



सत्यमेव जयते

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**  
**(Thermal Projects)**

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**Minutes of AGENDA FOR 29th MEETING OF EXPERT APPRAISAL COMMITTEE (THERMAL SECTOR), SCHEDULED TO BE HELD ON 29th AUGUST, 2025 THROUGH VIRTUAL MODE. meeting Thermal Projects held from 29/08/2025 to 29/08/2025**

**MoM ID:** EC/MOM/EAC/741577/8/2025

**Agenda ID:** EC/AGENDA/EAC/741577/8/2025

**Meeting Venue:** N/A

**Meeting Mode:** Virtual

**Date & Time:**

29/08/2025	10:30 AM	05:30 PM
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## 1. Opening remarks

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of members who participated in the meeting is at **Annexure – I**. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

**[The Original PDF of the MoM is attached at page no. 33-63]**

## 2. Confirmation of the minutes of previous meeting

Confirmation of the Minutes of the 28<sup>th</sup> Meeting of the EAC (Thermal): The minutes of the 28<sup>th</sup> meeting of the EAC (Thermal) held on 12-13<sup>th</sup> August, 2025 has been confirmed by the EAC as uploaded on Parivesh along with following corrections:

A. Agenda item no: 28.2

Minutes uploaded on PARIVESH	To be read as
<u>Para No. 28.2.19, After specific ToR A(ii)</u> PP shall obtain No Objection Certificate from Archeological Survey of India for blasting for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.	<u>Para No. 28.2.19, After specific ToR A(ii)</u> PP shall obtain No Objection Certificate from Archeological Survey of India for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.
<u>Para No. 28.2.19, After specific ToR A(ix)</u> The remedial measures for arresting dust generation on roads and atmosphere, Air	<u>Para No. 28.2.19, After specific ToR A(ix)</u> The remedial measures for arresting dust generation on roads and atmosphere, Air

Minutes uploaded on PARIVESH	To be read as
pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up. Implementation plan along with timelines and financial allocations for Scientific and engineered closure of existing landfill shall be submitted.	pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up.
<u>Para No. 28.2.19, After specific ToR A(xv)</u> Impact of existing integrated facility on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.	<u>Para No. 28.2.19, After specific ToR A(xv)</u> Impact of existing Waste to Energy plant on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.
<u>Para No. 28.2.19, After specific ToR A(xxiii)</u> Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan for thick plantation in the surrounding Nallah/stream shall be submitted.	<u>Para No. 28.2.19, After specific ToR A(xxiii)</u> Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan shall be submitted. -

B. Agenda item no: 28.7

Minutes uploaded on PARIVESH	To be read as
<u>Para No. 28.7.7, Environmental site settings, s.no. 2</u> Land use breakup Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2025 has been issued by Revenue Dept.	<u>Para No. 28.7.7, Environmental site settings, s.no. 2</u> Land use breakup Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2024 has been issued by Revenue Dept.
<u>Para No. 28.7.7, Environmental site settings, s.no. 4</u> Existence of habitation & involvement of R&R, if any. A 250–500 m buffer from the Reserve Forests will be maintained.	<u>Para No. 28.7.7, Environmental site settings, s.no. 4</u> Existence of habitation & involvement of R&R, if any. A 25–50 m buffer from the Reserve Forests will be maintained.
<u>Para No. 28.7.14, Public consultation</u> No. of people attended: 228 Nos	<u>Para No. 28.7.14, Public consultation</u> No. of people attended: 288 Nos
<u>Para No. 28.7.17, Ash Management</u> <u>D. Ash Pond Details</u> Volume & Quantity in M3 & MT	<u>Para No. 28.7.17, Ash Management</u> <u>D. Ash Pond Details</u> Volume & Quantity in Lac m <sup>3</sup> & Lac MT
<u>Para No. 28.7.21, Specific conditions</u> <u>A. Environment Management</u> 2. In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB within six months from the date of grant of EC as committed.	<u>Para No. 28.7.21, Specific conditions</u> <u>A. Environment Management</u> 2. In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB within three months from the date of establishment of proposed ash dyke.
<u>Para No. 28.7.21, Standard conditions</u> F. Water Quality Monitoring and Management 1. Induced/Natural draft closed cycle wet	<u>Para No. 28.7.21, Standard conditions</u> F. Water Quality Monitoring and Management 1. Air-Cooled Condenser cooling system shall be

Minutes uploaded on PARIVESH	To be read as
cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m <sup>3</sup> /MWhr.	installed to reduce the specific water consumption below 3.0 m <sup>3</sup> /MWh.

### 3. Details of proposals considered by the committee

Day 1 -29/08/2025

#### 3.1. Agenda Item No 1:

##### 3.1.1. Details of the proposal

<b>3 x 800 MW (Phase-I) Patratu Super Thermal Power Project at Patratu, District Ramgarh, Jharkhand. by PAT RATU VIDYUT UTPADAN NIGAM LIMITED located at RAMGARH, JHARKHAND</b>			
<b>Proposal For</b>		Amendment in EC	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
<a href="#">IA/JH/THE/547380/2025</a>	J-13012/21/2015-IA.I(T)	07/08/2025	Thermal Power Plants (1(d))

##### 3.1.2. Project Salient Features

#### **Agenda No 29.1**

29.1 3x800 MW (Phase-I) Patratu Super Thermal Power by M/s. Patratu Vidyut Utpadan Nigam Limited at Village Patratu, District Ramgarh, Jharkhand - Amendment in Environment Clearance – regarding.

**[Proposal No. IA/JH/THE/547380/2025; F. No. J-13012/21/2015-IA.I(T)]**

**29.1.1:** M/s. Patratu Vidyut Utpadan Nigam Limited (PVUNL) has made an online application vide proposal no. IA/JH/THE/547380/2025 dated 07.08.2025 along with Form-4 and sought for following amendment in the EC vide letter no. J-13012/21/2015-IA-I (T) on 07.11.2017 & its amendment dated 16/03/2022 and 03/06/2024 accorded for the project mentioned above.

EC condition No.	Stipulation in EC	Amendment Requested
Specific conditions clause no. IX. Amendment vide MoEF&CC letter No. J-13012/21/2015-IA.I(T) dtd. 03.06.2024	A minimum distance of 500 m from the HFL of Nalkari river shall be maintained. Ash mound shall be developed in 340 acres and the height of the ash mound shall be restricted to 35 m (in two benches of 20 m and 15 m height each). However, till 30.09.2025, PP is permitted to construct and store dry ash in a temporary storage facility (over an area of 25 Ha) within the existing plant premises and having capacity of	PUVNL shall comply with the specific condition Clause No. (IX) and its subsequent amendment dtd. 03.06.2025. Further, permission may be accorded for storage of dry ash in the temporary storage facility till 30.09.2027 with maximum capacity limited to 12.55 lakh CuM and area of 25 Ha as granted earlier.

EC condition No.	Stipulation in EC	Amendment Requested
	up to 12.55 lakh CuM)	

### 3.1.3. Deliberations by the committee in previous meetings

N/A

### 3.1.4. Deliberations by the EAC in current meetings

**29.1.2:** The Committee noted the following during the meeting.

i. MoEF&CC has accorded Environmental Clearance to M/s. Patratu Vidyut Utpadan Nigam Limited (PVUNL) for setting up of (3x800MW) Coal based power plant at Village Patratu, District Ramgarh, Jharkhand vide letter dated 07/11/2017.

ii. As per the EC accorded on 07/11/2017, the 3x800 MW units are to be set up within the existing premises of Patratu Thermal Power Station consists of 10 units having configurations as given below:

Units (1-4): 4 x50 MW

Units (5-6): 2x100 MW

Units (7-10): 4x110 MW

Proponent failed to apprise the status of operation of the above 10 units including the ash disposal and adherence of prescribed emission norms for the above units.

iii. As per the proposal submitted, total involvement of forest land is 127.871 ha. Status of approvals obtained under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 has not been submitted. No details are provided regarding de-notification of forest land admeasuring 108.87 Ha.

iv. Status of implementation of EC dated 07/11/2017 and its subsequent amendment including kml file of the complete project site, map depicting the maintenance of project site by 500 m from the HFL of Nalkari river, ash disposal from operating 1x800 MW unit, status of construction of 2x800 MW units, ash mound development status, land use of temporary ash storage facility, mitigation measures being adopted in the temporary ash storage facility as per the EC amendment dated 03/06/2024 have neither been provided in the proposal nor in the presentation made before the EAC.

#### Recommendations of the Committee

**29.1.3:** In view of the foregoing and after deliberations, the Committee **recommended to return the proposal in its present form** and asked the proponent to revisit the entire application by incorporating all the technical shortcomings inter-alia including the above and thereafter proposal shall be submitted by the proponent for fresh consideration by the EAC.

