patratu – Koderma and Patratu – Chandil, after the award in Jul'2023.

It was also informed that to evacuate power from Patratu-Patratu line, downstream Patratu-Latehar-Chandwa lines are also to be completed matching with Unit#2 schedule. It was apprised that to resolve the commercial issues between PGCIL and JUSNL a meeting will be held at the level of Secretary (Power).

NTPC informed that as of now, the project progress is as per targets. The status was noted.

**(v) Talcher TPP, St-III, Unit- 1 & 2 (2x660 MW):**

Trial run schedule for Unit-1 & 2 indicated as **Nov'26** and **May'27** respectively was noted.

NTPC informed that **work is progressing** as per schedule. However, immediate support from GoO is required on following issues:

- Closure of Road passing through Talcher Thermal stage III project (Jagannath-Anand Bazar Road) affecting Main Plant civil works.
- Completion of Railway Road over bridge (RoB) connecting NH 149 to the project by Roads & Bridges Department, GoO to facilitate material movement to Project site.

- Relocation of Bi-weekly Haat from entrance gate of Project (Anand Bazar).

**Secretary (Power)** assured to take up the issues with Government of Odisha.

**(vi) Lara STPP, St-II, Unit- 1 & 2 (2x800 MW):**

NTPC informed that Lara-II (2x800 MW) project has been awarded in **Aug-2023**. Trial run schedule for Unit-1 & 2 indicated as **Dec'27** and **Jun'28** respectively was noted.

**(vii) Buxar TPP, St-I, Unit- 1 & 2 (2x660 MW):**

It was informed that overall progress of Unit-1 is 83% and Unit-2 is 71% and the trial run scheduled in Dec'23 and Mar'24 was revised to **Mar'24** and **July'24** respectively. The revised status was noted.

SJVNL informed that project is on track, however, there is problem in land acquisition for railway siding and hence alternate feasible route for coal transportation has been envisaged. The contingency plan has been made to achieve the target date of trial run of Unit-1.

**(viii) Ghatampur TPP, Unit- 1, 2 & 3 (3x660 MW):**

It was informed that overall progress of Unit-1 is 90%, Unit-2 is 79% and Unit-3 is 73% and the trial run scheduled in Jul'23, Oct'23 and Dec'23 was revised to **Nov'23**, **Feb'24** and **Apr'24** respectively. The status was noted.

NUPPL informed that initially there was slow work progress in BoP area but the same has been addressed and BoP works are progressing. As a result of that rolling & synchronization of Unit#1 has been planned by **end of Sept'23/early Oct'23**.

**(ix) THDC, KHURJA STPP, Unit -1 & 2 (2x660MW)**

It was informed that overall progress of Unit-1 is 73% and Unit-2 is 63% and the trial run scheduled in **Feb'24** and **Aug'24** respectively. The status was noted.

THDC apprised that switch yard and water linkage is ready and Turbine box-up completed in July-2023. Coal mine linkage is also in place. **Boiler light-up is planned for Nov'23. Synchronization is planned for Dec' 2023 and COD is planned for Feb- 2024.**

### 8.3 Private Sector-Thermal Power projects under construction.

#### (i) Adani- Mahan STPP, Stage-I, Unit 1 & 2 (2X800 MW)-

It was informed that Mahan STPP (2x800 MW) project has been awarded in Aug-2023. Trial run schedule for Unit-1 & 2 indicated as **Apr'27** and **Sep'27** respectively was noted.

### 9. New Project-Candidate Capacity (Already planned)

The New Project- Candidate Capacity projects (Already planned) were discussed. CEA informed that 28,160 MW thermal capacity from Central (16,100 MW) and State Sector (12,060 MW) are under various stages of tendering and all the 'Units' are likely to be commissioned, as per schedule by FY 2029-30.

Sl. No.	Project Name	Issue/Status	Decision
<b>Central Sector(16,100 MW)</b>			
<b>NTPC</b>			
1	Singrauli -III, UP (2X800 MW)	<ul style="list-style-type: none"> <li>• DPR- Ready</li> <li>• Coal available from NCL.</li> <li>• EC granted on 13.07.2020. Allocation of 48 Cusecs is available from Rihand Reservoir.</li> </ul>	<p><b>The status was noted.</b></p> <p>NTPC informed that NIT has been published on 02.09.2023 and Project is targeted for award by <b>Dec. 23</b></p> <p>Commissioning- <b>U-1: Aug'2028</b> <b>U-2: Feb'2029</b></p>
2	Darlipali-II, Odisha (1x800 MW)	<ul style="list-style-type: none"> <li>•DPR: Dec,2023</li> <li>•ToR amendment Application submitted on 30.08.2023.</li> <li>Land-Partially Available Coal Linkage-,SLC (LT) 01/23 dt 10.04.2023 recommended for grant of coal linkage to NTPC Darlipalli Stage - II (1 x 800 MW) TPS underpara B(i) Shakti policy.</li> <li>•Award Mar'2024</li> <li>•Commissioning- 2028-29</li> </ul>	<p><b>The status was noted.</b></p> <p><b>Award Targeted by Mar-24.</b></p> <ul style="list-style-type: none"> <li>• NTPC informed that Compensatory Afforestation (CA) land has been earmarked to NTPC and now FC application will be submitted on Parivesh.</li> <li>• NTPC informed that HLCA clearance is the mandatory requirement in</li> </ul>



Sl. No.	Project Name	Issue/Status	Decision
		<p>About 296 Acres of land needs to be diverted / acquired. (Forest-161, Private-97, Govt Land - 38)</p> <p>170 Acres of land for compensatory Afforestation has been identified and approval obtained from Tehsildar, Sundargarh. DFO has to accord acceptance for the same. After acceptance of DFO, the EC shall be applied.</p> <p>NTPC conveyed that 7 Cusecs surplus water is available from existing plant. Application for additional 17 cusec water allocation shall be submitted after HLCA clearance.</p>	<p>Odisha State and is critical for the project. In past cases, it took long time for HLCA clearance.</p>
3	Sipat-III, Chhattishgarh (1x800 MW) Ultra Super Critical	<p>NTPC informed following status of Project (USC): Land available.</p> <p>Coal linkage- SLC (LT) 01/23 dt 10.04.2023 recommended for grant of coal linkage to NTPC Sipat Stage-III (I x 800 MW) TPS under para B(i) Shakti policy</p> <ul style="list-style-type: none"> <li>•DPR- under approval.</li> <li>• ToR Approval- EIA report is finalized and shall be submitted shortly.</li> <li>•Award- Dec-23</li> <li>•Commissioning: 2028-29</li> </ul> <p>Water requirement could be met with existing water allocation.</p>	<p><b>Award Targeted by Dec-23.</b></p> <p>NTPC informed that NIT has been published on 11.09.2023.</p> <p>NTPC informed that Public hearing has been postponed which may affect the award target.</p> <p>JS (Thermal) informed that the matter was taken up with DM (Bilaspur). It was assured that New Date shall be informed shortly.</p>

Sl. No.	Project Name	Issue/Status	Decision
4	Obra –D, UP (2X800MW) JV	Land Available, Fuel and water will be Tied up.	<b>The status was noted.</b>
<b>NLC</b>			
5	Talabira STPS, Sambalpur, Odisha 3x800 (2400 MW)	<p>EC granted on 02.02.2021            Technical bid opened on 12.07.2022. Under evaluation.            Award-On acquisition of land, March-2024</p> <ul style="list-style-type: none"> <li>• <b>Comm. U-1: Feb.2028</b></li> <li>• <b>Comm. U-2: Aug.2028</b></li> <li>• <b>Comm. U-3: Feb.2029</b></li> </ul> <p>Total Land recommended by IPICOL is 1694 acre.            Total land applied for Acquisition so far is 1563.80 acre.            As on date land acquired: 174 Acres (Govt. land).            Balance land likely be available by Oct.,2023.</p> <p>Coal availability is from Talabira Mines.            Water allocation is also available.</p>	<p><b>The status was noted.</b></p> <p>CMD, NLC stated that land for project is likely to be available by Oct- 2023 and Bid shall be opened as soon as land is available.</p> <p><b>Award targeted by Oct 2023 was revised to March-2024</b></p>
6	TPS-II 2nd Expansion, Cuddalore District. 2x660 (1320 MW)	<p>EC granted.            Lignite based. Fuel Tie-up from basket of Mines in Neyveli</p> <ul style="list-style-type: none"> <li>•NIT issued in Oct.,2022 (Pre-bid meeting: 09.11.22)</li> <li>•Comm U-I: March-2028</li> <li>•Comm U-II: Sept-2028</li> </ul> <p>It was apprised that the project is brown field and hence land is available.            TANGEDCO consented to</p>	<p><b>CMD, NLC stated that this project is first of its kind Supercritical lignite based project.</b></p> <p><b>NLC informed that Bid submission by 04.10.2023</b></p> <p><b>Award is Targeted By - Jan' 2024.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
		acquire entire power. MoP has given the consent for the same. Water availability is also there.	
7	Meja-II,UP (3x800MW)	<ul style="list-style-type: none"> <li>• Planned Project configuration changed from 2x660 to 3x800 MW</li> <li>• DPR: Sept 2023/Dec-2023,</li> <li>• Application for TOR: July 2023</li> <li>• Award: Sep, 2024</li> </ul> <p>Present linkage for Stage-I is from NCL / CCL.</p> <p>NTPC conveyed that Land is available and water allocation needs to be done. (30 Cusecs required with ACC and 5 Cusecs is available)</p> <p>Coal linkage available for 2x600. To be tied up for enhanced capacity. The feasibility of Coal movement needs is being explored presently. Thereafter, process of EC shall be taken up</p>	<p><b>The status was noted.</b></p> <p><b>Award Targeted by Sep-24.</b></p> <p>NTPC informed that the capacity for the project has been enhanced from 2x660 MW to 3x800 MW and the Feasibility Report for the project is under preparation. Project is as per schedule for award.</p>
<b>DVC</b>			
8	Ragunathpur, WB (2x660 MW)	<ul style="list-style-type: none"> <li>•DPR: 28.10.2022</li> <li>•NIT: 31.03.2023</li> <li>•<b>EC: Nov'23</b></li> <li>•<b>Award: Nov'23</b></li> <li>•Coal Linkage: CCL Within 100 KM</li> <li>•U-1 Commissioning: Oct.27</li> <li>•U-2 Commissioning: Apr.28.</li> </ul> <p>NTPC is appointed as consultant for preparation of DPR &amp; Pre-award activities.</p>	<p><b>The status was noted.</b></p> <p>DVC informed that Report of Public Hearing submitted by WBPCB to MoEF&amp;CC on 08.09.23.</p> <p>NTPC appointed as consultant for prep. of DPR &amp; Pre-award activities</p> <p>Award Targeted by <b>Nov-2023.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
		<p>Land is available and water allocation for all the 3 plants has been obtained from Damodar Valley River Regulation Committee (DVRRC).</p> <p>Coal Linkage of 4.3 MMT of CIL is available with DVC. Allocation of Mines is pending and is being followed up with CIL. Rail connectivity is also available for the plant</p>	
9	Durgapur, WB (1x800 MW)	<ul style="list-style-type: none"> <li>•DPR: 30.09.2023</li> <li>•NIT: 30.04.2024</li> <li>•EC: Aug-2024</li> <li>•Award: 01.09.2024</li> <li>•Coal Linkage: ECL (75 km)</li> <li>•Comm U-1.: March-28</li> <li>•Comm.U-2: Sept-28</li> </ul> <p>DVC Conveyed that the dismantling of Decommissioned units need to be taken up.</p> <p>It was apprised that the Coal Linkage allocation is not in place.CIL has to be approached for allocation of coal. Also, DVC shall be participating in the coal mine auction.</p>	<p><b>The status was noted.</b></p> <p>Chairman, DVC informed that Dismantling and Scrap Disposal Contract awarded in Aug 2023. The dismantling work shall take around 15 months.</p> <p><b>NIT for project shall be floated by April-24 &amp; Award is Targeted by Sept 2024.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
10	Koderma, Jharkhand (2x800 MW)	<ul style="list-style-type: none"> <li>•DPR: 25.04.2023</li> <li>•NIT: 31.05.2023</li> <li>•EC: Dec-23</li> <li>•Award: Jan-24</li> <li>•CCL within 100-200KM</li> <li>•Comm U-1.: Feb-28</li> <li>•Comm.U-2: Aug-28</li> </ul> Consultant appointed on 24.03.2023 for EC.  DVC conveyed that Land is available and water allocation has been done by DVRRC.	<p><b>The status was noted.</b></p> <p>Award to be targeted by <b>Jan-2024</b></p> <p>NTPC appointed as consultant for preparation of DPR and Pre-award activities.</p> <p>Chairman, DVC informed that EPC Tender has been floated and contract shall be awarded as soon as EC is granted.</p>
11	Chandrapura TPS Extn. (1X800MW):		<p>Topography survey 75% complete.</p> <p>Engagement of Consultant for preparation Feasibility Study by Sept,2023</p>
<b>SJVN</b>			
12	Buxar ,Bihar 1*660 (extension)	<ul style="list-style-type: none"> <li>•DPR: prepared under approval</li> <li>•NIT:31.10.2023</li> <li>•EC: Dec.23</li> <li>•Award: March 2024</li> <li>•Commissioning- 2028-29</li> <li>•250 acre land acquisition to be completed.</li> </ul> <p>SJVNL apprised that approx. 250 acre land is required for ash dyke which is difficult under new guidelines, remaining land is presently available.Coal linkage has been recommended in SLC (LT) on 16.06.2023.</p> <p>After EC cabinet has to be approached for investment Approval.</p> <p>Provision of water</p>	<p>SJVN informed that DPR is under approval. Ensuring availability of Land and water still under discussion stage.</p> <p>Award Targeted for Mar.,24</p>