### 3.1.5. Recommendation of EAC

Returned in present form

### 3.2. Agenda Item No 2:



### 3.2.1. Details of the proposal

<b>1x660 MW Amarkantak Ultra Supercritical Thermal Power Project at Village: Chachai (V), Distt: Anuppur (D), Madhya Pradesh by M/s. M. P. Power Generating Company Limited (MPPGCL) by Madhya pradesh power generating company limited located at ANUPPUR, MADHYA PRADESH</b>			
<b>Proposal For</b>		Amendment in EC	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
<a href="#">IA/MP/THE/531999/2025</a>	J/13011/20/2002-IA.II(T)	31/07/2025	Thermal Power Plants (1(d))

### 3.2.2. Project Salient Features

#### Agenda No 29.2

**29.2** Expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.24 ha by **M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) located at Chachai Village, District Anuppur, Madhya Pradesh – Amendment in Environmental Clearance – regarding.**

**[Proposal No. IA/MP/THE/531999/2025; F. No. J/13011/20/2002-IA.II(T)]**

**29.2.1:** M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) has made an online application vide proposal no. IA/MP/THE/531999/2025 dated 31/07/2025 along with Form-4 and sought for amendment in the EC dated 08/05/2023 accorded for the project mentioned above.

The project proponent earlier submitted the above vide proposal no. IA/MP/THE/507303/2024 dated 13/01/2025 and the same was considered by the EAC – Thermal in its meeting held on 24/02/2025 wherein EA noted that proponent has not obtained requisite approval (Stage I & II) under the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for diversion of 6.171 Ha of forest land involved in the project. The said forest land is reported to be located with the premises of proposed power house for the expansion project. In view of this, EAC recommended to return the proposal in its present form. Further, the EAC recommended that Ministry may send a letter to the project proponent informing that proponent shall not initiate any project related activity at the site till the requisite clearance under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 is obtained for diversion of 6.171 Ha of forest land. Accordingly, MoEF&CC informed the proponent not to initiate any project related activity at the site till the requisite clearance.

**Name of the consultant:** M/s. Re Sustainability Solutions Pvt. Ltd (RSSPL) [S. No. 173 List of ACOs with their Certificate / Extension Letter no: NABET/EIA/2225/RA 0278; Valid up to 26.09.2025]

**Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:**

**29.2.2:** MoEF&CC accorded EC under the provisions of EIA Notification, 2006 to M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) on 08/05/2023 for expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.2 ha located at Chachai Village, District Anuppur, Madhya Pradesh.

**29.2.3:** As per the EC accorded, the land requirement for 660 MW Supercritical Thermal Power Project is 90.22 Ha and the area occupied by the 210 MW power generation unit is 58.7 Ha. Total land after the expansion is 148.92 Ha. The land proposed for the expansion project is under the possession of MPPGCL. Out of 90.2 ha, there is 6.171 Ha of forest land involvement for which requisite Stage I FC obtained on vide letter no. 6-MPR009/2022-BHO/I/107197 dated 24/04/2025.

**29.2.4:** It has been reported that no activity has been commenced at the project site with respect to the implementation of the EC dated 08/05/2023.

**29.2.5:** The details of the condition for which amendment is sought and justification for the same is as follows:

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
i.	EC Sr. No. 10; <a href="#">Page No 6</a>	Super Critical	Ultra supercritical	• <b>Reduced Emissions:</b> Higher efficiency of USC plants results in lower CO <sub>2</sub> e

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
	<u>of 17</u>			<p>missions, reducing carbon footprint.</p> <ul style="list-style-type: none"> <li>• <b>Lower Fuel Consumption:</b> USC plants require less fuel thereby reducing overall fuel costs.</li> <li>• <b>Cost Savings:</b> USC plants have higher operational efficiency and reduced fuel consumption leading to lower operational costs over the plant's lifetime.</li> <li>• <b>Improved Flexibility:</b> USC plants are flexible in operation, allowing them to respond better to fluctuations in electricity demand &amp; grid requirements. This flexibility can support the integration of renewable energy sources like wind and solar, which are intermittent in nature.</li> <li>• <b>Longer Lifespan:</b> Advanced materials, design in USC plants contribute to longer operational lifespans, reducing frequency of maintenance shutdowns &amp; improving overall reliability.</li> <li>• <b>Technology Development:</b> Building USC plants encourages the development and deployment of advanced technologies in the energy sector, fostering innovation and supporting economic growth in related industries.</li> </ul>
ii.	EC S. No. 9 Under water requirements section : <u>Page No 5 of 17</u> Std EC condition, I. (v) and VI (i) : <u>Page No 10 &amp; 11 of 17</u>	Induced Draft ( Air Cooled Condenser) Specific water consumption is 2.5 m <sup>3</sup> /MWh	Water Cooled Condenser with Induced Draft Cooling Tower (I DCT) system Revision in specific water consumption from 2.5 to 3.0 m <sup>3</sup> /MWh	<ul style="list-style-type: none"> <li>• <b>Heat Rate:</b> WCC technology offers 4 - 5 % lesser Heat rate in comparison to ACC.</li> <li>• <b>Thermal Efficiency:</b> WCC has better Thermal efficiency of approx. 1.5 - 1.7% over ACC</li> <li>• <b>Coal Consumption:</b> Lesser coal consumption; causing lesser CO<sub>2</sub> emission in comparison to ACC.</li> <li>• <b>Capital &amp; Operational Expenses:</b> Lower capital and operation expenses of approx. 10-15 Paisa/unit (about 50 cr. per annum); than ACC System.</li> <li>• <b>Availability of Vendors:</b> Very few vendors are available for ACC system in the Country.</li> <li>• There will be increase in water consumption in WCC system but adequate water allocation for the project is now available. However, water consumption shall be managed within norms dt d. 28.06.2018 of 3.0 m<sup>3</sup>/MWh.</li> <li>• Lesser quantity of Ash generation will reduce the burden of disposal of Ash.</li> </ul>

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
				<ul style="list-style-type: none"> <li>Emission settled on the soil surface will be considerably reduced.</li> <li>There will be reduction in stress on ground flora and fauna due to reduction of ash generation and emission.</li> </ul>
iii.	Specific Condition no. xxi x: <u>Page No 9 of 17</u>	Development of multi-specialty Hospital	Request for waiving off the condition	<ul style="list-style-type: none"> <li>Request for waiving off the condition as MPPGCL is not technically equipped for developing &amp; running a Multi-specialty Hospital.</li> <li>MPPGCL does not have any expertise of doing this and it is also not the core business of MPPGCL.</li> <li>Two District Hospitals are available in nearby vicinity i.e. at Anuppur (11 Kms) &amp; at Shahdol (within 35 Km)</li> <li>A Govt. Medical College cum Hospital has recently been established at Distt. Shahdol, nearly 35 Km from Project site; which may also cater the requirement of Multi- Speciality Hospital.</li> </ul>
	EC Sr. No. 9 under Ash pond/Dyke: <u>Page No 4 of 17</u>	Use of existing Ash pond	Allotment of additional land for emergency / temporary ash pond and ash dyke.	<ul style="list-style-type: none"> <li>Acquisition of additional land for emergency / temporary Ash Dyke, @ 0.1 Ha/ MW may be permitted in line with <a href="#">MoEF&amp;CC Notification No. S.O. 54819E dated 31st Dec. 2021.</a></li> <li>An area of 66 Ha @ 0.1 Ha per MW and 3% of greenbelt area of 21.78 Ha along the ash dyke, the total requirement will be around 87.78 Ha.</li> <li>For this, MPPGCL is requesting to allow to use 80 Ha. including Green Belt of 20 Ha land adjacent to the existing ash pond. The ash pond will be developed with proper lining which will control the ground water seepage. Hence, no impact on GW.</li> <li>Existing Ash pond has 2 compartments; out of the two permissible raisings, first raising of both the compartments has been done.</li> <li>Second raising of any compartment shall disrupt ash lifting process leading to forced closure of existing 210 MW Unit.</li> <li>Thus, MPPGCL is left with limited capacity commensurate with the day to day lifting of Ash and any hindrance in lifting of Ash will jeopardize the operation of existing 210 MW unit.</li> <li>Project proponent, is accordingly entirely dependent on allotment of land for construction of dedicated temporary storage</li> </ul>

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
				of ash for the proposed unit.
iv.	EC Sr. No. 9 Under Fuel and Ash disposal section: <a href="#">Page No 5 of 17</a>	100 mts	155 mts	<ul style="list-style-type: none"> <li>There will be proper dispersion of pollutants with increased stack height.</li> <li>There will be decrease in the GLC, less atmospheric interference, reduce risk of flue gas re-entering into boiler due to "wake effect"</li> <li>Dust deposition on nearby water bodies will be reduced.</li> <li>Reduction in Dust deposition on surface will reduce the pollution stress on the soil surface, conserve the nutrient level of soil surface.</li> <li>Less stress on the vegetation</li> <li>Overall air quality will improve.</li> <li>Movement of avifauna will increase</li> <li>Improvement of workers health due to overall reduction of pollution level in local area, thus, reducing health problems etc.</li> </ul>
v.	Specific Condition No. iii: <a href="#">Page No 7 of 17</a>	<ul style="list-style-type: none"> <li>Sal Plantation on 30.2 ha land and development of Sal Nursery</li> <li>Extensive green cover within 2 Km range of the plant boundary</li> <li>Peripheral Green belt (Three row plantation) with <b>Miyawaki plantation</b> technique of <b>15 M thickness</b> along the plant boundary</li> </ul>	<ul style="list-style-type: none"> <li>Mixed Plantation on 30.2 ha land</li> <li>Request for amending the condition to develop green belt in the nearby area of the Plant Boundary, wherever feasible.</li> <li>Request for waiving off the condition</li> </ul>	<ul style="list-style-type: none"> <li>State Forest Research Institute (SFRI), Jabalpur indicated in <a href="#">April'23</a> that viability of Sal seed is very less &amp; die back phenomena is high.</li> <li>Subsequently, Div. Manager, MP Rajya Van Vikas Nigam Ltd., Umariya Project Division, Umariya citing reference of Chief Gen. Manager, MP Rajya Van Vikas Nigam Ltd., Jabalpur intimated in <a href="#">Sept'23</a> that planting Sal in the area is not possible due to reason indicated above and insisted for consent for 100% Mixed plantation.</li> <li>Thereafter, Div. Manager, MP Rajya Van Vikas, Umariya Project Division, Umariya in <a href="#">Jan'24</a> quoting the reference of study carried out by Tropical Forest Research Institute (TFRI) indicated that survival of Sal Plantation on Natural Ground in India is very rare &amp; suggested not to opt for Sal Plantation.</li> <li>A mixed variety plantation of approximately 18,000 trees has been completed over 12 ha. within the plant premises and 3,000 trees planted on 3 ha. of land outside the plant.</li> <li>As such, exemption from development of Sal Nursery and 100% Sal Plantation</li> </ul>



S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
				n be granted.
vi.	Std EC Sr. No. VII (ii) <u>Page No 12 of 17</u>	Sulphur Content in the liquid fuel should not exceed 0.5%	'Sulphur Content' in the liquid fuel to be enhanced to 1.5% (for LDO), as per IS 15770:2008.	Requested; as the IS also calls for a ceiling limit of 1.5% Sulphur in LDO
vii.	EC S.No 7 ; <u>Page No 2 of 17</u>	<ul style="list-style-type: none"> <li>Coal to be supplied from Sangma &amp; Korba siding of SEC L.</li> <li>Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Normative requirement of 2.542 MTPA @90% as per CE A norms.</li> </ul>	<ul style="list-style-type: none"> <li>Coal to be supplied from SEC L sources.</li> <li>Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Revised Normative requirement of 2.824 MTPA @100% as per CE A norms.</li> </ul>	<ul style="list-style-type: none"> <li>SECL has indicated that Coal shall be supplied from any of their source/ Coal fields. They have accordingly insisted to get specific siding names deleted from the EC.</li> <li>SECL has revised allocation to 2.824 MTPA corresponding to 100% normative requirement.</li> </ul>

### 3.2.3. Deliberations by the committee in previous meetings

N/A

### 3.2.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

29.2.6: The Committee observed and noted the following:

- Instant proposal is for seeking amendment in various conditions prescribed in the EC dated 08/05/2023 accorded for the project titled "Expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.24 ha by M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) located at Chachai Village, District Anuppur, Madhya Pradesh.
- No activity has been commenced at the project site with respect to the implementation of the EC dated 08/05/2023.
- As per the EC accorded, the land requirement for 660 MW Supercritical Thermal Power Project is 90.22 Ha and the area occupied by the 210 MW power generation unit is 58.7 Ha. Total land after the expansion is 148.92 Ha. The land proposed for the expansion project is under the possession of MPPGCL. Out of 90.2 ha, there is 6.171 Ha of forest land involvement for which requisite Stage I FC obtained on vide letter no. 6-MPR009/2022-BHO/I/107197 dated 24/04/2025.
- With respect to the amendment sought by the proponent, for the additional area sought for the ash pond neither the proponent nor the consultant was able to provide the details regarding whether the additional area was considered as part of the appraisal process of the EC dated 08/05/2023, ash pond design parameters and method of lining and mode of ash disposal etc. In view of this, EAC not acceded to this amendment request of the proponent.

v. With respect to increased stack height, the committee opined new notification has been issued by the Ministry on 11/07/2025 regarding timelines for achieving sulphur dioxide standards for category A,B,C Thermal Power Plants. Proponent has to revisit the stack height based on the provisions of the said notification. In view of this, EAC not acceded to this amendment request of the proponent.

vi. With respect to the remaining amendments sought, the Committee deliberated on the justification provided by the proponent and found it satisfactory.

vii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and if any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

#### Recommendations of the Committee:

**29.2.7:** In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC dated 08/05/2023 as detailed below **subject to stipulation of following additional specific conditions**. All other terms and conditions prescribed in EC dated 08/05/2023 shall remain unchanged:

S.No.	Specific/General Condition No as per EC dated 08/05/2023	Details of Conditions as per ToR/EC	Amendment Sought	Recommendation of the EAC
i.	EC Sr. No. 10; <u>Page No 6 of 17</u>	Super Critical	Ultra supercritical	<b>Agreed</b>
ii.	EC S. No. 9 Under water requirement section : <u>Page No 5 of 17</u> Std EC condition, I. (v) and VI (i) : <u>Page No 10 &amp; 11 of 17</u>	Induced Draft (Air Cooled Condenser) Specific water consumption is 2.5 m <sup>3</sup> /MWh	Water Cooled Condenser with Induced Draft Cooling Tower (IDCT) system Revision in specific water consumption from 2.5 to 3.0 m <sup>3</sup> /MWh	<b>Agreed</b>
iii.	Specific Condition no. xix: <u>Page No 9 of 17</u>	Development of multi-specialty Hospital	Request for waiving off the condition	<b>Agreed</b>
iv.	EC Sr. No. 9 under Ash pond/Dyke: <u>Page No 4 of 17</u>	Use of existing Ash pond	Allotment of additional land for emergency / temporary ash pond and ash dyke.	<b>Not agreed</b>
v.	EC Sr. No. 9 Under Fuel and Ash disposal section: <u>Page No 5 of 17</u>	100 mts	155 mts	<b>Not agreed</b>
vi.	Specific Condition No. ii: <u>Page No 7 of 17</u>	<ul style="list-style-type: none"> <li>Sal Plantation on 30.2 ha land and development of Sal Nursery</li> <li>Extensive green cover within 2 Km range of the plant boundary</li> <li>Peripheral Green belt (Three row plantation) with Miyawaki plantation</li> </ul>	<ul style="list-style-type: none"> <li>Mixed Plantation on 30.2 ha land</li> <li>Request for amending the condition to develop green belt in the nearby area of the Plant Boundary, wherever feasible.</li> <li>Request for waiving off the condition</li> </ul>	<b>Partly agreed</b>

S.No.	Specific/General Condition No as per EC dated 08/05/2023	Details of Conditions as per ToR/EC	Amendment Sought	Recommendation of the EAC
		on technique of <b>15 M thickness</b> along the plant boundary		
vii.	Std EC Sr. No. VII (ii) <u>Page No 12 of 17</u>	Sulphur Content in the liquid fuel should not exceed 0.5%	'Sulphur Content' in the liquid fuel to be enhanced to 1.5% (for LDO), as per IS 15770:2008.	<b>Agreed</b>
viii.	EC S.No 7 ; <u>Page No 2 of 17</u>	<ul style="list-style-type: none"> <li>Coal to be supplied from Sangma &amp; Korba siding of SECL.</li> <li>Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Normative requirement of 2.542 MTPA @90% as per CEA norms.</li> </ul>	<ul style="list-style-type: none"> <li>Coal to be supplied from SECL sources.</li> <li>Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Revised Normative requirement of 2.824 MTPA @100% as per CEA norms.</li> </ul>	<b>Agreed</b>

#### Additional Specific Conditions

- Project proponent shall strengthen the Government Primary Health Centres/ Community Health Centres in the nearby vicinity of the project site. Project proponent shall prepare an action plan for implementing the budget proposed for the same, by visiting each PHC/CHC and identifying the needs of all the PHCs/CHCs individually. A day care centre will be constructed and maintained by PP in each Government PHCs/CHCs. The time-bound action plan along with the financial outlay for strengthening the PHCs/ CHCs shall be submitted to the concerned Regional Office of MoEF&CC along with the six-monthly compliance report.
- 6.171 ha of forestland on which stage – I forest clearance has been accorded shall not be disturbed until the stage – II forest clearance is accorded for the same as per the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.
- PP shall install at least 2 MW solar PV for power generation within the project site. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of amendment in the EC.
- Project proponent shall carry out mixed plantation in 30.2 Ha of land comprising of atleast 30% sal plantation. In addition to this, peripheral Green belt with Miyawaki plantation technique along the plant boundary shall also be carried out.

#### 3.2.5. Recommendation of EAC

Recommended

#### 3.2.6. Details of Environment Conditions

### 3.2.6.1. Specific

Additional Specific Conditions	
1.	Project proponent shall strengthen the Government Primary Health Centres/ Community Health Centres in the nearby vicinity of the project site. Project proponent shall prepare an action plan for implementing the budget proposed for the same, by visiting each PHC/CHC and identifying the needs of all the PHCs/CHCs individually. A day care centre will be constructed and maintained by PP in each Government PHCs/CHCs. The time-bound action plan along with the financial outlay for strengthening the PHCs/ CHCs shall be submitted to the concerned Regional Office of MoEF&CC along with the six-monthly compliance report.
2.	6.171 ha of forestland on which stage – I forest clearance has been accorded shall not be disturbed until the stage – II forest clearance is accorded for the same as per the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.
3.	PP shall install at least 2 MW solar PV for power generation within the project site. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of amendment in the EC.
4.	Project proponent shall carry out mixed plantation in 30.2 Ha of land comprising of atleast 30% sal plantation. In addition to this, peripheral Green belt with Miyawaki plantation technique along the plant boundary shall also be carried out.