Sl. No.	Project Name	Issue/Status	Decision
		availability needs to be taken from Ganga water authority.	
<b>State sector (12,060 MW)</b>			
1	Super Critical Power Plant at Korba West, Korba 'Chhattisgarh (2X660 MW)	<ul style="list-style-type: none"> <li>• It was apprised that Land is available.</li> <li>• Coal-CEA recommended coal linkage under Shakti B(i)</li> <li>• Water-No (Application to be submitted to GoCG after EC)</li> <li>• DPR- Ready</li> <li>• ToR Approval- TOR granted on 23.3.2023</li> <li>• Consultant appointed for EIA study.</li> <li>• EC Status- Application submitted on 09.02.23.</li> <li>• EAC Sub-Committee visited plant on 19.05.2023</li> <li>• Award- <b>Dec'2024</b></li> <li>• Commissioning U-1: Mar-2029</li> <li>• Commissioning U-2: Mar-2030</li> </ul>	<p><b>Award is targeted by Dec'2024</b></p> <p>It was informed that Public Hearing (for EC) is planned on 26.10.2023 and required water (28 MCM) will be allocated to project by WRD, GoCG.</p> <p>It was informed that, NTPC is to be awarded consultancy contract. Bid is in process.</p>
2	OPGC Expansion Project St- III (2x660 MW)	<ul style="list-style-type: none"> <li>• Land-Available.</li> <li>• Coal-Available</li> <li>• Water-No (Application to be submitted for 2800 M3/hr)</li> <li>• DPR-Ready</li> <li>• ToR Approval-Aug'2023</li> <li>• EIAR Report-Feb'2024</li> <li>• EC -April'2024.</li> <li>• <b>Award-May'2024</b></li> <li>• Commissioning-U-1: <b>Mar' 2029</b></li> <li>• Commissioning U-2: <b>Sept'2029</b></li> </ul>	<p><b>Award is targeted by May'2024.</b></p> <p>It was noted that Team from MOEF&amp;CC had visited plant in Aug'23 and Presentation to EAC completed, TOR is awaited.</p> <p><b>LOI issued for Pre award to M/s NTPC consultancy on 11.09.2023.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
3	Godhna TPS, Champa, Karnataka (2X800MW)	<ul style="list-style-type: none"> <li>Land available (1016.23 Acres Private land &amp; 158.16 Acres Govt. Land), Coal-Available</li> <li>Water- Available</li> </ul>	<p><b>The status was noted.</b></p> <p>Tendering process will be decided after MoEF&amp;CC clearance to the project.</p>
4	Ukai Thermal Power Station (TPP) Tapi, U-7 Gujarat, GSCECL 1x800(800 MW)	<ul style="list-style-type: none"> <li>DPR-Ready</li> <li>Tender document- Dec'23</li> <li>NIT-Jan'2024</li> <li>Bid submission- May'2024</li> <li>Award-July'24</li> <li>EC -Accorded</li> <li>Commissioning-U-1: <b>July'2028</b></li> </ul>	<p>Considering the rapidly growing power demand in the country there is an urgent need to add capacity at a fast pace. Adding new units to existing power plants enables this as the required land, water, infrastructure for fuel transport, transmission line etc are already available at the existing power plant site. Therefore, the Ministry is supporting the State to construct additional unit at Ukai TPP even through it is located more than 500 KMs away from the nearest coalmine. However, since the plant is located near the load center there will be less congestion on the ISTS.</p>
5	<b>Koradi Project, Nagpur, Maharashtra, MSPGCL (2x660MW)</b>	<ul style="list-style-type: none"> <li>DPR- Ready</li> <li>Tender document- Oct' 2023</li> <li>NIT-Nov'2023</li> <li>Bid submission- Jan'2024</li> <li>Award June'2024</li> <li>CommissioningU-1: Mar' 2028</li> <li>Commissioning U-2: Sep'2028</li> </ul> <p>It was informed that public hearing has been completed on 29-05-2023. EC is under consideration</p>	<p><b>The status was noted.</b></p> <p>It was decided to issue tender is parallel with EC process and award the project as soon as EC is granted.</p> <p><b>Award is targeted by June' 2024.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
6	Chandrapur Super Thermal Power Station, Maharashtra, MSPGCL (1x660MW)	DPR yet to be prepared, only feasibility study is carried out. It was informed that current Unit shall come in place of yet to be retired 210 MW units.	All details will be provided after DPR preparation, approval from GoM, MERC, etc.
7	Amarkantak Thermal Power Station, Anuppur Madhya Pradesh MPPCL (1x660 MW)	<ul style="list-style-type: none"> <li>• DPR- Approved.</li> <li>• <b>Tender document- Oct'2023</b></li> <li>• <b>NIT-Oct'2023</b></li> <li>• Bid submission- Dec'2023</li> <li>• <b>Award-Mar'2024</b></li> <li>• <b>EC -accorded on 1<sup>st</sup> May'2023</b></li> <li>• Commissioning-U- 1:2027-28</li> </ul> <p>Forest land of 6.171 Ha. within the MPPGCL's Plant Boundary, need to be acquired by MPPGCL. Revised Online Application has been submitted in Jan'22.</p> <p>Chief Conservator of Forest, Bhopal vide letter dated 24.04.2023 has recommended <b>to MoEF, Bhopal</b> for acquisition of balance 6.171 Ha forest land; situated within power house premises</p>	<p>It was informed that M/s NTPC has been appointed as Project Consultant.</p> <p><b>Award to be Targeted- by March'2024.</b></p>
8	Satpura TPP U-12, Phase-V, Sarni, Madhya Pradesh MPPGCL (1x660 MW)	<ul style="list-style-type: none"> <li>• DPR-Approved.</li> <li>• Tender document- Sept'2023</li> <li>• <b>NIT-Oct'2023</b></li> <li>• EIA report-Report submitted</li> <li>• EC - Under process</li> <li>• <b>Bid submission- Nov'23</b></li> <li>• <b>Award-Mar'24</b></li> <li>• Commissioning-U1: FY 2027- 28.</li> </ul>	<p>It was informed that M/s NTPC has been appointed as Project Consultant.</p> <p>GLP is almost finalized, cost estimation being done by M/s NTPC</p> <p><b>Award Targeted by March 2024.</b></p>



Sl. No.	Project Name	Issue/Status	Decision
9	Singareni Thermal Power Plant (Stage-II), (1x800 MW)	<ul style="list-style-type: none"> <li>•DPR- completed</li> <li>•NIT- 19-11- 2022</li> <li>•EIA report-Completed</li> <li>• Bid opened- 02.03.2023</li> <li>•Bid: Under Evaluation, Negotiations with L1 bidder M/s BHEL is under progress.</li> <li>•EC - Accorded</li> <li>•Commissioning-U-1: 50 Months from the date of investment approval or issuance date of letter of award (LOA) for main contract, whichever is earlier.</li> </ul>	<p>It was informed that due to higher pricing compared to recently awarded project, they are planning for rebidding.</p> <p>It was informed that M/s NTPC has been appointed as Project Consultant.</p>
10	Extension Unit of DeenBandhu Chhotu Ram Thermal Power Project (DBCR-TPP), Yamuna Nagar, Haryana (1X800 MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>• DPR-completed</li> <li>• NIT-16-01-2023</li> <li>• <b>Bid submission- 18.10.2023</b></li> </ul>	<p>Given the rapidly increasing power demand in the country, there is an urgent need to augment capacity at an accelerated pace. The addition of new units to existing power plants facilitates this objective, as the necessary land, water, and infrastructure for fuel transport and transmission lines are already in place at the existing power plant site. Hence, the Ministry will support the State to construct an additional unit at DBCR-TPP, even though it is situated more than 500 kilometers away from the nearest coalmine.</p> <p>It was also noted that this project will replace the existing Panipat TPS unit which is going to be retired. Thus, the net additional requirement for coal will be less. The plant is also closer to the load center.</p> <p><b>Award Targeted by Dec-2023.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
11	CHHABRA TPS U- 7 & 8 Rajasthan, (2X660 .MW)	<p>It was apprised that</p> <ul style="list-style-type: none"> <li>•DPR- completed</li> <li>•NIT-31.10.2023</li> <li>•Bid submission- 15.11.2023</li> </ul> <p><b>Commissioning- FY 28-29</b></p> <p>It was informed that This Project is link with the captive coal mine (Parsa East Kanta Basan &amp; Extension Coal Block).</p> <p>The distance from the linked mine is around 800 Kms</p>	<p>It is essential to increase capacity at a faster rate given the nation's constantly rising demand for electricity. This goal is made easier by the addition of new units to existing power plants because these plants already have the requisite land, water, and infrastructure for fuel transportation and transmission lines. Therefore, the Ministry will support the State to build two additional units at Chhabra TPS despite the fact that it is more than 500 km away from the closest coalmine. However, because of the plant's proximity to the load center, there will be less congestion on the ISTS.</p> <p><b>Award Targeted by April'2024.</b></p> <p>It was informed that Consultancy for Engineering services technical bid opened on 22.08.2023 and case for awarding of contract is under submission for approval</p>
12	KALISINDH TPS Rajasthan, (1x800 MW)	<ul style="list-style-type: none"> <li>•DPR- completed</li> <li>•ToR- Approved on 24-03-23.</li> </ul> <p><b>NIT-31.10.2023</b></p> <ul style="list-style-type: none"> <li>•Bid submission- 15.11.2023</li> </ul> <p>It was informed that This</p>	<p><b>Award Targeted by Feb'2024.</b></p>

Sl. No.	Project Name	Issue/Status	Decision
		project is linked with the captive coal mine (Parsa East Kanta Basan & Extension Coal Block). EIA study at site has been completed on 14.06.2023 by M/s BHEL, PCRI Haridwar	

### 10. New Project- Candidate Capacity (In Planning)

CEA informed that 25,400 MW thermal capacity from Central (12,000 MW), UMPPs (6,400 MW) and Private Sector (7,000 MW) is under planning and all the 'Units' are likely to be commissioned, as per schedule by FY 2031-32.

**10.1** The following NTPC brownfield projects are considered for expansion under candidate capacity (In planning) (9,600 MW)

- Telangana – II (3x800 MW)
- Patratu - II with ACC (2x800 MW)
- Nabinagar – II (3x800 MW)
- Gadawara - II (2x800 MW). **It was decided to set-up 2x800 MW Ultra Super Critical Units instead of 1x800 MW Advanced Ultra Super Critical Unit (AUSC). AUSC shall be planned as a green field project at any other suitable site by NTPC.**
- Anpara E (2x800 MW) JV with UP Govt.

**10.2** CMD NTPC requested MoP to take up issues related to coal linkage from SCCL for the Telangana-II project with the Ministry of Coal.

**10.3** NTPC submitted that in view of concurrent execution of large number of projects and limited vendor base, the execution of projects may pose challenges.

**10.4** Constraints due to availability of only 02 (two) bidders for EPC Package and limited availability of BoP vendors was discussed. CEA was advised to have discussions with other prospective bidders/vendors for EPC and BoP to ensure suitable participation and smooth execution of additional thermal capacity envisaged.

**10.5** It was informed that NLC's brownfield capacity expansion is planned at Talabira STPS expansion, Sambalpur, Odisha 1x800 (800MW). It was further informed that application for EC of St-II (1x800MW) will be filed after award of Stage-I (3x800 MW).

**10.6** CEA informed that there is a possibility to set-up 2 new TPPs on the already identified sites of UMPP (Odisha, Sundargarh\*:(2,400+1,600) MW, Tamil Nādu, Cheyyur:(4,000MW) where land is available with respective SPV of Power Finance Corporation (PFC). It was further informed that Odisha site in Sundargarh District:(4,000) MW was envisaged for a domestic coal based power plant whereas the Tamil Nādu site in Cheyyur: (4,000MW) was envisaged for an imported coal based power plant. It was also informed that a subsidiary of Mahanadi Coal fields (MCL) ltd has proposed to set up a 1,600 MW TPP in Sundargarh district on the site mentioned above for which process of land transfer is going on.

**10.7** Based on the discussions, **Hon'ble Minister directed that a thermal power plant of 4,000 MW capacity should be planned in Sundargarh District, Odisha State. Power Finance Corporation was further instructed to examine the possibility of establishing this 2,400 MW capacity plant in addition to 1,600 MW capacity planned by VIL/ MCL.**

**10.8** CEA further informed that, 3,000 MW Stressed Project Capacity (Thaminapatnam-700 MW, Akaltara-1,800 MW, Utkal-350 MW and Shirpur-150 MW) is also likely to be commissioned in FY 31-32.

## **B) Hydropower Power Projects**

11. CEA made a detailed presentation on the Hydro-Electric Power Projects (under-implementation, Pump storage hydro project, Planned projects). It was informed that 15,253 MW- Hydro-Electric Power Project are under implementation and are likely to be commissioned by 2031-32. Apart from this, 2,780 MW of Pumped storage hydro projects are under implementation and likely to be commissioned by 2026-27. It was further informed that 50,588 MW of Hydro-Electric Power Projects are under planning stage and likely to be commissioned by 2026-32.

**11.1 Hon'ble Minister enquired about** Hydro Power Projects of Arunachal Pradesh of more than 11.5 GW recently handed over to Hydro PSUs.

**11.2** CEA informed that total 12 Hydro power projects were handed over to Hydro CPSUs on 12<sup>th</sup> Aug-2023. Out of these 12 projects, five projects of 2,620 MW have been allocated to the NEEPCO, five projects of 5,097 MW to SJVN and the remaining two projects of capacity 3,800 MW to NHPC. The respective Hydro CPSUs have initiated the process of revalidation of TEC/ application for FC/EC etc. A monitoring committee chaired by Adviser to GoAP has been set up by GoAP.

**11.3** CEA further informed that Dibang Multipurpose Project 12x240=2,880 MW, NHPC- (under initial stage of development), Subansiri Upper HEP (2,000 MW) and Subansiri Middle (Kamala) HEP 1,800 MW (both NHPC) are likely to be commissioned by Feb'32.

**11.4 Hon'ble Minister instructed to CEA to review** Subansiri Upper HEP (2,000 MW) and Subansiri Middle (Kamala) HEP 1,800 MW (both NHPC) project **and submit report to Ministry of Power within 1 month.**

**11.5 Secretary (Power)** stated that States are facing difficulties in allotment of PSPs under self-identified category as in most of the cases multiple agencies are filing application(s) for self-identified projects. **Hon'ble Minister instructed CEA to review** self-identified PSPs scheme and submit report to Ministry of Power in one (01) month time.

## **C) Nuclear Power Project-**

12. CEA made a detailed presentation about the Nuclear Power Projects (under-implementation and Planned projects). It was informed that 8,000 MW- Nuclear Power Projects are under various stages of construction and likely to be commissioned by FY 24 to FY 30. It was further informed

that 7,000 MW- Nuclear Power Projects accorded administrative approval and these projects are under various stage of development and likely to be commissioned by FY 32. It was also informed that KAKRAPARA A.P.S. UNIT 4 (700 MW, India's indigenous technology) is likely to be commissioned by May-24.

**12.1** NTPC informed that, the JV company (NPCIL-NTPC) is developing two Pressurized Heavy-Water Reactor (PHWR) projects, Chutka Madhya Pradesh Atomic Power Project 2x700 MW and Mahi Banswara Rajasthan Atomic Power Project 4x700 MW, which were identified as a part of fleet mode nuclear projects. NTPC requested Ministry of Power for support of faster execution of these projects.

13. The action points that emerged during the meeting are summarised below:

(1) CEA to undertake CHP/AHP vendor development exercise.

**Action: Chairperson, CEA**

(2) A meeting to be held at the level of Secretary (Power) in order to resolve the commercial issues between PGCIL and JUSNL and expedite construction of Transmission lines for Patratu TPP, Unit- 1, 2 & 3.

**Action: JS (Thermal)**

(3) A meeting to be held between Secretary (Power) and Chief Secretary (Odisha) to resolve issues pertaining to Talcher TPP, St-III, Unit- 1 & 2.

**Action: JS (Thermal)**

(4) Government of Gujarat may be supported to construct the proposed additional Unit at Ukai Thermal Power Station (1x800 MW).

**Action: Chairperson, CEA/ JS (Thermal)**

(5) Government of Haryana may be supported to construct the proposed additional Unit at DeenBandhu Chhotu Ram Thermal Power Station (1x800 MW).

**Action: Chairperson, CEA/ JS (Thermal)**

(6) Government of Rajasthan may be supported to build the proposed two additional units at Chhabra Thermal Power Station (2X660 MW).

**Action: Chairperson, CEA/ JS (Thermal)**

(7) NTPC to set up 2x800 MW Ultra Super Critical Units at Gadawara instead of 1x800 MW Advanced Ultra Super Critical Unit (AUSC). AUSC shall be planned as a green field project at any other suitable site by NTPC.

**Action: CMD, NTPC/ JS (Thermal)**

(8) CEA to hold discussions with prospective bidders/vendors for EPC and BoP to ensure suitable participation and smooth execution of additional thermal capacity envisaged.

**Action: Chairperson, CEA**

(9) Power Finance Corporation to examine the possibility of establishing 2,400 MW capacity plant at Sundargarh District, Odisha in addition to 1,600 MW capacity planned by VIL/ MCL.