### 3.3. Agenda Item No 3:

#### 3.3.1. Details of the proposal

Proposed Expansion of 1200 MW to 2000 MW by Installing 1x800 MW plant unit at Village-Derang, Post-Kaniha, District-Angul, State-Odisha by JINDAL INDIA POWER LIMITED located at ANUGUL, ODISHA			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
<a href="#">IA/OR/THE/542805/2025</a>	J-13011/40/2008-IA-II(T)	19/08/2025	Thermal Power Plants (1(d))

#### 3.3.2. Project Salient Features

##### **Agenda No 29.3**

29.3 Proposed Expansion of 1200 MW to 2000 MW by installing 1X800 MW Plant Unit by **M/s Jindal India Power Limited** at Village-Derang, Post-Kaniha, **District- Angul, State- Odisha – Prescribing of Terms of Reference – regarding.**

**[Proposal No. IA/OR/THE/542805/2025; F. No. J-13011/40/2008-IA-II(T)]**

**29.3.1:** M/s Jindal India Power Limited has made an application online vide proposal no. IA/OR/THE/542805/2025 dated 28/6/2025 along with application in prescribed format (CAF, Form-I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA Notification, 2006 for the project mentioned above. The project activity is listed at item no. 1(d) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

**Name of the EIA consultant:** M/s. **Mantec Consultants Private Limited** [NABET Certificate No.: NABET/EIA/23-26/RA 0305\_Rev.01, Valid till 20.04.2026].



### 3.3.3. Deliberations by the committee in previous meetings

N/A

### 3.3.4. Deliberations by the EAC in current meetings

**29.3.2:** The EAC noted the following during the EAC meeting:

- i. The existing TPP of 2x600 MW was accorded environmental clearance vide letter dated 29/09/2008 from Ministry of Environment and Forest. It has been reported that the said TPP has been implemented and under operation. Instant proposal is for obtaining Terms of Reference (ToR) for undertaking EIA/EMP study for the proposed addition of 1x800 MW TPP within the premises of existing 2x600 MW TPP.
- ii. As per the application submitted proposal involves an forest land of 1.45 Ha. However, in the brief summary and the presentation it has been reported that there is no involvement of forest land.
- iii. In Application form total greenbelt area is written as 128.49 Ha whereas in Brief writeup in Sl. No. 4 in Environmental Setting section it is written as 125.45Ha.
- iv. Neither the project proponent nor the consultant was able to explain the salient features of the proposed expansion project as ash pond design for the proposed expansion, area earmarked for the green belt development and the land use break up for the existing and proposed expansion project.
- v. Land use break up provided is observed to be very confusing as the same has been bifurcated for BGT, CHP, Raw Water Reservoir, Water System Including IDCT, AHP, Fuel Oil Storage, Switchyard, Miscellaneous, Construction Yard, Roads, Green Belt, Ash Dyke Area Township for the existing and proposed expansion separately. It is not clear from the records made available that new facilities will be established for the proposed expansion (or) existing infrastructural facilities will be catering to the proposed expansion.
- vi. There are two rivers in the vicinity of the project site namely Tikra and Othani river located at distance of 0.18 km and 1.28 km respectively. HFL data of these rivers have not been made available.
- vii. The capacity of ETP proposed is less than actual effluent generation.
- viii. There are 10 temples names have been mentioned under Archaeological sites monuments and details of NOC obtained have not been made available.
- ix. As per the photographs furnished in the presentation, high volume samplers have been kept at the ground level which is not in accordance with the CPCB norms of monitoring. Besides, in the down wind direction, no AAQ station have been established.
- x. Total coal requirement is reported to be 11.7 MTPA and the same would be transported by road and conveyor. The Right of Way for the conveyor belt has not been provided.
- xi. Plant layout does not contain details regarding existing and proposed green belt development.
- xii. In the brief write up submitted the liquid effluents have been given under solid and hazardous waste generation. Further, with respect to ash disposal, no details are provided with respect to the life of the ash pond. Besides, the mode of ash disposal is mentioned as dry disposal with no water, however ash water recirculation system is in place has been reported. Thus, confusing statements have been mentioned for ash disposal.

#### **Recommendations of the Committee**

**29.3.3:** In view of the foregoing and after deliberations, the Committee **recommended to return the proposal in its present form** and asked the proponent to revisit the entire application by incorporating all the technical shortcomings inter-alia including the above and thereafter proposal shall be submitted by the proponent for fresh consideration by the EAC.

### 3.3.5. Recommendation of EAC

Returned in present form

## 3.4. Agenda Item No 4:

### 3.4.1. Details of the proposal

<b>Ideal Energy Projects Limited (Expansion of Existing Thermal Power Plant) by IDEAL ENERGY PROJECTS LIMITED located at NAGPUR, MAHARASHTRA</b>			
<b>Proposal For</b>		Fresh ToR	
<b>Proposal No</b>	<b>File No</b>	<b>Submission Date</b>	<b>Activity (Schedule Item)</b>
<a href="#">IA/MH/THE/542684/2025</a>	J-13012/06/2025-IA.I(T)	26/08/2025	Thermal Power Plants (1(d))

### 3.4.2. Project Salient Features

#### Agenda 29.4

**29.4** Expansion of 1x270 MW Thermal Power Project by addition of 2x175 MW coal based thermal power plant by M/s. Ideal Energy Projects Limited located at Mouza Khursapar Kinhala, Near village Bela, Tal. Umred, Dist. Nagpur, Maharashtra – Prescribing of Terms of Reference – regarding.

[Proposal No: IA/MH/THE/542684/2025; File No: J-13012/06/2025-IA.I(T)]

**29.4.1:** Ideal Energy Projects Limited has made an application online vide proposal no. IA/MH/THE/542684/2025 dated 11/07/2025 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToR's for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category “A” of the schedule of the EIA Notification, 2006 and do not attract the general conditions of the EIA Notification, 2006.

**Name of the EIA consultant:** M/s. Reijg GreenLogic Pvt. Ltd., Hyderabad [NABET Certificate No.: NABET/EIA/22-27/IA 0135; Valid up to 28/01/2027].

**Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:**

**29.4.2:** The existing project of 270 MW TPP was accorded environmental clearance vide letter dated 15/05/2009 from SEIAA -Maharashtra. Thereafter, corrigendum to the EC was accorded on 27/11/2009. Total existing area is 101 Ha. Project has been implemented and the units are under operation. Consent to Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide Ir. No. MPCBCONSENT-0000178101/CR/2312000892 dated 08/12/2023. The validity of CTO is up to 31/08/2026.

**29.4.3:** Implementation status of the existing EC dated 15/05/2009

S.No.	Configuration	Capacity (MW)	As per EC dated 15/05/2009	Implementation Status as on date	Production as per CTO
1.	Subcritical Coal Fired Power Plant (CFPP)	270	270 MW	270 MW	270 MW

#### 29.4.4: Environmental site settings

S.no.	Particulars	Details	Remarks
1.	Total land	101 ha [Private: 101 ha; Govt.:0 ha; Agriculture: 0 ha;]	Land use: Industrial
2.	Land use breakdown	The proposed expansion will be carried out within the existing premises of 101 Ha. No additional land is required for the proposed expansion. Out of 101 Ha, total green belt will be 37.60 Ha and no additional ash pond is envisaged for the proposed expansion.	Total area: 101 Ha

S.no.	Particulars	Details	Remarks																																																
3.	Land acquisition details as per Mo EF&CC O.M. dated 7/10/2014& 20/2/2025	The entire land of 101 ha is already under the possession of the project proponent.																																																	
4.	Existence of habitation & involvement of R & R, if any.	<p><b>Project site:</b> Mouza Khursapar Kinhala, Near Village-Bela, Tal- Umrer, Dist – Nagpur</p> <p><b>Study Area:</b> 20°48'36.57"N 79°3'14.76"E Mouza Khursapar.</p> <table border="1"><thead><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr></thead><tbody><tr><td>Khursapar Village</td><td>0.85 km</td><td>E</td></tr><tr><td>Bela village</td><td>3.8 km</td><td>SW</td></tr></tbody></table> <p>Schools: Satpute house (praful Satpute) - High school : 2.40 Km (SSW) Z. P. Upper Primary School Salairani : 2.80 Km (SSW) Zilla Parishad Uchh Prathmik Shala Bela : 4.40 Km (SW) Z. P. Upper Primary School, Rama : 5.40 Km (WNW)</p>	Habitation	Distance	Direction	Khursapar Village	0.85 km	E	Bela village	3.8 km	SW	R&R is not applicable for this project.																																							
Habitation	Distance	Direction																																																	
Khursapar Village	0.85 km	E																																																	
Bela village	3.8 km	SW																																																	
5.	Latitude and Longitude of all corners of the project site.	<p><b>A. Plant Site</b></p> <table border="1"><thead><tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr></thead><tbody><tr><td>A</td><td>20°48'28.58"N</td><td>79°02'48.02"E</td></tr><tr><td>B</td><td>20°48'47.87"N</td><td>79°03'13.13"E</td></tr><tr><td>C</td><td>20°48'56.18"N</td><td>79°03'16.36"E</td></tr><tr><td>D</td><td>20°48'46.72"N</td><td>79°03'31.09"E</td></tr><tr><td>E</td><td>20°48'39.04"N</td><td>79°03'30.28"E</td></tr><tr><td>F</td><td>20°48'36.67"N</td><td>79°03'42.76"E</td></tr><tr><td>G</td><td>20°48'27.51"N</td><td>79°03'42.51"E</td></tr><tr><td>H</td><td>20°48'24.27"N</td><td>79°03'27.37"E</td></tr><tr><td>I</td><td>20°48'22.00"N</td><td>79°03'13.83"E</td></tr></tbody></table> <p><b>B. Ash pond</b></p> <table border="1"><thead><tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr></thead><tbody><tr><td>A</td><td>20°48'08.97"N</td><td>79°03'13.04"E</td></tr><tr><td>B</td><td>20°48'06.06"N</td><td>79°03'28.25"E</td></tr><tr><td>C</td><td>20°47'56.41"N</td><td>79°03'15.27"E</td></tr><tr><td>D</td><td>20°48'04.49"N</td><td>79°03'16.84"E</td></tr><tr><td>E</td><td>20°48'05.47"N</td><td>79°03'12.24"E</td></tr></tbody></table>	S. No.	Latitude	Longitude	A	20°48'28.58"N	79°02'48.02"E	B	20°48'47.87"N	79°03'13.13"E	C	20°48'56.18"N	79°03'16.36"E	D	20°48'46.72"N	79°03'31.09"E	E	20°48'39.04"N	79°03'30.28"E	F	20°48'36.67"N	79°03'42.76"E	G	20°48'27.51"N	79°03'42.51"E	H	20°48'24.27"N	79°03'27.37"E	I	20°48'22.00"N	79°03'13.83"E	S. No.	Latitude	Longitude	A	20°48'08.97"N	79°03'13.04"E	B	20°48'06.06"N	79°03'28.25"E	C	20°47'56.41"N	79°03'15.27"E	D	20°48'04.49"N	79°03'16.84"E	E	20°48'05.47"N	79°03'12.24"E	
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6.	Elevation of the project site	277 m above mean sea level																																																	
7.	Involvement of Forest land if any.	Nil and Not applicable	Not Applicable, as forest land is no																																																

S.no.	Particulars	Details	Remarks
			t involved at project site.
8.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Canal : Passing through Plant Boundary Veena River : 1.15 Km (W) Nand Nadi : 5.30 Km (SSW) Wadgaon Reservoir : 0.31 Km (N) Amghat Nala : 5.50 Km (SE) Muradpur Talav : 4.60 Km (ENE) Nishanghat Talav : 4.80 Km (E)	
9.	Archaeological sites monuments/ historical temples etc.	Nil	Not Applicable
10.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	<b>Study area</b> <b>Name of the ESZ/ESA: NA</b> <b>Status of Notification: NA</b> <b>Distance of project from ESZ/ESA: NA</b> <b>Authenticated map of ESZ projecting distance of ESZ from project site: NA</b> Status of NBWL approval: NA <b>List of Reserved and protected forests: Munia Reserve forest - 4 km (approx.)</b>	Munia forest - 4 km (approx.)
12.	Involvement of Critically Polluted Area / Severely Polluted area as per 2018 CEPI score	<b>Involvement of CPA/SPA:</b> Not applicable <b>Proximity to CPA/SPA:</b> Not applicable	Not applicable Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019

**29.4.5:** The unit configuration and capacity of existing and proposed project is given as below:

Sr.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity*	Total	Technology adopted
1	1 x 270 MW Subcritical Coal Fired Power Plant (CFPP)	2 x 175 MW Subcritical Coal Fired Power Plant (CFPP)	620 MW (2 x 175MW, 1 x 270 MW)	Subcritical Coal Fired Power Plant (PF & CFPP)

**\*Note** – It has been submitted by the proponent with respect to the instant expansion proposal based on subcritical technology, a meeting was held in the Ministry of Power on 04/08/2025. As per the minutes of the said meeting submitted by the proponent (F.No. 11/72/2025-Th II dated 25/08/2025 of Ministry of Power), it has been decided to permit the deployment of subcritical CFBC technology for all expansion projects, subject to maintaining biomass co-firing ratio at minimum 20% on annual basis. In view of this, instant was proposal considered by the EAC based on subcritical CFBC technology.

**29.4.6:** The details of the fuel (coal/gas/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:



Details	Fuel requirement (M TPA)	Source	Distance from site (kms)	Mode of Transportation	Coal characteristics (Worst case scenario)
Existing TPP	1 x 270 MW	SHAKTI scheme coal	40	Road	Ash - (30%) Sulphur - (0.4 to 0.6%) Moisture (10%) GCV – Avg. 4000 Kcal/Kg
Proposed TPP	2 x 175 MW	SHAKTI scheme coal	40	Road	Ash - (30%) Sulphur - (0.4 to 0.6%) Moisture (10%) GCV – avg 4000 Kcal/Kg

**29.4.7: Water Requirement:** Existing water requirement is 15,098 m<sup>3</sup>/day, water requirement is obtained from Wadgaon Dam and permission for the same has been obtained from Irrigation Department, Nagpur vide Agreement dated 04/05/2023. The water requirement for the proposed project is estimated as 25,855 m<sup>3</sup>/day, out of which 21,168 m<sup>3</sup>/day of fresh water requirement will be obtained from the Wadgaon Dam and the remaining requirement of 4,687 m<sup>3</sup>/day will be met from the recycled ETP water. The permission for drawl of surface water is obtained from Irrigation Department, Nagpur Vide Agreement dated 04/05/2023. The water will be transported to the plant site through pipes/canal and pump house is installed at project site. The specific water consumption for the power plant will be 2.5 m<sup>3</sup>/MWhr.

**29.4.8: Power Requirements:** Existing power requirement of 18 MW is obtained from MSEB / construction power. The power requirement for the proposed project is estimated as 23 MW, all of this will be obtained from the Construction Power / MSEB. (Required power shall be supplied from the existing plant).

**29.4.9: Solid and hazardous waste Management:** The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Sr.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1.	Municipal solid waste	Domestic activities	22	Collection and segregation	Local authority	-
2.	Fly Ash	Burning of Coal	940831.56	Shall be sent to Cement Manufacturing Plant	Shall be sent to Cement Manufacturing Plant	
3.	Bottom Ash	Burning of Coal	256807.89	Shall be sent to Cement Manufacturing Plant	Shall be sent to Cement Manufacturing Plant	
4.	STP Sludge	STP	9	Used as manure in landscaping	Used as manure in landscaping	Sewerage carrying vehicle with pump & clo

Sr.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
						sed tank.
5.	Used or spent oil	DG set and Equipment	19.2	Authorized Recyclers	Authorized Recyclers	-
6.	Chemical sludge from waste water treatment	Waste water treatment	55	CHWTSD F	CHWTSD F	-
7.	Wastes or residues containing oil	Oil tanks	32.4	CHWTSD F	CHWTSD F	-
8.	E-waste such as used computers, keyboards, mouse etc.	Electronic equipment	0.1	Authorised recycler	Authorised recycler	-
9.	Battery Waste	Batteries	0.5	Authorised recycler	Authorised recycler	-

**24.4.10: Cost of project:** Existing capital cost of project was Rs. 1800 Cr. The expansion cost of the proposed project is Rs. 2400 Cr. The employment generation from the proposed project/ expansion is 560 (380-Permanent, 180-Contractual).

**24.4.11: Green belt development:** Existing green belt has been allocated in 35 ha area which is about 34.69 % of the total project area of 101 ha with total existing Trees of 22,000 nos. Total area of 37.60 ha area will be developed as greenbelt. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

**24.4.12: Ash management for last three years**

Year	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No of storage silos with capacity
The Plant was operational in Oct. 2022.					
2022-23	141417.87	17728.38	12.53	1.23689494	Silo 1 - 1000 MT Silo 2 - 400 MT
2023-24	410637.09	136630.88	33.27	2.7400621	
2024-25	376402.23	319271.07	84.82	0.57131157	

**a. Fly ash Details for last three years=362275.9849 TPA**

Sr.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Cement manufacturing	362275.9849	48.77%	Consent to Operate v

Sr.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
				valid till 31.08.2026
	<b>Total</b>	362275.9849	48.77%	

**b. Bottom ash generation for last three years =185691.43 MT**

Sr.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Use in overburden dumps	0.160445 1	8.64 %	NOC from MPCB has been obtained by the mine owner.
	<b>Total</b>	0.160445 1	8.64 %	

**c. Legacy ash details = Not Applicable**

**d. Ash Pond details**

Sr.	Details of Ash pond	Ash pond 1	Total
1.	Area (Ha)	14.162	14.162
2.	Dyke height (m)	5	5
3.	Volume (m <sup>3</sup> )	457450	457450
4.	Quantity of ash disposed (Metric Tons)	473630.334	473630.334
5.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	42.47 349779.666	42.47 349779.666.
6.	Expected life of ash pond (number of years and months)	25 Years	N.A.
7.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE	N.A.
8.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	N.A.
9.	Ratio of ash: water in slurry mix (1:):	70 : 30	N.A.
10.	Ash water recycling system (AWRS) installed	Yes	N.A.