**Action: CMD, PFC/ JS (Thermal)**

(10) CEA to review Subansiri Upper HEP (2,000 MW) and Subansiri Middle (Kamala) HEP 1,800 MW (both NHPC) projects and submit report to Ministry of Power within one month.

**Action: Chairperson, CEA**

(11) CEA to review self-identified PSPs scheme and submit report to Ministry of Power in one month time. The mode of allocation of PSPs to private entities must be through transparent process.

**Action: Chairperson, CEA**

**The meeting ended with vote of thanks to the Chair.**

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**List of participants at the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 27.09.2023 at 05:00 PM to review capacity addition upto 2031-32.**

<b>Sl.No.</b>	<b>Name</b>	<b>Designation</b>
<b>Ministry of Power</b>		
1.	Shri R.K. Singh	Hon'ble Minister for Power & NRE, in Chair
2.	Shri Pankaj Agrawal	Secretary (Power)
3.	Shri Piyush Singh	Joint Secretary (Thermal)
4.	Shri Mohmmad Afzal	Joint Secretary (Hydro)
5.	Shri Jithesh John	Economic Advisor
6.	Shri Arun Kumar Garg	Director (P&P)
7.	Shri Kushwant Kumar	Assistant Director (P&P)
<b>CEA</b>		
8.	Shri. Ghanshyam Prasad	Chairperson
9.	Shri. Praveen Gupta	Member (Thermal)
10.	Shri. M.P. Singh	CE (TPP&D)
11.	Smt. Ammi R. Toppo	Chief Engineer
12.	Shri. P.K. Shukla	Chief Engineer
13.	Shri. Manoj Tripathi	Chief Engineer
14.	Shri J.N. Prasad	Chief Engineer
15.	Shri. Shantanu Biswas	Director
16.	Shri Aman Khare	SA-Incharge (TPMD)
17.	Shri Ankit Khasa	Assistant Director
18.	Shri Asif Iqbal	Assistant Director
<b>MNRE</b>		
19.	Shri. Bhupinder Singh Bhalla	Secretary (MNRE)
<b>MoEF&amp;CC</b>		
20.	Shri. Tanmay Kumar	Additional Secretary
<b>PIB</b>		
21.	Shri. Alok Mishra	ADG
<b>NTPC</b>		
22.	Shri. Gurdeep Singh	CMD
23.	Shri. U.K. Bhattacharya	Director (Projects)
24.	Shri. S.N. Tripathi	Executive Director
25.	Shri. M. K. Srivastava	
<b>NHPC</b>		



<b>Sl.No.</b>	<b>Name</b>	<b>Designation</b>
26.	Shri. R.K. Vishnoi	CMD
27.	Shri. R. K. Chaudhary	Director (Technical)
28.	Shri. Deepak Saigal	ED (PMSG)
29.	Shri. Sanjay Darbari	ED (Planning)
<b>DVC</b>		
30.	Shri R.N. Singh	Chairman
31.	Shri M. Raghuram	Member (Technical)
<b>THDC</b>		
32.	Shri. R.K. Vishnoi	CMD
<b>SJVNL</b>		
33.	Shri. N.L. Sharma	CMD
34.	Shri. V. Sankaranarayanan	ED
<b>REC</b>		
35.	Shri. Vivek Kumar Dewangan	CMD
<b>PFC</b>		
36.	Smt. Parminder Chopra	CMD
37.	Shri Rajiv Ranjan Jha	Executive Director
<b>NLC</b>		
38.	Shri. Prasanna Kumar Motupalli	CMD
39.	Shri. M Venkatachalam	Director (Power)
<b>BHEL</b>		
40.	Shri. Tajinder Gupta	Director (Power)
41.	Shri. R.P.S. Sisodia	General Manager
<b>NPCIL</b>		
42.	Shri B.C. Pathak	CMD
43.	Shri Vineet Kumar Sharma	Director (Operations)
44.	Shri R. Sharan	Director (Projects)

**Representatives from States**

<b>State Thermal Utilities – Through VC</b>	
<b>WBPDCL</b>	
Shri Asit Kumar Mukherjee,	Director (Projects & Planning)
<b>UPRVUNL</b>	
Shri Ajeet kumar Tiwari	Sr. Advisor, Technical
<b>TANGEDCO</b>	
Smt. N.Uma Devi	Director (Projects)
<b>TSGENCO</b>	
Shri. M Sachidanandam	Director/Projects
Shri P.V.Srinivas	Chief Engineer/TPC
Shri G.Srinivasa Rao	CE/Civil/Thermal
<b>MAHAGENCO</b>	
Shri Abhay Harne	Director (Projects)
<b>APGENCO</b>	
Shri Chandrashekhar Rao	Director (Thermal)
<b>HYDRO (State &amp; Private) – Through VC</b>	
Jammu & Kashmir - <b>JKSPDC</b>	Managing Director
Himachal Pradesh - <b>BVPCL</b>	MD
Himachal Pradesh - <b>HPPCL</b>	MD/Director
Himachal Pradesh - <b>Statkraft</b>	Country Head
<b>IPL</b>	
<b>JSW Energy Ltd</b>	GM/Project Director
Uttarakhand - <b>UJVNL</b>	Director
Punjab - <b>PSPCL</b>	Chief Engineer
Assam - <b>APGCL</b>	Project Director
Kerala - <b>KSEB</b>	Chief Engineer
Tamil Nadu - <b>TANGEDCO</b>	CMD/Chief Engineer
Andhra Pradesh - <b>APGENCO</b>	Director hydel
Telangana - <b>TSNPDCL</b>	Director



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

तापीय परियोजना नवीनीकरण एवं आधुनिकीकरण प्रभाग

Thermal Project Renovation & Modernization Division

Annexure-P3

No.: CEA-TH-14-24/5/2022-TRM Division/235-335

Dated 20.01.2023

**विषय: Renovation and Modernisation (R&M) of aged coal-fired Thermal Power Stations (TPS) - reg.**

The Govt. of India is striving to provide affordable electricity on 24x7 basis to common citizen. However, the country is witnessing huge energy demand post pandemic which is projected to surge at all-time high in coming summer of 2023 and beyond. Therefore, the role of thermal fleets including old thermal units becomes crucial in order to support renewable integration.

Hon'ble minister in the meeting held on 06.12.2022 (copy enclosed) advised not to retire any thermal units and urged for carrying out R&M for life extension and improve the flexibility and reliability of thermal units considering the expected demand scenario and availability of capacity in future. It may be noted that about 15-16 GW of new thermal capacity is expected by December 2023. Accordingly, R&M for life extension is to be considered after December 2023. However, RLA and other pre-R&M/LE related preparatory works may be taken up in the meantime.

Therefore, it is advised to all power utilities not to retire any thermal units till 2030 and ensure the availability of units after carrying out R&M activities, if required.

बि मल्लिक 20/01/2022

(B C Mallick) / (बी सी मलिक)

CE (TPRM) / सीई (टीपीआरएम)

To:

As per the list.

Copy for information:

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2. Chairperson, CEA
3. Member (Thermal), CEA

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40. Director, Jaiprakash Power Ventures Limited, Complex of Jaypee Nigrie Super Thermal Power Plant, Tehsil Sarai, Nigrie, Singrauli , Madhya Pradesh - 486669 , India, Phone No: (7801 ) 286021 - 39, Fax: (780 I ) 286020, Email: mm.sibbal@jalindia.co.in
41. CMD, NLC India Ltd., First Floor, No.8, Mayor Sathyamurthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai-60003 I ,Tamil Nadu, India. Ph No. 044-28364613,614,615,616,617 Fax. 044-28364619 Email: cmd@nlcindia.com
42. CMD, The Singareni Collieries Company Ltd., Kothagudem Collieries, Bhadradi Kothagudem Dist , Telangana State PIN: 507101. Ph No 08744-242301 /02/03/04 Fax: 08744-242305, Email: dp@scclmines.com

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47. Dy. General Manager, Mahatma Gandhi TPS, Jhajjar Power Ltd . (CLP India Co.), Tehsil Matenhail , Distt Jhajjar-124142, Email: rajiv.mishra @clpindia.in
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  96. Vidarbha Industries Ltd. Subsidiary of reliance Power, Email : [rpower.mcafiling@relianceada.com](mailto:rpower.mcafiling@relianceada.com)
  97. Korba West power Company Ltd., Avantha Power, Email: [communications@avanthapower.com](mailto:communications@avanthapower.com)
  98. MD/CMD, ITPCL, IL&FS Tamil Nadu Power Company Limited 4th Floor, KPR Tower, Old No. 21, New No. 2, 1st Street, Subba Rao Avenue, College Road, Chennai - 600 006, Email: [info@itpclindia.com](mailto:info@itpclindia.com)



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No. 11/3/2022-Th-I  
Government of India  
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,  
New Delhi, dated 23th December, 2022

**OFFICE MEMORANDUM**

**Sub: Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 at 03:30 PM to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants - Reg.**

The undersigned is directed to forward herewith a copy of Minutes of the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on **06.12.2022 at 03:30 PM** at 2<sup>nd</sup> Floor, Shram Shakti Bhawan, Rafi Marg, New Delhi to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants.

Encl: As above

(Sunil Kumar Sah)

Under Secretary to the Government of India

Telefax: 23719710

To:

1. Chairman, CEA
2. CMD, NTPC Ltd.

Copy for information to:

PS to Hon'ble Minister of Power & NRE /PS to Hon'ble MoS (Power & HI)/Sr. PPS to Secretary (P)/PPS to JS (Th)/ PS to Dir (Th), Ministry of Power

(Sunil Kumar Sah)

Under Secretary to the Government of India

**Minutes of the meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants**

List of Participants is given at **Annexure**.

2. At the outset, Secretary (Power) welcomed all the participants and apprised the agenda of the meeting. It was informed that Renovation & Modernization (R&M) is an important but neglected area. Various states are going for retirement and subsequent repurposing of their plants instead of opting for R&M in more efficient manner.
3. CMD, NTPC briefed about the R&M experience of GSECL's Wanakbori Thermal Power Station and NTPC's Ramagundam TPS.
4. Considering the expected demand scenario and availability of the capacity, Hon'ble Minister instructed not to retire any thermal Unit and urged to carry out R&M for life extension and improve the flexibility and reliability of the Units.
5. CEA made a presentation explaining objectives and guiding principles of R&M emphasizing that priority should be given to R&M and LE. It was agreed that CEA will take up with States and other Utilities for revisiting their plans for retirement/ re-purposing of thermal Units, if any.
6. Secretary (Power) asked CEA to prepare a scheme for LE and R&M and a phasing plan for the R&M of Units.
7. It was discussed that 15-16 GW of new thermal capacity is expected by December 2023. Accordingly, R&M for life extension is to be considered after December 2023. However, RLA and other pre-R&M / LE-related preparatory works are to be taken up.
8. Hon'ble Minister asked CEA to review the off-bar capacity Utility wise and take measures for bringing them on-bar.

The meeting ended with a vote of thanks to all the participants.

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Annexure

**List of Participants in the Meeting held under the Chairmanship of Hon'ble Minister of Power & NRE on 06.12.2022 to discuss Life Extension (LE) and Renovation and Modernization (R&M) of Coal Based Thermal Power Plants.**

S. No	Name	Designation
<b>Ministry of Power</b>		
1	Shri Alok Kumar	Secretary
2	Shri Piyush Singh	Joint Secretary (Thermal)
3	Shri Satish Kumar	Director (Thermal)
4	Shri Sunil Kumar Sah	Under Secretary (Thermal)
<b>CEA</b>		
5	Shri Praveen Gupta	Member (Thermal)
6	Shri B C Mallick	Chief Engineer, TPR&M
7	Shri Pravir Kumar	Director, TPR&M
8	Shri Surender Kumar	Dy. Director, TPR&M
<b>NTPC Ltd</b>		
9	Shri Gurdeep Singh	CMD
10	Shri U K Bhattacharya	Director (Projects)
11	Shri Ramesh Babu	Director (Operations)
12	Shri M K Shrivastava	Executive Director (Engineering)
13	Shri A P Samal	General Manager
14	Shri Soumyajit Mukherjee	Addl General Manager
15	Shri Santosh Kumar V	Deputy General Manager



No. 11/3/2022-Th.I  
Government of India  
Ministry of Power  
\*\*\*

Shram Shakti Bhawan, Rafi Marg  
New Delhi, 1<sup>st</sup> August, 2023

To:

- i. Principal Secretary (Power/Energy) of all States/UTs
- ii. CMD/MD of all coal/lignite based power Thermal Power Plants  
(Central/State/Private)

**Subject: Approach to be adopted for Life Extention (LE) and Renovation and Modernization (R&M) Coal Based Thermal Units -reg**

Government of India is committed to provide reliable & affordable electricity on 24x7 basis to the citizens of the country. With the restoration of economic activity the country is witnessing a continuous surge in energy demand post pandemic which is projected to rise further with the dynamic economic growth. Further, India has set the target for attaining 500 GW non-fossil fuel capacity by the year 2030 which needs to be integrated with the grid to counter the intermittency associated with power from renewable sources.

2. Therefore, the role of coal fired thermal power plants including old thermal units becomes crucial in meeting the power/energy demand and ensuring renewable integration. The R&M of old thermal units is not only a cheaper and cost effective solution in comparison to addition of new thermal capacity but will also ensure higher integration of renewable capacity in the Grid through flexible operations as per technical minimum regulations. It shall also help to bridge the gap in increased demand and required installed capacity in India by 2030.

3. In this context, the Central Electricity Authority has identified 148 units with total capacity of 38150 MW as potential candidates for R&M/LE works. List of these 148 units is enclosed as Annexure.

4. R&M/LE works in these 148 units have to be implemented in three phases to avoid any major energy demand-supply gap. These units have

been distributed under three phases based on their operating life span and Phase-I has been further divided under two sub phases i.e. Phase-IA & IB. The timelines of each phase/sub phase for completion of R&M/LE activity has been proposed as 30 months (including 3 months shut down period) considering maximum completion time for R&M works mentioned in committee report and the timelines for Phase-IA & Phase-IB have been concurrently aligned for optimum utilization of time in Phase 1. The criteria for selecting coal based thermal units in the 3 phases is illustrated as under:

Phases		Criteria for Selection of Thermal Units (Age as on Dec-2022)	Timeline
Phase-I	Phase-I	Age 35 Years and above	01.01.24 to 30.06.26
	Phase-II	Age 30 to 35 years	01.01.26 to 30.06.28
Phase-II		Age 25 to 30 years	01.07.28 to 31.12.30
Phase-III		Age 20 to 25 years	01.01.31 to 30.06.33

5. The Phasing Plan of 148 units along with tentative timelines for implementation of R&M/LE intervention have been prepared and proposed to be implemented in three phases given as under:

Phasing Plan for R&M (Sector Wise)								
Time Lines	Phase-I				Phase-II		Phase-III	
	Phase-IA		Phase-IB					
	01.01.24 to 30.06.26		01.01.26 to 30.06.28		01.07.28 to 31.12.30		01.01.31 to 30.06.33	
Sector	Units	Capacity (MW)	Units	Capacity (MW)	Units	Capacity (MW)	Units	Capacity (MW)
<b>Central State</b>	20	4930	22	6940	11	3180	8	2840
<b>Private</b>	32	6690	16	3940	19	4900	14	2980
	1	500	0	0	3	750	2	500
<b>Total</b>	<b>53</b>	<b>12120</b>	<b>38</b>	<b>10880</b>	<b>33</b>	<b>8830</b>	<b>24</b>	<b>6320</b>

6. The timeline for individual thermal unit may be finalized in consultation with power utilities, RPCs, OEMs and Grid Controller of India Ltd.