Sr.	Details of Ash pond	Ash pond 1	Total
	d and functioning :		
11.	Quantity of wastewater from ash pond discharged into land or water body (m <sup>3</sup> )	NIL	N.A.
12.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	NIL	N.A.
13.	Last date when the audit was conducted and name of the organization who conducted the audit:	28.12.2024 Department of Civil Engineering, Visvesvaraya National Institute of Technology, Nagpur	N.A.

#### E. Proposed ash utilization plan for expansion project

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash Fly & Bottom)	481950	657951	1139901	1025910	90%	113990	A.1000MT B.400MT

**Ash pond details: Existing ash pond will be utilized. No new ash pond is envisaged.**

**29.4.12:** Proposed Terms of Reference (Baseline data collection period of March to May 2025)

Attributes	Parameters	Sampling		Remarks
Air		No. of stations	Frequency	
Meteorological parameters	1	1	1	-
AAQ parameters	SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub> , Pb, CO, NH <sub>3</sub> , C <sub>6</sub> H <sub>6</sub> , BaP, As, Ni	8	24	-
Noise	24 hours	8		-
Water				
Surface water	Colour, Odour, pH value, Turbidity, Biochemical Oxygen Demand, Total Dissolved Solids, Aluminium, Ammonia, Boron, chlorides, Copper, Fluoride, Iron, Magnesium, Nitrate, Selenium, Sul	4	1	-



Attributes	Parameters	Sampling		Remarks
	phate, Total alkalinity ,Total Hardness ,zinc, Cadmium, Lead, Arsenic			
Ground water quality parameters	Colour, Odour, pH value, Turbidity, Biochemical Oxygen Demand , Total Dissolved Solids, Aluminium ,Ammonia ,Boron ,chlorides ,Copper, Fluoride, Iron, Magnesium ,Nitrate, Selenium, Sulphate, Total alkalinity ,Total Hardness ,zinc, Cadmium, Lead, Arsenic	1	1	-
Land				-
a. Soil quality b. Land use		8	1	-
Biological a. Aquatic b. Terrestrial		1	1	-
Socio-economic parameters		1	1	-

**29.4.13:** Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

**A. Summary of court cases:** No court cases pending to the project

**B. Summary of Show Cause Notices:** There are no Show Cause Notices pertaining to existing and proposed project.

**C. Summary of violation:** There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

**29.4.14: Written submissions:** Project proponent made the following written submission during the meeting

**1. Point no. 2, Land use break-up.**

There is no requirement for additional space for Ash Pond in the expansion project. This land will be added to the Green Belt. The total green belt shall be 37.60 Ha instead of 33.28 ha, as mentioned earlier.

**2. Point no. 6,**

a. The fuel requirement for the existing plant of 1 x 270 MW is 4050 TPD, i.e. 1.3 MMT per Year.

Since IEPL is supplying power to MAHAGENCO, under Case IV bidding, the coal equivalent to 200 MW is being procured against MAHAGENCO's quota. For the remaining 70 MW, coal is being procured through the SHAKTI scheme.

b. For the proposed unit of 2 x 175 MW, the fuel shall be as follows, based on 20% Bio-Mass on a Heat equivalent basis.

Coal : 4040 TPD i.e. 1.33 MMT Per Year

Bio-Mass (Less than 15% Moisture Basis) : 940 TPD i.e. 0.31 MMT Per Year.

c. For the existing unit, coal is being transported by road, mostly from mines of WCL Umred area, situated around 40 km from the site. For the expansion project, if required, coal will be transported over Indian Railways, up to Butibori Station on Nagpur - Wardha Line, from where it will be transported by Road up to the plant and the distance involved is 22 kms.

Bio-mass will be transported in either loose/ briquetted form, depending on the distance, while taking due precautions.

While transporting by road, the concerned MPCB guidelines shall be followed.

**3. Point No. 9**

9.2 Fly Ash @ 34% - 0.71 MMT Per Year (This includes ash generated through Unit I and Unit II.

Fly Ash generated from Bio-Mass: 0.021 MMT Per Year .

9.3 Bottom Ash @20% - 0.17 MMT per year.

**Other Points Discussed**

a. Source of Water shall be Wadgaon Dam on the river Vena, which is under the Water Resource Department,

Government of Maharashtra.

b. Sewage Treatment Plant (STP) of Nagpur Municipal Corporation (NMC) is more than 70 km away, and most of the quantity is being utilised by MAHAGENCO. If required, a Certificate shall be obtained from NMC.

c. Existing Ambient Air Quality Monitoring Report, considering Unit-I in operation, sample reports attached as Annexures.

d. Bio-Mass Ash utilisation - Feasibility for separation and usage in cement shall be explored separately. Impact of Bio-Mass ash contamination in coal ash, in respect of the required quality for cement manufacture to be ascertained.

e. Impact of air pollution, if any, while transporting coal will be assessed separately. Meanwhile, it is to reiterate that for the existing unit, all guidelines of the Maharashtra Pollution Control Board are being followed.

f. Baseline data collection sampling shall be as suggested in the meeting i.e. AAQ 10 station, Surface Water - 8 GroundWater - 6.

g. Renewable Energy will be 1 MW instead of 840 KW.

h. Slide No. 26 of the presentation : With the consent of MPCB, bottom ash is utilised for mine void (filling of abandoned stone quarries). The mention of landfill refers to mine void.

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### 3.4.3. Deliberations by the committee in previous meetings

N/A

### 3.4.4. Deliberations by the EAC in current meetings

#### Observations and deliberation of the EAC

**29.4.15:** The Committee observed and noted the following:

i. Instant proposal is seeking for expansion of 1x270 MW Thermal Power Project by addition of 2x175 MW coal based thermal power plant based on subcritical technology by M/s. Ideal Energy Projects Ltd located at Village Khursapar Kinhal near village Bela in Umrer Tehsil of Nagpur district.

ii. The EAC noted that with respect to the instant expansion proposal based on subcritical technology, a meeting was held in the Ministry of Power on 04/08/2025. As per the minutes of the said meeting submitted by the proponent (F.No. 11/72/2025-Th II dated 25/08/2025 of Ministry of Power), it has been decided to permit the deployment of subcritical CFBC technology for all expansion projects, subject to maintaining biomass co-firing ratio at minimum 20% on annual basis. In view of this, instant was proposal considered by the EAC based on subcritical CFBC technology.

iii. The existing project of 270 MW TPP was accorded environmental clearance vide letter dated 15/05/2009 from SEIAA -Maharashtra. Thereafter, corrigendum to the EC was accorded on 27/11/2009. Total existing area is 101 Ha. Project has been implemented and the units are under operation. Consent to Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide Ir. No. MPCBCONSENT-0000178101/CR/2312000892 dated 08/12/2023. The validity of CTO is up to 31/08/2026.

iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH.

v. The proposed expansion will be carried out within the existing premises of 101 Ha. No additional land is required for the proposed expansion. Out of 101 Ha, total green belt will be 37.60 Ha and no additional ash pond is envisaged for the proposed expansion.

vi. There is no involvement of forest land in the proposed project.

vii. Wadgaon Dam is located at a distance of 0.31 km in North direction. PP should submit detailed mitigation measures for the protection of the same.

viii. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

x. Munia Reserve Forest is situated approx. 4 km from the project site.

xi. Existing water requirement is 15,098 m<sup>3</sup>/day, water requirement is obtained from Wadgaon Dam and permission for the same has been obtained from Irrigation Department, Nagpur vide Agreement dated 04/05/2023. The water requirement for the proposed project is estimated as 25,855 m<sup>3</sup>/day, out of which 21,168 m<sup>3</sup>/day of fresh water requirement will be obtained from the Wadgaon Dam and the remaining requirement of 4,687 m<sup>3</sup>/day will be met from the recycled ETP water. The permission for drawl of surface water is obtained from Irrigation Department, Nagpur Vide Agreement dated 04/05/2023. The water will be transported to the plant site through pipes/canal and pump house is installed at project site. The specific water consumption for the power plant will be 2.5 m<sup>3</sup>/MWhr.

xii. Existing power requirement of 18 MW is obtained from MSEB / construction power. The power requirement for the

proposed project is estimated as 23 MW, all of this will be obtained from the Construction Power / MSEB. (Required power shall be supplied from the existing plant).

xiii. Zero liquid discharge (ZLD) will be adopted for the proposed plant using suitable effluent treatment plant, sludge thickener and RO systems.

xiv. Existing capital cost of project was Rs. 1800 Cr. The expansion cost of the proposed project is Rs. 2400 Cr. The employment generation from the proposed project/ expansion is 560 (380-Permanent, 180-Contractual).