7. Further, CEA has prepared a guideline on various aspects of Renovation & Modernization (R&M) and Life extension (LE) of coal based thermal power stations consisting of issues related to time taken/schedule for completion of R&M works, uprating of units where margin is available, guiding principles for preparation of bidding documents of R&M works including commercial and technical aspects and do's & don'ts in bidding process. The viable business models given in report include conventional competitive bidding and PPP models such as joint venture between Power utility and Private/Public

Company/Manufacturer and Service Model. The same is enclosed for detailed reference.

**8. All States Power utilities are accordingly advised to carry out R&M/LE activities and related processes for identified units on priority basis.**

9. This issues with the approval of Hon'ble Minister of Power & NRE.



(Sunil Kumar Sah)

Under Secretary to Govt. of India

Telefax: 2371-9710

Encl: As above

Copy to:

1. Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

Draft Phasing Plan for carrying out R&M				
Phase IA (Units with Age >=35 years as on 31.12.2022)				
Central Sector				
NTPC				
Name of Project	Date of Commissioning	Unit No	Capacity	
FARAKKA STPS	1/1/1986	1	200	
	12/24/1986	2	200	
	8/6/1987	3	200	
<b>FARAKKA STPS Total</b>		<b>3</b>	<b>600</b>	
KORBA STPS	2/28/1983	1	200	
	10/31/1983	2	200	
	3/17/1984	3	200	
	5/31/1987	4	500	
<b>KORBA STPS Total</b>		<b>4</b>	<b>1100</b>	
RAMAGUNDEM STPS	10/27/1983	1	200	
	5/29/1984	2	200	
	12/13/1984	3	200	
<b>RAMAGUNDEM STPS Total</b>		<b>3</b>	<b>600</b>	
SINGRAULI STPS	2/14/1982	1	200	
	11/25/1982	2	200	
	3/28/1983	3	200	
	11/2/1983	4	200	
	2/26/1984	5	200	
	12/23/1986	6	500	
	11/24/1987	7	500	
<b>SINGRAULI STPS Total</b>		<b>7</b>	<b>2000</b>	
VINDHYACHAL STPS	10/10/1987	1	210	
<b>VINDHYACHAL STPS Total</b>		<b>1</b>	<b>210</b>	
<b>NTPC Total</b>		<b>18</b>	<b>4510</b>	
NLC				
Name of Project	Date of Commissioning	Unit No	Capacity	
NEYVELI TPS-II	2/6/1987	2	210	
	3/29/1987	3	210	
<b>NEYVELI TPS-II Total</b>		<b>2</b>	<b>420</b>	
State Sector Utilites				
State	Name of Project	Date of Commissioning	Unit No	Capacity
Chhattisgarh	KORBA-WEST TPS	6/21/1983	2	210
		3/30/1984	1	210

		3/26/1985	3	210
		3/13/1986	4	210
	<b>KORBA-WEST TPS Total</b>		<b>4</b>	<b>840</b>
<b>Chhattisgarh Total</b>			<b>4</b>	<b>840</b>
<b>Gujarat</b>	<b>UKAI TPS</b>	1/21/1979	3	200
		1/30/1985	5	210
	<b>UKAI TPS Total</b>		<b>2</b>	<b>410</b>
	<b>WANAKBORI TPS</b>	3/23/1982	1	210
		1/15/1983	2	210
		3/9/1986	4	210
		9/23/1986	5	210
		11/18/1987	6	210
	<b>WANAKBORI TPS Total</b>		<b>5</b>	<b>1050</b>
<b>Gujarat Total</b>			<b>7</b>	<b>1460</b>
<b>Karnataka</b>	<b>RAICHUR TPS</b>	3/29/1985	1	210
		3/2/1986	2	210
	<b>RAICHUR TPS Total</b>		<b>2</b>	<b>420</b>
<b>Karnataka Total</b>			<b>2</b>	<b>420</b>
<b>Madhya Pradesh</b>	<b>SATPURA TPS</b>	6/27/1979	6	200
		9/20/1980	7	210
		1/25/1983	8	210
		2/27/1984	9	210
	<b>SATPURA TPS Total</b>		<b>4</b>	<b>830</b>
<b>Madhya Pradesh Total</b>			<b>4</b>	<b>830</b>
<b>Maharashtra</b>	<b>CHANDRAPUR(MAHARASH)</b>	5/3/1985	3	210
		3/8/1986	4	210
	<b>CHANDRAPUR(MAHARASHTRA) STPS Total</b>		<b>2</b>	<b>420</b>
	<b>NASIK TPS</b>	4/26/1979	3	210
		7/10/1980	4	210
	<b>NASIK TPS Total</b>		<b>2</b>	<b>420</b>
<b>Maharashtra Total</b>			<b>4</b>	<b>840</b>
<b>Tamil Nadu</b>	<b>METTUR TPS</b>	1/4/1987	1	210
		12/1/1987	2	210
	<b>METTUR TPS Total</b>		<b>2</b>	<b>420</b>
	<b>TUTICORIN TPS</b>	7/9/1979	1	210
		12/17/1980	2	210
		4/16/1982	3	210
	<b>TUTICORIN TPS Total</b>		<b>3</b>	<b>630</b>
<b>Tamil Nadu Total</b>			<b>5</b>	<b>1050</b>
<b>Uttar Pradesh</b>	<b>ANPARA TPS</b>	3/24/1986	1	210
		2/28/1987	2	210
	<b>ANPARA TPS Total</b>		<b>2</b>	<b>420</b>
	<b>OBRA TPS</b>	7/21/1982	13	200
	<b>OBRA TPS Total</b>		<b>1</b>	<b>200</b>
<b>Uttar Pradesh Total</b>			<b>3</b>	<b>620</b>
<b>West Bengal</b>	<b>BANDEL TPS</b>	10/8/1982	5	210
	<b>BANDEL TPS Total</b>		<b>1</b>	<b>210</b>



	KOLAGHAT TPS	1/24/1984	4	210
		12/16/1985	3	210
	<b>KOLAGHAT TPS Total</b>		<b>2</b>	<b>420</b>
<b>West Bengal Total</b>			<b>3</b>	<b>630</b>
<b>State Sector Total</b>			<b>32</b>	<b>6690</b>

Private Sector Utilites				
State	Name of Project	Date of Commissioning	Unit No	Capacity
Maharashtra	TROMBAY TPS	1/25/1984	5	500
	<b>TROMBAY TPS Total</b>		<b>1</b>	<b>500</b>
<b>Maharashtra Total</b>			<b>1</b>	<b>500</b>
<b>Grand Total Phase I A</b>			<b>53</b>	<b>12120</b>

Draft Phasing Plan for carrying out R&M			
Phase IB (Units with 30<=Age <35 years as on 31.12.2022)			
Central Sector			
NTPC			
Name of Project	Date of Commissioning	Unit No	Capacity
DADRI (NCTPP)	12/21/1991	1	210
	12/18/1992	2	210
<b>DADRI (NCTPP) Total</b>		<b>2</b>	<b>420</b>
FARAKKA STPS	9/25/1992	4	500
<b>FARAKKA STPS Total</b>		<b>1</b>	<b>500</b>
KAHALGAON TPS	3/31/1992	1	210
<b>KAHALGAON TPS Total</b>		<b>1</b>	<b>210</b>
KORBA STPS	3/25/1988	5	500
	2/26/1989	6	500
<b>KORBA STPS Total</b>		<b>2</b>	<b>1000</b>
RAMAGUNDEM STPS	6/26/1988	4	500
	3/26/1989	5	500
	10/16/1989	6	500
<b>RAMAGUNDEM STPS Total</b>		<b>3</b>	<b>1500</b>
RIHAND STPS	3/31/1988	1	500
	7/5/1989	2	500
<b>RIHAND STPS Total</b>		<b>2</b>	<b>1000</b>
UNCHA HAR TPS	11/21/1988	1	210
	3/22/1989	2	210
<b>UNCHA HAR TPS Total</b>		<b>2</b>	<b>420</b>
VINDHYACHAL STPS	7/23/1988	2	210
	2/3/1989	3	210
	12/26/1989	4	210
	3/31/1990	5	210
	2/1/1991	6	210
<b>VINDHYACHAL STPS Total</b>		<b>5</b>	<b>1050</b>
<b>NTPC Total</b>		<b>18</b>	<b>6100</b>

NLC			
Name of Project	Date of Commissioning	Unit No	Capacity
NEYVELI TPS-II	1/17/1988	1	210
	3/30/1991	4	210
	12/31/1991	5	210
	10/30/1992	6	210
<b>NEYVELI TPS-II Total</b>		<b>4</b>	<b>840</b>

State Sector Utilitites				
State	Name of Project	Date of Commissioning	Unit No	Capacity
Gujarat	GANDHI NAGAR TPS	3/20/1990	3	210
		7/20/1991	4	210
	<b>GANDHI NAGAR TPS Total</b>		<b>2</b>	<b>420</b>
<b>Gujarat Total</b>			<b>2</b>	<b>420</b>
Karnataka	RAICHUR TPS	3/30/1991	3	210
	<b>RAICHUR TPS Total</b>		<b>1</b>	<b>210</b>
<b>Karnataka Total</b>			<b>1</b>	<b>210</b>
Maharashtra	CHANDRAPUR(MAHARASH)	3/22/1991	5	500
		3/11/1992	6	500
	<b>CHANDRAPUR(MAHARASHTRA) STPS Total</b>		<b>2</b>	<b>1000</b>
	KHAPARKHEDA TPS	3/26/1989	1	210
		1/8/1990	2	210
	<b>KHAPARKHEDA TPS Total</b>		<b>2</b>	<b>420</b>
<b>Maharashtra Total</b>			<b>4</b>	<b>1420</b>
Punjab	ROPAR TPS	3/31/1988	3	210
		1/29/1989	4	210
		3/29/1992	5	210
	<b>ROPAR TPS Total</b>		<b>3</b>	<b>630</b>
<b>Punjab Total</b>			<b>3</b>	<b>630</b>
Tamil Nadu	METTUR TPS	3/22/1989	3	210
		3/27/1990	4	210
	<b>METTUR TPS Total</b>		<b>2</b>	<b>420</b>
	TUTICORIN TPS	3/31/1991	5	210
		2/11/1992	4	210
	<b>TUTICORIN TPS Total</b>		<b>2</b>	<b>420</b>
<b>Tamil Nadu Total</b>			<b>4</b>	<b>840</b>
Uttar Pradesh	ANPARA TPS	3/12/1988	3	210
	<b>ANPARA TPS Total</b>		<b>1</b>	<b>210</b>
<b>Uttar Pradesh Total</b>			<b>1</b>	<b>210</b>
West Bengal	KOLAGHAT TPS	3/17/1991	6	210
	<b>KOLAGHAT TPS Total</b>		<b>1</b>	<b>210</b>
<b>West Bengal Total</b>			<b>1</b>	<b>210</b>
<b>State Sector Total</b>			<b>16</b>	<b>3940</b>
<b>Grand Total Phase I B</b>			<b>38</b>	<b>10880</b>

## Phase II (Units with 25&lt;=AGE&lt;30 years as on 31.12.2022)

Central Sector				
NTPC				
Name of Project	Date of Commissioning	Unit No	Capacity	
DADRI (NCTPP)	3/23/1993	3	210	
	3/24/1994	4	210	
DADRI (NCTPP) Total		2	420	
FARAKKA STPS	2/16/1994	5	500	
FARAKKA STPS Total		1	500	
KAHALGAON TPS	3/17/1994	2	210	
	3/24/1995	3	210	
	3/18/1996	4	210	
KAHALGAON TPS Total		3	630	
TALCHER STPS	2/19/1995	1	500	
	3/27/1996	2	500	
TALCHER STPS Total		2	1000	
<b>NTPC Total</b>		<b>8</b>	<b>2550</b>	
DVC				
Name of Project	Date of Commissioning	Unit No	Capacity	
MEJIA TPS	3/1/1996	1	210	
	3/24/1997	2	210	
MEJIA TPS Total		2	420	
<b>DVC Total</b>		<b>2</b>	<b>420</b>	
NLC				
Name of Project	Date of Commissioning	Unit No	Capacity	
NEYVELI TPS-II	6/19/1993	7	210	
<b>NEYVELI TPS-II Total</b>		<b>1</b>	<b>210</b>	
State Sector Utilites				
State	Name of Project	Date of Commissioning	Unit No	Capacity
Andhra Pradesh	RAYALASEEMA TPS	3/31/1994	1	210
		2/25/1995	2	210
	RAYALASEEMA TPS Total		2	420
Andhra Pradesh Total			2	420
Jharkhand	TENUGHAT TPS	4/14/1994	1	210
		10/10/1996	2	210
	TENUGHAT TPS Total		2	420

Jharkhand Total			2	420
Karnataka	RAICHUR TPS	9/29/1994	4	210
	RAICHUR TPS Total		1	210
Karnataka Total			1	210
Madhya Pradesh	SANJAY GANDHI TPS	3/26/1993	1	210
		3/27/1994	2	210
	SANJAY GANDHI TPS Total		2	420
Madhya Pradesh Total			2	420
Maharashtra	CHANDRAPUR(MAHARASHTRA) STPS	10/1/1997	7	500
	CHANDRAPUR(MAHARASHTRA) STPS Total		1	500
Maharashtra Total			1	500
Odisha	IB VALLEY TPS	6/2/1994	1	210
		10/22/1995	2	210
	IB VALLEY TPS Total		2	420
Odisha Total			2	420
Punjab	GH TPS (LEH.MOH.)	12/29/1997	1	210
	GH TPS (LEH.MOH.) Total		1	210
	ROPAR TPS	3/30/1993	6	210
	ROPAR TPS Total		1	210
Punjab Total			2	420
Tamil Nadu	NORTH CHENNAI TPS	10/25/1994	1	210
		3/27/1995	2	210
		2/24/1996	3	210
	NORTH CHENNAI TPS Total		3	630
Tamil Nadu Total			3	630
Telangana	KOTHAGUDEM TPS (NEW)	3/27/1997	9	250
	KOTHAGUDEM TPS (NEW) Total		1	250
Telangana Total			1	250
Uttar Pradesh	ANPARA TPS	7/19/1993	4	500
		7/4/1994	5	500
	ANPARA TPS Total		2	1000
Uttar Pradesh Total			2	1000
West Bengal	KOLAGHAT TPS	12/28/1993	5	210
	KOLAGHAT TPS Total		1	210
West Bengal Total			1	210
<b>State Sector Total</b>			<b>19</b>	<b>4900</b>



Private Sector Utilites				
State	Name of Project	Commissioning	Unit No	Capacity
Maharashtra	DAHANU TPS	1/6/1995	1	250
		3/29/1995	2	250
	DAHANU TPS Total		2	500
Maharashtra Total			2	500
West Bengal	BUDGE BUDGE TPS	9/16/1997	1	250
	BUDGE BUDGE TPS Total		1	250
West Bengal Total			1	250
<b>Private Sector Total</b>			<b>3</b>	<b>750</b>
<b>Grand Total Phase II</b>			<b>33</b>	<b>8830</b>

### Phase III (Units with 20<=AGE<25 years as on 31.12.2022)

Central Sector				
NTPC				
Name of Project	Date of Commissioning	Unit No	Capacity	
SIMHADRI	2/22/2002	1	500	
	8/24/2002	2	500	
<b>SIMHADRI Total</b>		<b>2</b>	<b>1000</b>	
UNCHA HAR TPS	1/27/1999	3	210	
	10/22/1999	4	210	
<b>UNCHA HAR TPS Total</b>		<b>2</b>	<b>420</b>	
VINDHYACHAL STPS	3/3/1999	7	500	
	2/26/2000	8	500	
<b>VINDHYACHAL STPS Total</b>		<b>2</b>	<b>1000</b>	
<b>NTPC Total</b>		<b>6</b>	<b>2420</b>	
DVC				
Name of Project	Date of Commissioning	Unit No	Capacity	
MEJIA TPS	3/25/1998	3	210	
<b>MEJIA TPS Total</b>		<b>1</b>	<b>210</b>	
<b>DVC Total</b>		<b>1</b>	<b>210</b>	
NLC				
Name of Project	Date of Commissioning	Count of Unit No	Sum of Capacity	
NEYVELI ( EXT) TPS	10/21/2002	1	210	
<b>NEYVELI ( EXT) TPS Total</b>		<b>1</b>	<b>210</b>	
State Sector Utilites				
State	Name of Project	Date of Commissioning	Unit No	Capacity
	GANDHI NAGAR TPS Total		<b>1</b>	210
	WANAKBORI TPS	12/31/1998	7	210
	<b>WANAKBORI TPS Total</b>		<b>1</b>	<b>210</b>
<b>Gujarat Total</b>			<b>2</b>	<b>420</b>
Haryana	PANIPAT TPS	3/31/2001	6	210
	<b>PANIPAT TPS Total</b>		<b>1</b>	<b>210</b>
<b>Haryana Total</b>			<b>1</b>	<b>210</b>

Karnataka	RAICHUR TPS	1/31/1999	5	210
		7/22/1999	6	210
		12/11/2002	7	210
	RAICHUR TPS Total		3	630
Karnataka Total			3	630
Madhya Pradesh	SANJAY GANDHI TPS	2/28/1999	3	210
		11/23/1999	4	210
	SANJAY GANDHI TPS Total		2	420
Madhya Pradesh Total			2	420
Maharashtra	KHAPARKHEDA TPS	5/31/2000	3	210
		1/7/2001	4	210
	KHAPARKHEDA TPS Total		2	420
Maharashtra Total			2	420
Punjab	GH TPS (LEH.MOH.)	10/16/1998	2	210
	GH TPS (LEH.MOH.) Total		1	210
Punjab Total			1	210
Telangana	KOTHAGUDEM TPS (NEW)	2/28/1998	10	250
	KOTHAGUDEM TPS (NEW) Total		1	250
Telangana Total			1	250
West Bengal	BAKRESWAR TPS	7/17/1999	2	210
		5/20/2000	3	210
	BAKRESWAR TPS Total		2	420
West Bengal Total			2	420
<b>State Sector Total</b>			<b>14</b>	<b>2980</b>
<b>Private Sector Utilites</b>				
<b>State</b>	<b>Name of Project</b>	<b>Date of Commissioning</b>	<b>Unit No</b>	<b>Capacity</b>
Tamil Nadu	NEYVELI TPS(Z)	10/21/2002	1	250
	NEYVELI TPS(Z) Total		1	250
Tamil Nadu Total			1	250
West Bengal	BUDGE BUDGE TPS	3/6/1999	2	250
	BUDGE BUDGE TPS Total		1	250
West Bengal Total			1	250
<b>Private Sector Total</b>			<b>2</b>	<b>500</b>
<b>Grand Total Phase III</b>			<b>24</b>	<b>6320</b>



 <p>सत्यमेव जयते</p>	<p>कार्यालय प्रधान महालेखाकार (लेखापरीक्षा) हरियाणा प्लॉट नं. 5 सेक्टर 33-बी, दक्षिण मार्ग, चण्डीगढ़-160020</p> <p>OFFICE OF THE PRINCIPAL ACCOUNTANT GENERAL (AUDIT) HARYANA, PLOT NO.5, SECTOR 33-B, DAKSHIN MARG, CHANDIGARH-160020</p> <p>No. AMG-IV/ Section-1/HPGCL/BS-2022-23/2023-24/295</p> <p>दिनांक 18.09.2023</p>	
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सेवा में,

प्रबन्ध निदेशक,  
हरियाणा विद्युत उत्पादन निगम लिमिटेड,  
ऊर्जा भवन, सेक्टर-6,  
पंचकुला (हरियाणा)।

दिष्य :

कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2023 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र।

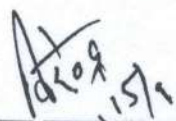
महोदय,

मैं इसके साथ कम्पनी अधिनियम 2013 की धारा 143 (6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2023 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र सलग्न करता हूँ।

टिप्पणियों को कंपनी की वार्षिक महासभा (ए.जी.एम.) में प्रस्तुत करने की तिथि एवं समय इस कार्यालय को सूचित किया जाये।

संलग्न: उपरोक्त

भवदीय,

  
वरिष्ठ उप-महालेखाकार  
(AMG-IV)

**B. Comments on Profitability  
Statement of Profit and Loss  
Employee benefit expenses (Note 33): ₹ 404.20 crore  
Salaries: ₹218.58 crore**

The above includes an expenditure of ₹ 47.42 crore on security services engaged from Central Industrial Security Force (CISF) for watch and ward at the Company's power plants located at Hisar, Panipat and Yamuna Nagar. This expenditure should have been classified under 'Other Expenses' instead of 'Employee benefit expenses'. This resulted in overstatement of 'Employee benefit expenses' and understatement of 'Other Expenses' by ₹ 47.42 crore.

**C. Comments on Disclosure**

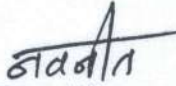
**C.1** The Company has not disclosed the useful life or the depreciation rate used for each class of Property, Plant & Equipment as per the requirement of Para 73(c) of Ind AS-16.

**C.2** Haryana Electricity Regulatory Commission (HERC) in its tariff order (22 February 2022) approved annual fixed charges of ₹ 39.52 crore for Western Yamuna Canal (WYC) hydroelectric project for the year 2022-23. The Company has raised bills and booked revenue of ₹ 43.26 crore for 2022-23 against approved fixed charges of ₹ 39.52 crore which is yet to be approved by HERC. However, this material fact has not been disclosed in the accounts.



**For and on the behalf of the  
Comptroller & Auditor General of India**

Place: Chandigarh

Date: 18.09.23

  
(Navneet Gupta)

**Principal Accountant General (Audit)  
Haryana**

 सत्यमेव जयते	कार्यालय प्रधान महालेखाकार (लेखापरीक्षा) हरियाणा प्लॉट नं. 5 सेक्टर 33-बी, दक्षिण मार्ग, चण्डीगढ़ - 160020 <b>OFFICE OF THE PRINCIPAL ACCOUNTANT GENERAL (AUDIT) HARYANA, PLOT NO.5, SECTOR 33-B, DAKSHIN MARG, CHANDIGARH-160020</b> No. AMG-IV/ Section-1/HPGCL/BS-2021-22/2022-23/158 दिनांक 11.10.22	
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सेवा में,

प्रबन्ध निदेशक,  
हरियाणा विद्युत उत्पादन निगम लिमिटेड,  
ऊर्जा भवन, सेक्टर-6,  
पंचकुला (हरियाणा)।

विषय :

कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2022 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र।

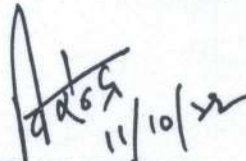
महोदय,

मैं इसके साथ कम्पनी अधिनियम 2013 की धारा 143 (6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2022 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र संलग्न करता हूँ।

टिप्पणियों को कंपनी की वार्षिक महासभा (ए.जी.एम.) में प्रस्तुत करने की तिथि एवं समय इस कार्यालय को सूचित किया जाये।

संलग्न: उपरोक्त

भवदीय,

  
11/10/22  
वरिष्ठ उप-महालेखाकार  
(AMG-IV)

amount of Rs.37.50 crore has been shown as payables under current liabilities. Similarly, the Company had not recognized dividend income of Rs.384.25 crore relating to previous years from 2015-16 to 2020-21. The accounting practice adopted by the Company for not recognizing the dividend income received from its joint venture entity and directly transferring the same to the State Government is incorrect.

**1.2 Expenses**

**Employee Benefit Expenses (Note-33) Rs.687.29 crore**

**a) Terminal Benefit Expenses Rs.402.07 crore**

The above balance is understated by Rs.20.65 crore due to short provision of 'Non funded liability' since provision of Rs.173.33 crore has been made against the liability of Rs.193.98 crore as per actuarial valuation report. This resulted in overstatement of other equity by Rs.20.65 crore and understatement of current provisions to that extent.

**b) Employees benefit expense (Note - 33) - Rs. 687.29 crore crore**

The above incorrectly includes expenditure of Rs.42.79 crore on security services engaged from Central Industrial Security Force for watch and ward at the Company's generation plants. The expenditure should have been classified under 'Other Expenses'. This resulted in overstatement of 'Employees benefit Expenses' and understatement of 'Other Expenses' by Rs.42.79 crore.



For and on the behalf of the  
Comptroller & Auditor General of India

Place: Chandigarh

Date: 11.10.22

*Vishal Bansal*

(Vishal Bansal)  
Principal Accountant General (Audit)  
Haryana

 <p>सत्यमेव जयते</p>	<p>कार्यालय प्रधान महालेखाकार (लेखापरीक्षा) हरियाणा प्लॉट नं. 5 सेक्टर 33-बी, दक्षिण मार्ग, चण्डीगढ़ - 160020</p> <p>OFFICE OF THE PRINCIPAL ACCOUNTANT GENERAL (AUDIT) HARYANA, PLOT NO.5, SECTOR 33-B, DAKSHIN MARG, CHANDIGARH-160020</p> <p>No. AMG-IV/ Section-1/HPGCL/BS-2020-21/2021-22/456</p> <p>दिनांक 13-10-21</p>	
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सेवा में,

प्रबन्ध निदेशक,  
हरियाणा विद्युत उत्पादन निगम लिमिटेड,  
ऊर्जा भवन, सेक्टर-6,  
पंचकुला (हरियाणा)।

विषय : कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2021 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र।

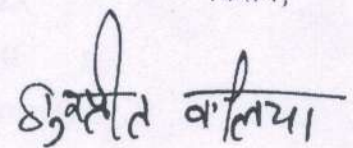
महोदय,

मैं इसके साथ कम्पनी अधिनियम 2013 की धारा 143 (6)(b) के अंतर्गत हरियाणा विद्युत उत्पादन निगम लिमिटेड, पंचकुला के 31 मार्च 2021 को समाप्त हुये वर्ष के वार्षिक लेखों पर भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियां एवं प्रबंधन पत्र संलग्न करता हूँ।

टिप्पणियों को कंपनी की वार्षिक महासभा (ए.जी.एम.) में प्रस्तुत करने की तिथि एवं समय इस कार्यालय को सूचित किया जाये।

संलग्न: उपरोक्त

भवदीय,



वरिष्ठ उप-महालेखाकार  
(AMG-IV)

2020-21

should have been derecognized in the current year. Resultantly, current year's profit is overstated by ₹ 337.88 crore and previous year's profit is understated by the same extent.

**A.2 Non-current assets held for sale (Note-17): ₹ 65.01 crore**

The above includes ₹ 32.38 crore on account of excess fixed cost recovered from Distribution Companies (DISCOMs) i.e. UHBVNL and DHBVNL during the year 2019-20 in respect of Panipat Thermal Power Station unit-V, Panipat. The same has been disallowed (April 2020) by the HERC. Accordingly, the Company issued (May 2020) credit note of ₹ 32.38 crore to DISCOMs. However, the Company capitalized the disallowed fixed cost under non-current assets held for sale and created a provision under current financial liabilities. Resultantly, non-current assets held for sale and provisions are overstated by ₹ 32.38 crore.

**B. Comments on profitability**

**Statement of Profit & Loss**

**B.1 Other Income (Note-31): ₹ 17.90 crore**

The above does not include dividend income of ₹ 175 crore (Final dividend 2019-20: ₹ 50 crore and Interim Dividend 2020-21: ₹ 125 crore) (net amount ₹ 161.87 crore after TDS deduction of ₹ 13.13 crore) received in current year from joint venture entity, Aravali Power Company Private Limited (APCPL). The Company transferred net receipt of dividend of ₹ 161.87 crore to the State Government and balance amount of ₹ 13.13 crore has been shown as payables under current liabilities. The Company had similarly not recognized dividend income of ₹ 209.25 crore relating to previous years from 2015-16 to 2019-20. The accounting practice adopted by the Company for not recognizing the dividend income received from its joint venture entity and directly transferring the same to the State Government without declaring own dividend is incorrect.

As a result current year's profit and other equity are understated by ₹ 175 crore and ₹ 209.25 crore respectively and receivables from State Government are understated by ₹ 371.12 crore and payables to State Government are overstated by ₹ 13.13 crore.

**B.2 Employees Benefit (Note-33): ₹ 327.84 crore**

The above incorrectly includes expenditure of ₹ 39.10 crore on security services engaged from Central Industrial Security Force for watch and ward of the Company's generation plants. The expenditure should have been classified under 'Other Expenses'. This incorrect classification has resulted in overstatement of 'Employees Benefit Expenses' and understatement of 'Other Expenses' by ₹ 39.10 crore.