xv. Existing green belt has been allocated in 35 ha area which is about 34.69 % of the total project area of 101 ha with total existing Trees of 22,000 nos. Total area of 37.60 ha area will be developed as greenbelt. A 10 m. wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

xvi. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.

xvii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

#### **Recommendations of the Committee:**

**29.4.16:** The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission on PARIVESH Portal** under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

### **3.4.5. Recommendation of EAC**

Recommended (Subject to submission of requisite information/ documents)

### **3.4.6. Details of Terms of Reference**

#### **3.4.6.1. Specific**

<b>[A] Environmental Management and Biodiversity Conservation</b>	
1.	Project proponent shall submit an action plan for maintaining biomass co-firing ratio at minimum 20% on annual basis in the proposed expansion project as committed.
2.	A Cumulative Environmental Impact Assessment study of all the existing and proposed projects in the 10-km radius of the proposed project shall be conducted and the same shall be included in the EIA/EMP report. Details of industrial units present in 10 Km radius of the power plant shall be earmarked in map and submitted.
3.	Proponent shall submit details of mitigation measures to be adopted for protection of Wadgaon Dam.
4.	Certified compliance report containing compliance to the prescribed EC conditions for the 1x270 MW as per the MoEF&CC O.M. dated 08/06/2022 shall be submitted.
5.	Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.
6.	Certificate from concerned District Magistrate/ Authorised Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain of canal passing through the project site corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
7.	All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent.
8.	Project proponent shall also obtain recommendations from the State Forest department regarding the impact of



	project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
9.	EIA/EMP study shall take into consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.
10.	Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of release of cooling tower water on aquatic life and action plan for complying with the mitigation measures shall be submitted.
11.	Project proponent shall commission a study on Hydrology and Hydrogeology of the project site as well as the study area of the project site through a NABET accredited consultant. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
12.	Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.
13.	PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 33 % of the project area. The PP should submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
14.	Action plan for development of three-tier plantation programme (33.0% of total project cover area) along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.
15.	Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.
16.	Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.
17.	Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
18.	Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
19.	Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body (minimum 60 meters) etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.
20.	Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied, and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP report.
21.	Details pertaining to water source, treatment and discharge should be provided.
22.	PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.



2 3.	Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
2 4.	An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.
2 5.	PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG-based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.
2 6.	PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.
2 7.	PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
2 8.	Details on renewable energy (solar plant) proposed to be installed as energy conservation measures and action plan for the same shall be submitted.
2 9.	The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.
3 0.	Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to sulphur di-oxide standards.
3 1.	Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
3 2.	Carbon emission due to TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
3 3.	PP is advised to implement the ' <i>Ek Ped Maa Ke Naam</i> ' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. An action plan in this regard shall be submitted.
<b>[B] Disaster Management</b>	
1.	A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.
<b>[C] Socio-economic study</b>	
1.	Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
2.	Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation

	&Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.
3.	A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
4.	Demographic details and land use change details in 10 km area shall be submitted.
<b>[D] Miscellaneous</b>	
1.	Plot the wind rose diagram using the Typical Meteorological Year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
2.	PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.
3.	PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
4.	Detailed description of all the court cases along with its current status shall be submitted.
5.	PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
6.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyse the samples.
7.	PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
8.	PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.
9.	Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.
10.	Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted.
11.	The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
12.	PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
13.	All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official

	seal of the person signing the certificate and dispatch number.
1 4.	Necessary coordination shall be made with concerned SPCB (who is responsible for Compliance of OM dated 14.01.2025) regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024 through which projects requiring prior EC were exempted from requirement of CTE.

### 3.4.6.2. Standard

1( d)	<b>Thermal Power Plants</b>
<b>Statutory compliance</b>	
1.	The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
2.	Vision document specifying prospective long term plan of the project shall be formulated and submitted.
3.	Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
<b>Details of the Project and Site</b>	
1.	The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
2.	Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
3.	Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
4.	The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
5.	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
6.	Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
7.	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
8.	If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.
9.	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.



1 0.	Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
1 1.	Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.
<b>Ecology biodiversity and Environment</b>	
1.	A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
2.	Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
3.	A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
4.	The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re- circulation of effluents.
5.	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
6.	It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
7.	Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted
8.	Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
9.	Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
1 0.	Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished. In addition, wherever ground water is drawn, PP shall submit detailed plan of Water charging activity to be undertaken.
1 1.	Feasibility of near zero discharge concept shall be critically examined and its details submitted.



1 2.	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
1 3.	Plan for recirculation of ash pond water and its implementation shall be submitted.
1 4.	Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
1 5.	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence
<b>Environmental Baseline study and mitigation measures</b>	
1.	One complete season (critical season) site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected along with past three year's meteorological data for that particular season for wins speed analysis and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
2.	In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
3.	A list of industries existing and proposed in the study area shall be furnished.
4.	Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
5.	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
6.	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
7.	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
8.	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
9.	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.

10.	Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
<b>Environmental Management Plan</b>	
1.	EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
2.	A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be prepared. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Provision for mock drills shall be suitably incorporated to check the efficiency of the plans drawn.
3.	The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/ Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
4.	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash along with monitoring mechanism.
<b>Green belt development</b>	
1.	Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary not less than 2000 tree per ha with survival rate of more than 85% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO <sub>2</sub> and other gaseous pollutants and hence a stratified green belt should be developed.
2.	Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months
<b>Socio-economic activities</b>	
1.	Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
2.	Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
3.	If the area has tribal population, it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
4.	A detailed CER plan along with activities wise break up of financial commitment shall be prepared in terms of the provisions OM No. 22-65/2017-IA.III dated 30.09.2020. CER component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified.
5.	While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes

	identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CER details done in the past should be clearly spelt out in case of expansion projects.
6.	R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
7.	Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
8.	Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conductive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
<b>Corporate Environment Policy</b>	
1.	Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
2.	Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
3.	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
4.	Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
<b>Miscellaneous</b>	
1.	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
2.	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
3.	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.

#### 4. Any Other Item(s)

N/A
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#### 5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Dr Santoshkumar Hampannavar	Member (EAC)	san*****@yahoo.com	Present

2	Dr Umesh Jagannathrao Kahalekar	Member (EAC)	uka*****@rediffmail.com	Present
3	Shri K B Biswas	Member (EAC)	bis*****@gmail.com	Present
4	Shri Mahi Pal Singh	Member (EAC)	mps*****@nic.in	Present
5	Sundar Ramanathan	Scientist - F	r.s*****@nic.in	Present
6	Sh Inder Pal Singh Matharu IFS	Chairman, EAC	mat*****@gmail.com	Present
7	Sh Lalit Kapur	Member (EAC)	lka*****@yahoo.com	Present
8	Sh Savalge Chandrasekhar	Member (EAC)	sav*****@gmail.com	Present
9	Prof Shyam Shanker Singh	Member (EAC)	sin*****@gmail.com	Present
10	Dr Vinod Agrawal	Member (EAC)	vin*****@yahoo.com	Present
11	Shri Harmeet Sahaney	Member (EAC)	har*****@imd.gov.in	Absent
12	Prof R M Bhattacharjee	Member (EAC)	rmb*****@iitism.ac.in	Absent
13	Shri Prasoon Gargava	SCIENTIST F	pra*****@nic.in	Absent





**Ministry of Environment, Forest and Climate Change  
Impact Assessment Division  
(Thermal sector)**

**Date of zero draft MoM sent to Chairman: 06/09/2025**

**Approval by Chairman: 08/09/2025**

**Uploading on PARIVESH: 09/09/2025**

**SUMMARY RECORD OF THE TWENTY NINTH (29<sup>TH</sup>) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD ON 29<sup>TH</sup> AUGUST, 2025 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH VIRTUAL MODE.**

**29<sup>th</sup> August, 2025 [FRIDAY]**

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of members who participated in the meeting is at **Annexure – I**. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

Confirmation of the Minutes of the 28<sup>th</sup> Meeting of the EAC (Thermal): The minutes of the 28<sup>th</sup> meeting of the EAC (Thermal) held on 12-13<sup>th</sup> August, 2025 has been confirmed by the EAC as uploaded on Parivesh along with following corrections:

**A. Agenda item no: 28.2**

<b>Minutes uploaded on PARIVESH</b>	<b>To be read as</b>
<b><u>Para No. 28.2.19, After specific ToR A(ii)</u></b> PP shall obtain No Objection Certificate from Archeological Survey of India <b>for blasting</b> for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.	<b><u>Para No. 28.2.19, After specific ToR A(ii)</u></b> PP shall obtain No Objection Certificate from Archeological Survey of India for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.
<b><u>Para No. 28.2.19, After specific ToR A(ix)</u></b> The remedial measures for arresting dust generation on roads and atmosphere, Air pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up. Implementation plan along with timelines and financial allocations for Scientific and engineered closure of existing landfill shall be submitted.	<b><u>Para No. 28.2.19, After specific ToR A(ix)</u></b> The remedial measures for arresting dust generation on roads and atmosphere, Air pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up.