***Standalone Financial Statements  
FY 2022-23***







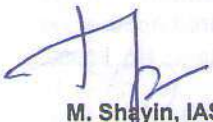

**HPGCL**

AN ISO:9001, ISO:14001 & OHSAS:18001  
CERTIFIED COMPANY

**HARYANA POWER GENERATION CORPORATION LIMITED**  
**Regd. Office: URJA BHAWAN, SECTOR-6, PANCHKULA-134109**  
**CORPORATE IDENTITY NUMBER: U45207HR1997SGC033517**

**HARYANA POWER GENERATION CORPORATION LIMITED**  
**REGD. OFFICE: URJA BHAWAN, SECTOR-6, PANCHKULA, HARYANA - 134109**  
**CIN: U45207HR1997SGC033517**  
**STANDALONE BALANCE SHEET AS ON 31st MARCH 2023**

(Rs. in crores)

	Particulars	Note No.	As at March 2023	As at March 2022
	<b>ASSETS</b>			
1	<b>Non-current assets</b>			
	Property, plant and equipment	2	3,779.48	4,095.84
	Capital work-in-progress	3	7.26	13.28
	Intangible assets	4	2.36	3.08
	Intangible assets under development	5	10.74	9.25
	<b>Financial assets</b>			
	Investments	6	1,496.93	1,387.33
	Loans	7	18.04	17.99
	Others	8	9.50	6.19
	Deferred tax assets (net)	9	-	-
	Other non-current assets	10	7.84	3.71
2	<b>Current assets</b>			
	Inventories	11	944.92	520.96
	<b>Financial assets</b>			
	Trade receivables	12	865.60	631.09
	Cash and cash equivalents	13	1.14	2.11
	Bank balances other than above	14	1.58	1.53
	Loans		-	-
	Other financial assets	15	80.42	39.98
	Current tax assets			
	Other current assets	16	203.22	150.11
	Assets held for sale	17	78.05	78.05
	Regulatory Deferral Account Debit Balance	18	-	-
	<b>Total Assets</b>		<b>7,507.10</b>	<b>6,960.50</b>
	<b>EQUITY AND LIABILITIES</b>			
1	<b>Equity</b>			
	Equity share capital	19	3,188.29	3,188.29
	Other equity	20	110.91	(55.47)
	<b>Total Equity</b>		<b>3,299.20</b>	<b>3,132.82</b>
2	<b>Liabilities</b>			
	<b>Non-current liabilities</b>			
	<b>Financial liabilities</b>			
	Lease liabilities		-	-
	Borrowings	21	167.25	261.27
	Other financial liabilities			
	Provisions	22	781.14	786.78
	Deferred tax liabilities (net)	23	-	-
	Other non-current liabilities	24	603.05	594.08
	<b>Current liabilities</b>			
	<b>Financial liabilities</b>			
	Lease Liabilities		-	-
	Borrowings	25	1,612.65	1,205.37
	Trade payables	26	-	-
	Total outstanding dues of micro & small enterprises		-	0.00
	Total outstanding dues of creditors other than micro & small enterprises		58.14	34.94
	Others	27	273.92	176.52
	Other current liabilities	28	488.78	365.95
	Provisions	29	132.22	172.61
	Current tax liabilities (net)		-	-
	Regulatory Deferral Account credit Balance	18	90.77	230.15
	<b>Total Equity and Liabilities</b>		<b>7,507.10</b>	<b>6,960.50</b>
	Significant Accounting Policies	1		
	The accompanying notes form an integral part of financial statements	2 to 43		
	For and on behalf of the Board of Directors			
	 Bahadur Singh Gosain Chief Accounts Officer	 Rajesh Goyal Chief Financial Officer	 Amit Dewan Director Finance	
	As per our report of even date attached For Ashwani Pardeep & Co. Chartered Accountants Firm Regd. No. 009099N	 Harish K. Gulati Company Secretary	 M. Shayin, IAS Managing Director	
	CA. Kapil Dev (Partner) Membership No. 093023 Place: Chandigarh Dated: 05/07/2023			

UDIN: 23093023BGTXYV11430



**HARYANA POWER GENERATION CORPORATION LIMITED**  
**REGD. OFFICE: URJA BHAWAN, SECTOR-6, PANCHKULA, HARYANA - 134109**  
**CIN: U45207HR1997SGC033517**  
**STANDALONE STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED 31st MARCH 2023**

(Rs. in crores)

	Particulars	Note No.	For the year ended 31 March 2023	For the year ended 31 March 2022
	<b>Income</b>			
	Revenue from operations	30	8,566.50	3,969.26
	Other income	31	59.92	16.78
	<b>Total income</b>		<b>8,626.42</b>	<b>3,986.03</b>
	<b>Expenses</b>			
	Cost of materials consumed	32	6,927.91	2,883.48
	Employee benefits expense	33	404.20	288.24
	Finance costs	34	171.10	142.85
	Depreciation and amortisation expense	35	337.43	336.75
	Other expenses	36	335.54	258.63
	<b>Total expenses</b>		<b>8,176.17</b>	<b>3,909.96</b>
	Profit/(Loss) before net movement in regulatory deferral account balance and tax		450.24	76.07
	Net movement in regulatory deferral account balance. Expense/(Income)	18	(91.21)	69.08
	<b>Profit / (Loss) before tax</b>		<b>541.45</b>	<b>6.99</b>
	Tax expense:			
	(a) Current tax		-	-
	(b) Deferred tax Assets (Liability)	9	-	-
	(a+b)		-	-
	<b>Profit / (Loss) after tax</b>		<b>541.45</b>	<b>6.99</b>
	Profit / (Loss) from discontinued operations	37	(1.25)	-
	Tax expense of discontinued operations		-	-
	Profit / (Loss) from discontinued operations after tax		(1.25)	-
	<b>Profit / (Loss) after tax</b>		<b>540.20</b>	<b>6.99</b>
	Other Comprehensive Income /(Expense) Items that will not be reclassified to profit or loss	38	(443.59)	(402.07)
	<b>Total</b>		<b>(443.59)</b>	<b>(402.07)</b>
	<b>Total Comprehensive Income for the year</b>		<b>96.61</b>	<b>(395.08)</b>
	Earnings per equity share (before net movement in regulatory deferral account balance) from continuing operations			
	(a) Basic	39	2.09	(102.29)
	(b) Diluted	39	2.08	(102.29)
	Earnings per equity share (after net movement in regulatory deferral account balance) from continuing operations			
	(a) Basic	39	30.69	(123.96)
	(b) Diluted	39	30.67	(123.96)
	Earnings per equity share for total operations (continuing + discontinuing operations)			
	(a) Basic	39	30.30	(123.96)
	(b) Diluted	39	30.28	(123.96)

Significant Accounting Policies

1

The accompanying notes form an integral part of financial statements

2 to 43

For and on behalf of the Board of Directors


  
**Bahadur Singh Gosain**  
 Chief Accounts Officer

  
**Rajesh Goyal**  
 Chief Financial Officer

  
**Amit Dewan**  
 Director Finance

As per our report of even date attached  
 For Ashwani Pardeep & Co.  
 Chartered Accountants  
 Firm Regd. No. 009099N

  
**Harish K. Gulati**  
 Company Secretary

  
**M. Shayin, IAS**  
 Managing Director

**CA. Kapil Dev**  
 (Partner)  
 Membership No. 093023  
 Place: Chandigarh  
 Dated: 05/07/2023



UDIN: 23093023 861X4V11430

**HARYANA POWER GENERATION CORPORATION LIMITED**  
**REGD. OFFICE: URJA BHAWAN, SECTOR-6, PANCHKULA, HARYANA - 134109**  
**CIN: U45207HR1997SGC033517**

**CASH FLOW STATEMENT FOR THE YEAR ENDED 31 MARCH 2023**

Particulars	(Rs In crores)	
	For the year ended 31 March 2023	For the year ended 31 March 2022
<b>A. Cash Flow from operating activities</b>		
Net profit / (loss) before tax	540.20	6.99
Adjusted for :		
Depreciation & Amortisation Expenses	337.43	336.75
Adjustments & appropriations	67.77	(136.08)
Interest on Deposits	(0.21)	(0.72)
Interest & Finance Charges	171.10	142.85
Operating Profit before working capital charges	<b>1,116.29</b>	<b>349.79</b>
Adjustment for Assets & Liabilities:		
Inventories	(423.95)	113.17
Trade receivables	(234.51)	(163.27)
Bank balance other than cash & cash equivalent	(0.05)	(0.04)
Loans, Other Financial Assets & Other Assets	(101.05)	(103.63)
Trade Payables	23.20	(55.70)
Other Financial Liabilities & Other Liabilities	233.51	2.01
Regulatory Deferral Account Balances	(139.38)	(172.17)
Provisions	(46.04)	16.42
Other Comprehensive Income	(443.59)	(402.07)
<b>Net Cash from Operating Activities (A)</b>	<b>(15.58)</b>	<b>(415.47)</b>
<b>B. Cash Flow from Investing activities</b>		
Net Expenditure on Property, Plant & Equipment and CWIP including advances for capital works	(15.84)	(8.78)
Term Deposits with Banks (having maturity exceeding 3 months)		
Interest on Deposits	0.21	0.72
Investments made	(109.60)	(194.51)
<b>Net cash used in Investing activities (B)</b>	<b>(125.23)</b>	<b>(202.58)</b>
<b>C. Cash Flow from financing activities</b>		
Proceeds from share capital		34.62
Proceeds from share application money	2.00	(34.62)
Net Borrowings	313.26	761.68
Interest & Finance Charges	(175.41)	(142.49)
<b>Net cash from financing activities (C)</b>	<b>139.84</b>	<b>619.20</b>
Net increase/ (decrease) in cash and cash equivalents (A, B, C)	(0.97)	1.14
Cash and cash equivalents at the beginning of the year	2.11	0.97
<b>Cash and cash equivalents at the end of the year</b>	<b>1.14</b>	<b>2.11</b>
<b>CASH &amp; CASH EQUIVALENTS</b>		
Balances with banks		
Balances in Current Accounts with Schedules banks	1.14	2.11
Cheques, cash, drafts on hand	0.00	0.00
<b>Total</b>	<b>1.14</b>	<b>2.11</b>

**Notes:**

- The Cash Flow Statement reflects the combined cash flows pertaining to continuing and discounting operations.
- Negative figures have been shown in brackets.

For and on behalf of the Board of Directors

**Bahadur Singh Gosain**  
Chief Accounts Officer

**Rajesh Goyal**  
Chief Financial Officer

**Amit Dewan**  
Director Finance

As per our report of even date attached  
For Ashwani Pardeep & Co.  
Chartered Accountants  
Firm Regd. No. 009099N

**Harish K. Gulati**  
Company Secretary

**M. Shyam, IAS**  
Managing Director

**CA. Kapil Dev**  
(Partner)  
Membership No. 093023  
Dated: 05/07/2023



UDIN: 23093023 B6XV11430

## STATEMENT OF CHANGES IN EQUITY

A. Equity Share Capital		
(Rs. in crores)		
Particulars	For the year ended 31 March 2023	For the year ended 31 March 2022
Balance at the beginning of the reporting period	3,188.29	3,153.67
Changes in Equity Share Capital due to prior period errors	-	-
Restated balance at the beginning of the current reporting period	3,188.29	3,153.67
Changes in equity share capital during the year	-	34.62
<b>Balance at the end of the reporting period</b>	<b>3,188.29</b>	<b>3,188.29</b>



Particulars	Reserves & Surplus										Other Comprehensive Income	Money received against share warrants	(Rs. in crores)
	Share application money pending allotment	Equity component of compound financial instruments	Retained earnings	World Bank Grant	Dry Fly Ash Fund	Energy Saving Certificate Reserve	Depreciation Reserve Fund	Loss of HSEB taken over	Remeasurement of Net defined benefit Asset/Liability (net of tax)	Total			
Balance as on 01.04.2022	0.00		650.07	-	497.82	1.11	202.51	(51.91)	(1,355.06)			(55.47)	
Changes in accounting policy or prior period errors													
Restated balance at the beginning of the reporting period													
Net Profit / Loss for the year													
Other Comprehensive Income for the year			540.20									540.20	
(a) Remeasurements of net defined benefit plans													
(b) Others									(443.59)			(443.59)	
Return in Equity													
Transfer to retained earnings													
Received during the year	2.00				95.55	0.62	9.19					107.37	
Allotment/Utilisation during the year	-				(56.77)	(3.18)	-					(59.95)	
Interest on Dry Fly Ash Fund					22.35		19.24					22.35	
Transfer from Retained earnings			(19.24)										
Balance as on 31.03.2023	2.00	-	1,171.02	-	558.95	(1.45)	230.95	(51.91)	(1,798.65)			110.91	



Particulars	Reserves & Surplus										Other Comprehensive Income		Total
	Share application money pending allotment	Equity component of compound financial instruments	Retained earnings	World Bank Grant	Dry Fly Ash Fund	Energy Saving Certificate Reserve	Depreciation Reserve Fund	Loss of HSEB taken over	Remeasurement of Net defined benefit Asset/Liability (net of tax)	Money received against share warrants	Total		
Balance as on 01.04.2021	34.62		990.31	4.00	484.75	1.54		(51.91)	(952.99)			510.31	
Changes in accounting policy or prior period errors			0.00									0.00	
Restated balance at the beginning of the reporting period													
Net Profit / Loss for the year			6.99										
Other Comprehensive income for the year													
(a) Remeasurements of net defined benefit plans												6.99	
(b) Others												(402.07)	
Dividends													
Transfer to retained earnings													
Received during the year													
Allotment/Utilisation during the year													
Interest on Dry Fly Ash Fund					51.92	0.01							
Transfer from Retained earnings					(61.94)	(0.44)							
					23.08								
Balance as on 31.03.2022	0.00		650.07		497.82	1.11	202.51	(51.91)	(1,355.06)			(55.47)	



HARYANA POWER GENERATION CORPORATION LIMITED  
 REGD. OFFICE: URJA BHAWAN, SECTOR-6, PANCHKULA, HARYANA - 134109  
 CIN: U45207HR1997SGC033517

RATIO ANALYSIS FOR THE YEAR ENDED 31 MARCH 2023

Ratio	Computation		As at March 2023	As at March 2022	Remarks
1 Current Ratio	Current Assets / Current Liabilities	times	0.82	0.65	Current ratio has improved due to higher proportionate increase in current assets i.e. inventory and debtors than current liabilities
2 Debt Service Coverage Ratio	(Net Profit+Depreciation+Interest on Term Loans) / (Interest on Term Loans+ Principal Repayments)	times	3.85	(0.22)	DSC ratio has improved due to reduction in debt and improved profitability position
3 Inventory Turnover Ratio	Cost of goods sold / Average inventory	times	11.42	6.11	Increase in plant load factor has resulted in better inventory turnover ratio
4 Trade Payables turnover Ratio	Credit Purchases / Average creditors	times-Days	-	-	Raw material is procured against advance payments
5 Net Profit Ratio	Net profit / Total income	%	1.12%	-9.91%	Availability of plant ensured recovery of fixed costs and better profitability
6 Debt Equity Ratio	Total Debt / Equity	times	0.56	0.46	Increase in working capital limits has resulted in increase in debt equity ratio
7 Return on Equity Ratio	Net profit / Average equity	%	3.59%	-13.59%	Improved profitability at same base of equity has improved the ratio
8 Trade Receivable turnover Ratio	Credit Sales / Average receivables	times	11.45	7.22	Increase in sales and timely collection of receivables has improved the ratio
9 Net Capital turnover Ratio	Total turnover / Average Equity	times	36.88	58.03	Increase in sales & profitability without any increase in equity share capital has improved the ratio
10 Return on Capital Employed	(Net Profit +Interest) / Average Capital employed	%	3.21	1.37	Improved profitability has bettered the ratio
11 Return on Investment	Interest +Dividend / Investments	%	7.80%	-6.80%	



**HARYANA POWER GENERATION CORPORATION LIMITED**  
**Significant Accounting Policies forming part of the Standalone Financial Statements for**  
**the year ended March 31st, 2023**

## NOTE - 1

**I. CORPORATE INFORMATION**

1. Haryana Power Generation Corporation Limited (HPGCL) is a company registered under the Indian Companies Act, 1956. HPGCL was incorporated as a company on 17th March 1997 with registered office at Urja Bhawan, Sector-6, Panchkula-134109 and CIN: U45207HR1997SGC033517. The company is engaged in the business of generation of power in the state of Haryana through thermal generating stations located at Panipat, Yamuna Nagar and Hisar; and hydroelectric stations located at Western Yamuna Canal (WYC) Bhudkalan, Yamuna Nagar and Solar generating unit at Panipat.
2. In exercise of the powers conferred by section 55 read with section 23, 24 and 25 of the Haryana Electricity Reform Act, 1997, the Government of Haryana vide Notification No. SO.106/HA/98/S23,24&25/ 99 dated 14.8.98 issued a transfer scheme under which the undertakings, assets, properties, liabilities, proceedings and personnel of the Haryana State Electricity Board (HSEB) relating to Generation Schemes in the State of Haryana were transferred to the Company (Haryana Power Generation Corporation Limited).  
  
Under rule 7 of the transfer scheme notified on 14th August 1998, the rights and obligations of all persons shall be restricted to the Transferee to whom the relevant undertakings are assigned. Therefore, Haryana Power Generation Corporation Limited (HPGCL) and Haryana Vidyut Prasaran Nigam Limited (HVPNL) are liable for all the obligations of the erstwhile HSEB for the respective undertakings transferred to them.
3. Haryana Govt. vide its notification No. 1/6/2005-1 Power dated 09.06.2005 transferred the rights relating to 'procurement and bulk supply of electricity or trading of electricity' from HVPNL to HPGCL w.e.f. 10.06.2005. The Assets & Liabilities relating to 'trading of electricity' which stood in the books of HVPNL as on 31.03.2005 besides trading operations performed by HVPNL or the period from 01.04.2005 to 09.06.2005 were transferred and vested to HPGCL.
4. Haryana Govt. vide its notification No. 1/1/2008-1 Power dated 11.04.2008 transferred the rights relating to Procurement of electricity/UI draws/dispatches or trading of electricity from HPGCL (Transferor Company) to Uttar Haryana Bijlee Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bijlee Vitran Nigam Limited (DHBVNL) w.e.f. 01.04.2008. However, the functional arrangements became operational w.e.f. 15.04.2008. The assets & liabilities relating to 'trading business of electricity' which stood in the books of the HPGCL as on 31st March 2008 were transferred and vested with the transferee companies as per audited Assets & Liabilities Statement.

**II. SIGNIFICANT ACCOUNTING POLICIES****1. Statement of Compliance**

These Standalone Financial Statements have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 read with the Companies (Indian Accounting Standards) Rules, 2015, and subsequent amendments thereto and the provisions of the Electricity Act 2003 to the extent applicable. The Company adopted Ind AS from 1<sup>st</sup> April, 2016.

**2. Basis of preparation**

These Standalone Financial Statements have been prepared on going concern basis following accrual basis of accounting and in accordance with historical cost convention.

These financial statements are presented in Indian Rupees (INR), which is the company's functional currency. All financial information presented in INR has been rounded off to the nearest crore (upto two decimals), except as stated otherwise.

**3. Use of estimates**

The preparation of financial statements in conformity with Ind AS requires the management to make judgments, estimates and assumptions that may impact the application of accounting policies and the reported value of assets, liabilities, revenues, expenses and related disclosures concerning the items involved as well as contingent assets and liabilities at the balance sheet date. The estimates and management's judgments are based on previous experience and other factors considered reasonable and prudent in the circumstances. Accounting estimates could differ from period to period and actual results may differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis and appropriate changes in estimates are made as the management becomes aware of changes in circumstances surrounding the estimates. Revisions to accounting estimates are recognized in the financial



statements in the period in which estimates are revised and in any future periods affected and their effects are disclosed in the notes to financial statements.

#### 4. Operating Cycle

All assets and liabilities have been classified as current or non-current as per the Company's normal operating cycle and other criteria set out in the Schedule III to the Companies Act, 2013 and Ind AS 1 – Presentation of Financial Statements.

#### 5. Property, plant and equipment

Items of property, plant and equipment are measured at cost less accumulated depreciation/amortization and accumulated impairment loss, if any.

##### a) Initial recognition and measurement

- i. Property, Plant & Equipment transferred from HSEB on 14.08.1998 are stated at transfer price and those created by the company are stated at historical cost.
- ii. Cost includes purchase price, initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located (referred to as decommissioning cost) and expenditure that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
- iii. Interest, commitment charges and guarantee charges on borrowed funds are capitalized till the asset is available for use.
- iv. Major spare parts, cost exceeding Rs.5.00Lacs, which meet the definition of property, plant and equipment are capitalized. Parts of an item of property, plant and equipment that are significant in value and have different useful lives are recognized separately. Other spare parts are classified as inventory and recognized in the statement of profit and loss on consumption.
- v. Major overhauling, stand by equipment and servicing equipments, which meet the definition of property, plant and equipment are capitalized.

##### b) Subsequent costs

Subsequent expenditures are recognized as an increase in the carrying amount of the asset when it is probable that future economic benefits associated with these will flow to the enterprise and the cost of the item can be measured reliably. Repairs and maintenance costs are recognized in statement of profit and loss when incurred. The cost of replacing major part of an item of property, plant and equipment is recognized in its carrying amount if the recognition criteria are met and the carrying amount of the replaced part is derecognized. Expenditure on major inspection and overhauls of generating unit is capitalized as a replacement when it meets the asset recognition criteria.

##### c) Decommissioning Costs

The present value of expected cost for the decommissioning of assets after its use is included in the cost of respective assets if the recognition criteria for a provision are met.

##### d) Derecognition

Items of Property, plant and equipment are derecognized when no future economic benefits are expected from their use or upon their disposal. Gain or loss on derecognition of an item of property, plant and equipment is recognized in the statement of profit and loss.

##### e) Depreciation/amortization

- i. Depreciation on Property, Plant & Equipment is charged on Straight Line Method as per rate notified by Ministry of Power for the assets acquired on or before 31.3.2005 and on assets acquired thereafter depreciation is charged as per rates notified by Haryana Electricity Regulatory Commission (HERC) in accordance with Schedule II of the Companies Act, 2013. As per HERC MYT Regulations (no.HERC/26/2012), depreciation shall be calculated annually over the useful life of asset at the rates specified in regulation upto 31st March of 12th year from the commercial date of operation of the asset. From 1st April of 13th year from the date of commercial date of operation of the asset, the remaining depreciable value if any out of 90% of the capital cost of the asset shall be equally spread over the balance useful life of the asset. The Property, Plant & Equipment are depreciated upto 90% of the original cost.
- ii. Depreciation on additions to/deductions from property, plant and equipment during the year is charged on pro-rata basis from/up to the month in which the asset is available for use/disposed.





**6. Capital work in progress**

Expenditure incurred on assets under construction (including a project) is carried at cost under Capital Work-in-progress (CWIP). Such cost comprises of purchase price of asset including other costs directly attributable.

**7. Intangible assets and intangible assets under development**

Intangible assets that are acquired/internally generated by the company, which have finite useful lives are measured at cost less accumulated amortization and accumulated impairment losses, if any.

**a) Initial recognition and measurement**

An intangible asset is recognized when it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity and its cost can be measured reliably. Cost includes any directly attributable incidental expenses necessary to make the assets ready for its intended use. Expenditures incurred which are eligible for capitalization are carried as intangible assets under development till they are ready for their intended use.

**b) Subsequent costs**

Subsequent expenditure is recognized as an increase in carrying amount of the asset when it is probable that future economic benefits deriving from the cost incurred will flow to the enterprise and the cost of item can be measured reliably.

**c) Derecognition**

An intangible asset is derecognized when no future economic benefits are expected from its use or upon its disposal. Gain or loss on disposal of an item of intangible asset is recognized in the statement of profit and loss.

**d) Amortization**

Intangible Assets are amortized over the economic useful life estimated by the management

**8. Investment in Subsidiaries**

a) A subsidiary is an entity controlled by the Company. Control exists when the Company has power over the entity or has rights to variable returns from its involvement with the entity and has the ability to affect those returns by using its power over entity. Power is demonstrated through existing rights that give the ability to direct relevant activities, those which significantly affect the entity's returns.

b) Investments in subsidiaries are carried at cost. The cost comprises price paid to acquire investment and directly attributable cost.

**9. Investment in Joint Ventures and Associates**

a) A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

b) An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but does not have control or joint control over those policies.

c) The investment in joint ventures and associates are carried at cost. The cost comprises price paid to acquire investment and directly attributable cost.

**10. Regulatory deferral account balances**

Expenses/income recognized in the statement of profit and loss to the extent recoverable from or payable to the beneficiaries in subsequent periods as per HERC Tariff Regulations are recognized as Regulatory deferral account balances. Regulatory deferral account balances are adjusted in the year in which the same become recoverable from or payable to the beneficiaries.

**11. Borrowing costs**

Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset (asset which takes a substantial period of time to get ready for its intended use or sale) are capitalized as a part of the asset. Other borrowing costs are recognized as an expense in the year in which they are incurred. Income earned on temporary investment of the borrowings pending their expenditure on the qualifying assets is deducted from the borrowing costs eligible for capitalization. When company borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the capitalization of borrowing costs is done based on the weighted average cost of general borrowings that are outstanding during the period and used for the acquisition, construction or production of the qualifying asset. Capitalization of borrowing costs ceases when substantially all the activities necessary to prepare the qualifying assets for their intended uses are complete. Borrowing costs include exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

**12. Inventories**

Inventories of stores, fuel, spares and consumable are valued at lower of weighted average cost or last purchase price. Cost includes cost of purchase, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. The diminution in the value of obsolete, unserviceable and surplus stores and spares is ascertained on review and provided for.

**13. Cash and cash equivalents**

Cash and cash equivalents in the balance sheet comprise cash, cheques in hand, demand deposits with banks and short term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value.

**14. Dry fly ash fund**

Proceeds from sale of ash/ash products are transferred to Dry fly ash fund in terms of provisions of gazette notification dated 3 November 2009 issued by Ministry of Environment and Forests, Government of India. The fund is utilized towards expenditure on development of infrastructure/facilities, promotion and facilitation activities for use of fly ash.

**15. Non-current assets held for sale**

An asset is classified as non-current asset held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset must be available for immediate sale in its present condition and its sale must be highly probable. Non-current asset held for sale is recorded at lower of its carrying amount and fair value less costs to sell.

**16. Provisions, contingent liabilities and contingent assets**

A provision is recognized if, as a result of a past event, the company has a present legal or constructive obligation that can be estimated reliably and it is probable that an outflow of economic benefits will be required to settle the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessment of the time value of money and the risks specific to the liability. When discounting is used, the increase in provision due to passage of time is recognized as a finance/borrowing cost. When some or all of the expenditure required to settle a provision is expected to be recovered from a third party, the receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably. The expense relating to a provision is presented in the statement of profit and loss net of any reimbursement, if any. Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

Contingent liabilities are possible obligations that arise from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events not wholly within the control of the company. Where it is not probable that an outflow of economic benefits will be required or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Contingent liabilities are disclosed on the basis of judgment of the management/independent experts. These are reviewed at each balance sheet date and are adjusted to reflect the current management estimate.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. It is disclosed in the financial statements when inflow of economic benefits is probable.

**17. Foreign currency transactions and translation**

Transaction in foreign currency is initially recorded in the functional currency by applying spot exchange rate at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated to functional currency at closing rate in effect on the reporting date. Exchange differences arising on settlement or translation of monetary items are recognized in profit or loss in the year in which they arise.

Non-monetary assets and liabilities denominated in foreign currency and measured at historical cost are translated to functional currency using the exchange rate in effect on the date of transaction.

**18. Revenue**

Company's revenues arise from sale of power and other income such as surcharge received from customers for delayed payments, sale of scrap, interest from banks, employees, contractors etc.



**a) Revenue from sale of power**

Power is sold through distribution companies owned by the Haryana Government, i.e. UHBVNL & DHBVNL, as per tariff approved by Haryana Electricity Regulatory Commission (HERC) subject to fuel surcharge adjustment, if any as per formulae approved by the HERC,

Tariff is based on the capital cost incurred for a specific power plant and primarily comprises two components: capacity charge i.e. a fixed charge that includes depreciation, return on equity, interest on working capital, operating and maintenance expenses, interest on loan and energy charge i.e variable charge primarily based on fuel costs.

Revenue from sale of power is measured at the fair value of the consideration received or receivable. Revenue is recognized when recovery of the consideration is probable, the associated costs and amount of revenue can be estimated reliably.

**b) Other income**

Interest income is recognized when no significant uncertainty as to measurability or collectability exists, on a time proportion basis taking into account the amount outstanding and the applicable interest rate, using the effective interest rate method (EIR).

Coal claims lodged with coal companies on account of inferior grade of coal received are recognized at the time of acceptance of coal claims by coal companies. The accounting policy is in lines with para 31 & 32 of Ind AS 37 "Provisions, Contingent Liabilities and Contingent Assets", which states as under:

*"31. An enterprise should not recognize a contingent asset.*

*32. Contingent assets usually arise from unplanned or other unexpected events that give rise to the possibility of an inflow of economic benefits to the enterprise. An example is a claim that an enterprise is pursuing through legal processes, where the outcome is uncertain."*

Surcharge on late payments is recognised only after realisation of the same from its customers i.e. UHBVNL & DHBVNL. The accounting policy is in lines with para 18 of Ind AS 18, which states as under:

*"18. Revenue is recognized only when it is probable that the economic benefits associated with the transaction will flow to the entity. In some cases, this may not be probable until the consideration is received or until an uncertainty is removed."*

Also para 33 of Ind AS 37 "Provisions, Contingent Liabilities and Contingent Assets" states that

*"Contingent assets are not recognised in financial statements since this may result in the recognition of income that may never be realised. However, when the realisation of income is virtually certain, then the related asset is not a contingent asset and its recognition is appropriate."*

**19. Employee benefits****a) Defined contribution plans**

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further amounts. The company pays fixed contribution to Provident Fund at pre-determined rates to regional provident fund commissioner.

**b) Defined benefit plans**

Defined benefit plans are post-employment benefit plans other than defined contribution plans. The company's liability towards gratuity and other post-retirement are in the nature of defined benefit plans. The company's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods and discounting that benefit to determine the present value of defined benefit obligation. Any unrecognized past service costs are deducted. The discount rate is based on the prevailing market yields of Indian Government securities as at the reporting date that have maturity dates approximating the terms of the company's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The calculation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the company, the recognized asset is limited to the total of any unrecognized past service costs. Any actuarial gains or losses are recognized in OCI in the period in which they arise.

**c) Other long-term employee benefits**

Benefits under the company's leave encashment etc constitute other long term employee benefits. The company's net obligation in respect of leave encashment is the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value and the fair value of any related assets is deducted. The discount rate is based on the prevailing market yields of Indian government securities as at the reporting date that have maturity dates approximating the terms of the

company's obligations. The calculation is performed using the projected unit credit method. Any actuarial gain or losses are recognized in profit or loss in the period in which they arise.

#### d) Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid under performance related pay if the company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

#### 20. Income tax

Taxation Laws (Amendments) Ordinance 2019 has introduced new section 115 BAA vide which companies covered under MAT mechanism have been given an option to pay tax under normal provisions and opt out of MAT provisions. HPGCL hitherto was paying tax under MAT provision till 2018-19, has opted to pay tax under normal provisions in view of carried forward business losses under Income Tax Laws. Therefore, corporation has not recognized tax expenses including deferred tax assets / liability.

#### 21. Impairment of non-financial assets

The carrying amounts of the company's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment considering the provisions of Ind AS 36, *Impairment of assets*. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an asset or cash-generating unit is the higher of its fair value less costs of disposal and its value in use. In assessing the value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is considered.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in statement of profit or loss. Impairment losses recognized in respect of CGUs are reduced from the carrying amounts of assets of the CGU.

Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation/amortization, if no impairment loss had been recognized. Reversal of impairment loss is recognized immediately in the statement of profit and loss.

#### 22. Material prior period errors

Material prior period errors are corrected retrospectively by restating the comparative amounts for the prior periods presented in which the error occurred. If the error occurred before the earliest prior period presented, the opening balances of assets, liabilities and equity for the earliest period presented are restated.

#### 23. Government grants

Government grants including non-monetary grants at fair value are recognized when there is a reasonable assurance that the company will comply with the conditions attaching to them and the grants will be received. Government grants are recognized in profit or loss on a systematic basis over the periods in which the entity recognizes as expenses the related costs for which the grants are intended to compensate. Government grants related to assets, including non-monetary grants at fair value, are presented in the balance sheet by setting up the grant as deferred income.

#### 24. Earnings per share

Basic earnings per equity share are computed by dividing the net profit or loss attributable to equity shareholders of the company by the weighted average number of equity shares outstanding during the financial year. Diluted earnings per equity share is computed by dividing the net profit or loss attributable to equity shareholders of the company by the weighted average number of equity shares considered for deriving basic earning per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares.

Basic and diluted earnings per equity share are also computed using the earnings amounts excluding as well as including the movements in regulatory deferral account balances.

In case of discontinued operations, basic and diluted amounts per share excluding as well as including discontinued operation is disclosed.



**25. Statement of cash flows**

Statement of cash flows is prepared in accordance with the indirect method prescribed in Ind AS 7 – Statement of cash flow

**26. Financial instruments**

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

**a) Financial assets**

A financial asset includes, inter-alia, any asset that is cash, equity instrument of another entity or contractual obligation to receive cash or another financial assets or to exchange financial asset or financial liability under condition that are potentially favourable to the Company. Financial assets of the Company comprise cash and cash equivalents, Bank Balances, Advances to employees/ contractors, security deposit, claims recoverable etc.

**Initial recognition and measurement**

The company recognizes financial assets when it becomes a party to the contractual provisions of the instrument. All financial assets are recognized initially at fair value except for trade receivables which are measured at transaction price. Transaction costs that are directly attributable to the acquisition or issue of the financial asset that are not recorded at fair value through profit or loss are added to the fair value. Transaction costs of financial assets carried at fair value through profit or loss are expensed in statement of profit or loss.

The company measures the trade receivables at their transaction price if the trade receivables do not contain a significant financing component. A receivable is classified as a 'trade receivable' if it is in respect to the amount due from customers on account of goods sold or services rendered in the ordinary course of business.

**Subsequent measurement**

Financial Assets are measured at amortized cost or fair value through Other Comprehensive Income or fair value through Profit or Loss, depending on its business model for managing those financial assets and the assets contractual cash flow characteristics.

**Financial assets carried at amortized cost**

A financial asset is subsequently measured at the amortized cost if it is held within a business model whose objective is to hold the asset for collecting contractual cash flows and contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Amortized cost is calculated by EIR method. The EIR amortization is included in finance income in the profit or loss.

**Financial assets at Fair Value through Other Comprehensive Income (FVTOCI)**

A financial asset is subsequently measured at FVTOCI if it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets and contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Fair value movements are recognized in the OCI.

**Financial assets at Fair Value through Profit or Loss (FVTPL)**

Any financial asset which does not meet the criteria for categorization as at amortized cost or at FVTOCI is classified as at FVTPL. In addition, the company may elect to classify a debt instrument which otherwise meets amortized cost or FVTOCI criteria, as at FVTPL. Debt instruments included within the FVTPL category are measured at fair value with all changes recognized in the profit and loss.

**Derecognition**

A financial asset (or where applicable, a part of a financial asset or a part of a company of similar financial assets) is primarily derecognized (i.e. removed from the company's balance sheet) when:

- The rights to receive cash flows from the assets have expired, or
- The company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a pass-through arrangement; and either (a) the company has transferred substantially all the risks and rewards of the asset, or (b) the company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

**Impairment of financial assets**

In accordance with Ind AS 109, the company applies expected credit loss (ECL) model for measurement and recognition of impairment loss on the following financial assets and credit risk exposure:

- Financial assets that are debt instruments, and are measured at amortized cost eg: loans, deposits, trade receivables and bank balance.



- Trade receivables under Ind AS 18.

For recognition of impairment loss on other financial assets and risk exposure, the company determines that whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12 month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognizing impairment loss allowance based on 12 month ECL.

#### **b) Financial liabilities**

Financial liabilities of the Company are contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Company. The Company's financial liabilities include loans & borrowings, trade and other payables etc.

#### **Initial recognition and measurement**

All financial liabilities are recognized initially at fair value and, in the case of borrowings and payables, net of directly attributable transaction costs. The company's financial liabilities include trade and other payables, loans and borrowings.

#### **Subsequent measurement**

The measurement of financial liabilities depends on their classification, as described below:

#### **Financial liabilities at amortized cost**

After initial measurement, such financial liabilities are subsequently measured at amortized cost using EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance costs in the profit or loss. This category generally applies to borrowings, trade payables and other contractual liabilities.

#### **Financial liabilities at FVTPL**

Financial liabilities at FVTPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the company that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/losses attributable to changes in own credit risk are recognized in OCI. These gains/losses are not subsequently transferred to profit and loss. However, the company may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognized in the statement of profit or loss. The company has not designated any financial liability as at FVTPL.

#### **Derecognition**

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and recognition of a new liability. The difference in the respective carrying amounts is recognized in the statement of profit or loss.



NOTE 2 PROPERTY, PLANT AND EQUIPMENT										Rs. in crores	
Description of Assets	GROSS BLOCK				DEPRECIATION			NET BLOCK			
	As at 01.04.2022	Additions during the year	Deletions/ adjustment during the year	As at 31.03.2023	As at 01.04.2022	Depreciation for the year	Deletions during the year	As at 31.03.2023	As at 31.03.2023	As at 31.3.2022	
<b>Part A - Tangible Assets:-</b>											
Land	330.70			330.70					330.70	330.70	
Buildings	1,192.31	1.50		1,193.82	352.15	50.60		402.75	791.07	840.17	
Hydraulic works	198.58	2.84		201.42	69.53	8.59		78.13	123.29	129.05	
Other civil works	43.99			43.99	11.24	1.36		12.60	31.39	32.74	
Plant & Machinery	4,832.93	12.86		4,845.79	2,216.77	259.90		2,476.67	2,369.12	2,616.16	
Plant & Machinery - Solar(PTPS)	58.69			58.69	16.84	3.15		20.00	38.70	41.85	
Plant & Machinery - spares	213.05			213.05	122.71	10.70		133.42	79.63	90.34	
Lines cable network etc.	4.03	1.01	0.00	5.04	1.54	0.26		1.80	3.24	2.50	
Vehicles	19.48	0.57	0.00	20.06	13.40	0.33		13.73	6.33	6.09	
Furniture & Fixture	4.64	0.58	0.01	5.22	2.55	0.47	0.00	3.01	2.20	2.09	
Office Equipments	6.49	1.69	0.69	7.50	2.33	1.35		3.68	3.83	4.16	
<b>Total (part -A)</b>	<b>6,904.91</b>	<b>21.06</b>	<b>0.70</b>	<b>6,925.27</b>	<b>2,809.06</b>	<b>336.72</b>	<b>0.00</b>	<b>3,145.78</b>	<b>3,779.48</b>	<b>4,095.84</b>	
<b>Previous year figures</b>	<b>6,898.99</b>	<b>5.92</b>	<b>0.00</b>	<b>6,904.91</b>	<b>2,473.17</b>	<b>336.27</b>	<b>0.37</b>	<b>2,809.06</b>	<b>4,095.84</b>	<b>4,425.82</b>	

There was no revaluation of property, plant and equipments during the year or previous year.



NOTE 3 CAPITAL WORK IN PROGRESS	Amount in CWIP for FY 2022-23				(Rs. in crores)
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years	As at March 2023
<b>Projects in progress</b>					
2X250 MW Thermal Project Stage-5 Panipat				0.00	0.00
Buildings containing thermoelectric generating plant,PTPS, Panipat					-
Coal Block at Kalyanpur-Badalapara				0.21	0.21
1000/1200 MW Thermal Plant at Hisar	0.33		1.46	-	1.79
1500 MW (2x750) Gas based Plant at Faridabad				0.64	0.64
2 X 300 MW , DCRTTP, Stage-2 Yamuna Nagar					0.00
DCRTTP Extension, Yamuna Nagar	0.90				0.90
Solar Power Plant- Budhkalan				0.02	0.02
Solar Power Plant- RGTPP, Khedar.				0.02	0.02
Solar Power Plant (Rania )-Sirsa				0.00	0.00
Solar Power Plant (FTPS) - Faridabad				0.00	0.00
6x5 MW Solar System Yamuna Nagar				0.02	0.02
Hydel Power Generating Plant				0.98	0.98
Renovation and Modernization, PTPS, Panipat			0.88	1.81	2.69
<b>Projects temporarily suspended</b>	-	-	-	-	-
<b>Total</b>	<b>1.22</b>	<b>-</b>	<b>2.34</b>	<b>3.70</b>	<b>7.26</b>

NOTE 3 CAPITAL WORK IN PROGRESS	Amount in CWIP for FY 2021-22				(Rs. in crores)
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years	As at March 2022
<b>Projects in progress</b>					
2X250 MW Thermal Project Stage-5 Panipat			0.00		0.00
Coal Block at Kalyanpur-Badalapara			0.08	0.13	0.21
1000/1200 MW Thermal Plant at Hisar	2.15	2.61	1.44	0.02	6.22
1500 MW (2x750) Gas based Plant at Faridabad				0.64	0.64
2 X 300 MW , DCRTTP, Stage-2 Yamuna Nagar	1.38		0.03		1.40
Solar Power Plant- Budhkalan				0.02	0.02
Solar Power Plant- RGTPP, Khedar.				0.02	0.02
Solar Power Plant (Rania )-Sirsa				0.00	0.00
Solar Power Plant (FTPS) - Faridabad				0.00	0.00
6x5 MW Solar System Yamuna Nagar				0.02	0.02
Hydel Power Generating Plant				2.06	2.06
Renovation and Modernization, PTPS, Panipat		0.88	1.77	0.04	2.69
<b>Projects temporarily suspended</b>	-	-	-	-	-
<b>Total</b>	<b>3.53</b>	<b>3.49</b>	<b>3.31</b>	<b>2.95</b>	<b>13.28</b>





Note-4											
INTANGIBLE ASSETS											
Description of Assets	GROSS BLOCK				DEPRECIATION				NET BLOCK		
	As at 01.04.2022	Additions during the year	Deletions/adjustment during the year	As at March 2023	As at 01.04.2022	Depreciation for the year	Deletions during the year	As at March 2023	As at March 2023	As at March 2022	(Rs. in crores)
Part -B Intangible Assets:-											
Computer Software (CIPMS)	8.07	-	-	8.07	4.99	0.71	-	5.70	2.36	3.08	
Total (Part-B)	8.07	-	-	8.07	4.99	0.71	-	5.70	2.36	3.08	
Previous year figures	8.07	-	-	8.07	4.51	0.48	-	4.99	3.08	3.56	

There was no revaluation of intangible assets during the year or previous year.



Note 5

**A. INTANGIBLE ASSETS UNDER DEVELOPMENT AGEING SCHEDULE**

FY 2022-23						(Rs. in crores)
Intangible assets under development	AMOUNT IN CWIP				As at March 2023	
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years		
<i>Projects in progress:</i>						
Enterprise Resource Planing (ERP)	1.49	2.17	1.69	5.39	10.74	
<i>Projects temporarily suspended:</i>	-	-	-	-	-	
<b>Total</b>	<b>1.49</b>	<b>2.17</b>	<b>1.69</b>	<b>5.39</b>	<b>10.74</b>	

FY 2021-22						(Rs. in crores)
Intangible assets under development	AMOUNT IN CWIP				As at March 2022	
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years		
<i>Projects in progress:</i>						
Enterprise Resource Planing (ERP)	2.17	1.69	2.48	2.91	9.25	
<i>Projects temporarily suspended:</i>	-	-	-	-	-	
<b>Total</b>	<b>2.17</b>	<b>1.69</b>	<b>2.48</b>	<b>2.91</b>	<b>9.25</b>	

**B. INTANGIBLE ASSETS UNDER DEVELOPMENT COMPLETION SCHEDULE**

FY 2022-23						(Rs. in crores)
Intangible assets under development	To be completed in				As at March 2023	
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years		
<i>Projects in progress:</i>						
Enterprise Resource Planing (ERP)	-	10.74	-	-	10.74	
<i>Projects temporarily suspended:</i>	-	-	-	-	-	
<b>Total</b>	<b>-</b>	<b>10.74</b>	<b>-</b>	<b>-</b>	<b>10.74</b>	

FY 2021-22						(Rs. in crores)
Intangible assets under development	To be completed in				As at March 2022	
	Less than 1 year	1-2 years	2-3 yrs	more than 3 years		
<i>Projects in progress:</i>						
Enterprise Resource Planing (ERP)	9.25	-	-	-	9.25	
<i>Projects temporarily suspended:</i>	-	-	-	-	-	
<b>Total</b>	<b>9.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.25</b>	



## NOTE 6

## NON-CURRENT INVESTMENTS

(Rs. In crores)

Particulars	Number of shares Current year/ (previous year)	Face value per share Current year/ (previous year)	As at March 2023	As at March 2022
<b>Investment in Joint Ventures:</b>				
Investment in fully paid shares of M/s Aravalli Power Company Private Limited on behalf of Haryana Government, a Joint Venture with IPGCL and NTPC. Extent of Investment 25% of the share capital	71,65,04,100 (71,65,04,100)	10/- (10/-)	716.50	716.50
Dry Fly Ash Fund Investment			550.28	488.16
Depreciation Reserve Fund Investment account			230.15	182.67
<b>Total</b>			<b>1,496.93</b>	<b>1,387.33</b>

## NOTE 6A

## AGGREGATE AMOUNT OF UNQUOTED INVESTMENT

Particulars	As at March 2023	As at March 2022
Aggregate amount of unquoted investments	1,496.93	1,387.33
<b>Total</b>	<b>1,496.93</b>	<b>1,387.33</b>



NOTE 7		
NON-CURRENT LOANS		
(Rs. in crores)		
Particulars	As at March 2023	As at March 2022
Unsecured, considered good	18.04	17.99
Doubtful	-	-
Total	18.04	17.99
NOTE 8		
OTHERS FINANCIAL ASSETS		
(Rs. in crores)		
Particulars	As at March 2023	As at March 2022
(i) Security Deposits	9.50	6.19
Total	9.50	6.19
NOTE 9		
DEFERRED TAX ASSETS		
(Rs. in crores)		
Particulars	As at March 2023	As at March 2022
Opening Balance	-	-
Tax Impact	-	-
NOTE 10		
OTHER NON-CURRENT ASSETS		
(Rs. in crores)		
Particulars	As at March 2023	As at March 2022
i) Capital advance		
a) Advance to suppliers & contractors	4.32	0.19
A	4.32	0.19
ii) Advance Other than capital advance		
a) Fringe Benefit Tax	3.52	3.52
B	3.52	3.52
Total (A+B)	7.84	3.71
CURRENT ASSETS		
NOTE 11		
INVENTORIES		
(Rs. in crores)		
Particulars	As at March 2023	As at March 2022
<b>Raw Materials:</b>		
Indigenous raw coal-Inward cost & Freight (At Cost or net realisable value, Whichever is lower)	-	-
(a) Coal Stock	720.22	352.53
(b) Coal in Transit (including imported Coal)	60.17	52.69
(c) Oil Stock -Diesal Oil (LDO) LSHS	10.78	9.09
(d) Oil Stock Furnance Oil	0.98	6.70
(e)Torrefied Biomass Pellets	-	-
Sub total (A)	792.15	421.00
<b>Stores and spares:</b>		
Capital Stores and Spares	0.00	0.00
O&M Stores and Spares	152.76	99.96
Sub total (B)	152.76	99.96
<b>Others</b>		
Other material account	-	-
Sub total (C)	-	-
Net Total	944.92	520.96