Minutes uploaded on PARIVESH	To be read as
<p><b><u>Para No. 28.2.19, After specific ToR A(xv)</u></b></p> <p>Impact of <b>existing integrated facility</b> on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.</p>	<p><b><u>Para No. 28.2.19, After specific ToR A(xv)</u></b></p> <p>Impact of <b>existing Waste to Energy plant</b> on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.</p>
<p><b><u>Para No. 28.2.19, After specific ToR A(xxiii)</u></b></p> <p>Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan for thick plantation <b>in the surrounding Nallah/stream shall be submitted.</b></p>	<p><b><u>Para No. 28.2.19, After specific ToR A(xxiii)</u></b></p> <p>Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan <b>shall be submitted.</b></p>

**B. Agenda item no: 28.7**

Minutes uploaded on PARIVESH	To be read as
<p><b><u>Para No. 28.7.7, Environmental site settings, s.no. 2</u></b></p> <p>Land use breakup Preliminary notification dated 05-09-2024 and demand letter dated <b>10.09.2025</b> has been issued by Revenue Dept</p>	<p><b><u>Para No. 28.7.7, Environmental site settings, s.no. 2</u></b></p> <p>Land use breakup Preliminary notification dated 05-09-2024 and demand letter dated <b>10.09.2024</b> has been issued by Revenue Dept</p>
<p><b><u>Para No. 28.7.7, Environmental site settings, s.no. 4</u></b></p> <p>Existence of habitation &amp; involvement of R&amp;R, if any. A <b>250–500 m</b> buffer from the Reserve Forests will be maintained.</p>	<p><b><u>Para No. 28.7.7, Environmental site settings, s.no. 4</u></b></p> <p>Existence of habitation &amp; involvement of R&amp;R, if any. A <b>25–50 m</b> buffer from the Reserve Forests will be maintained.</p>
<p><b><u>Para No. 28.7.14, Public consultation</u></b></p> <p>No. of people attended: <b>228 Nos</b></p>	<p><b><u>Para No. 28.7.14, Public consultation</u></b></p> <p>No. of people attended: <b>288 Nos</b></p>
<p><b><u>Para No. 28.7.17, Ash Management</u></b></p>	<p><b><u>Para No. 28.7.17, Ash Management</u></b></p>

Minutes uploaded on PARIVESH	To be read as
<b><u>D. Ash Pond Details</u></b> Volume & Quantity in M3 & MT	<b><u>D. Ash Pond Details</u></b> Volume & Quantity in Lac m <sup>3</sup> & Lac MT
<b><u>Para No. 28.7.21, Specific conditions</u></b> <b><u>A. Environment Management</u></b> 2. In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB <b>within six months from the date of grant of EC as committed.</b>	<b><u>Para No. 28.7.21, Specific conditions</u></b> <b><u>A. Environment Management</u></b> 2. In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB <b>within three months from the date of establishment of proposed ash dyke.</b>
<b><u>Para No. 28.7.21, Standard conditions</u></b> <b>F. Water Quality Monitoring and Management</b> 1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m <sup>3</sup> /MW <sub>hr</sub> .	<b><u>Para No. 28.7.21, Standard conditions</u></b> <b>F. Water Quality Monitoring and Management</b> 1. <b>Air-Cooled Condenser cooling system shall be installed to reduce the specific water consumption below 3.0 m<sup>3</sup>/MW<sub>h</sub>.</b>

### **Agenda No 29.1**

29.1 3x800 MW (Phase-I) Patrattu Super Thermal Power by **M/s. Patrattu Vidyut Utpadan Nigam Limited** at Village Patrattu, **District Ramgarh, Jharkhand - Amendment in Environment Clearance – regarding.**  
**[Proposal No. IA/JH/THE/547380/2025; F. No. J-13012/21/2015-IA.I(T)]**

**29.1.1:** M/s. Patrattu Vidyut Utpadan Nigam Limited (PVUNL) has made an online application vide proposal no. IA/JH/THE/547380/2025 dated 07.08.2025 along with Form-4 and sought for following amendment in the EC vide letter no. J-13012/21/2015-IA-I (T) on 07.11.2017 & its amendment dated 16/03/2022 and 03/06/2024 accorded for the project mentioned above.

EC condition No.	Stipulation in EC	Amendment Requested
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EC condition No.	Stipulation in EC	Amendment Requested
Specific conditions clause no. IX.  Amendment vide MoEF&CC letter No. J-13012/21/2015-IA.I(T) dtd. 03.06.2024	A minimum distance of 500 m from the HFL of Nalkari river shall be maintained. Ash mound shall be developed in 340 acres and the height of the ash mound shall be restricted to 35 m (in two benches of 20 m and 15 m height each).  However, till 30.09.2025, PP is permitted to construct and store dry ash in a temporary storage facility (over an area of 25 Ha) within the existing plant premises and having capacity of up to 12.55 lakh CuM)	PUVNL shall comply with the specific condition Clause No. (IX) and its subsequent amendment dtd. 03.06.2025.  Further, permission may be accorded for storage of dry ash in the temporary storage facility till 30.09.2027 with maximum capacity limited to 12.55 lakh CuM and area of 25 Ha as granted earlier.

**29.1.2:** The Committee noted the following during the meeting.

- i. MoEF&CC has accorded Environmental Clearance to M/s. Patratu Vidyut Utpadan Nigam Limited (PVUNL) for setting up of (3x800MW) Coal based power plant at Village Patratu, District Ramgarh, Jharkhand vide letter dated 07/11/2017.
- ii. As per the EC accorded on 07/11/2017, the 3x800 MW units are to be set up within the existing premises of Patratu Thermal Power Station consists of 10 units having configurations as given below:  
Units (1-4): 4 x50 MW  
Units (5-6): 2x100 MW  
Units (7-10): 4x110 MW  
Proponent failed to apprise the status of operation of the above 10 units including the ash disposal and adherence of prescribed emission norms for the above units.
- iii. As per the proposal submitted, total involvement of forest land is 127.871 ha. Status of approvals obtained under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 has not been submitted. No details are provided regarding de-notification of forest land admeasuring 108.87 Ha.
- iv. Status of implementation of EC dated 07/11/2017 and its subsequent amendment including kml file of the complete project site, map depicting the maintenance of project site by 500 m from the HFL of Nalkari river, ash disposal from operating 1x800 MW unit, status of construction of 2x800 MW units, ash mound development status, land use of temporary ash storage facility, mitigation measures being adopted in the temporary ash storage facility as per the EC amendment dated 03/06/2024 have neither been provided in the proposal nor in the presentation made before the EAC.



## **Recommendations of the Committee**

**29.1.3:** In view of the foregoing and after deliberations, the Committee ***recommended to return the proposal in its present*** form and asked the proponent to revisit the entire application by incorporating all the technical shortcomings inter-alia including the above and thereafter proposal shall be submitted by the proponent for fresh consideration by the EAC.

## **Agenda No 29.2**

**29.2** Expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.24 ha by **M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL)** located at Chachai Village, District Anuppur, Madhya Pradesh – **Amendment in Environmental Clearance – regarding.**

**[Proposal No. IA/MP/THE/531999/2025; F. No. J/13011/20/2002-IA.II(T)]**

**29.2.1:** M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) has made an online application vide proposal no. IA/MP/THE/531999/2025 dated 31/07/2025 along with Form-4 and sought for amendment in the EC dated 08/05/2023 accorded for the project mentioned above.

The project proponent earlier submitted the above vide proposal no. IA/MP/THE/507303/2024 dated 13/01/2025 and the same was considered by the EAC – Thermal in its meeting held on 24/02/2025 wherein EA noted that proponent has not obtained requisite approval (Stage I & II) under the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for diversion of 6.171 Ha of forest land involved in the project. The said forest land is reported to be located with the premises of proposed power house for the expansion project. In view of this, EAC recommended to return the proposal in its present form. Further, the EAC recommended that Ministry may send a letter to the project proponent informing that proponent shall not initiate any project related activity at the site till the requisite clearance under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 is obtained for diversion of 6.171 Ha of forest land. Accordingly, MoEF&CC informed the proponent not to initiate any project related activity at the site till the requisite clearance.

**Name of the consultant:** M/s. Re Sustainability Solutions Pvt. Ltd (RSSPL) [S. No. 173 List of ACOs with their Certificate / Extension Letter no: NABET/EIA/2225/RA 0278; Valid up to 26.09.2025]

**Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:**

**29.2.2:** MoEF&CC accorded EC under the provisions of EIA Notification, 2006 to M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) on 08/05/2023 for expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.2 ha located at Chachai Village, District Anuppur, Madhya Pradesh.

**29.2.3:** As per the EC accorded, the land requirement for 660 MW Supercritical Thermal Power Project is 90.22 Ha and the area occupied by the 210 MW power generation unit is 58.7 Ha. Total land after the expansion is 148.92 Ha. The land proposed for the expansion project is under the possession of MPPGCL. Out of 90.2 ha, there is 6.171 Ha of forest land involvement for which requisite Stage I FC obtained on vide letter no. 6-MPR009/2022-BHO/I/107197 dated 24/04/2025.

**29.2.4:** It has been reported that no activity has been commenced at the project site with respect to the implementation of the EC dated 08/05/2023.

**29.2.5:** The details of the condition for which amendment is sought and justification for the same is as follows:

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
i.	EC Sr. No. 10; Page No 6 of 17	Super Critical	Ultra supercritical	<ul style="list-style-type: none"> <li>• <b>Reduced Emissions:</b> Higher efficiency of USC plants results in lower CO<sub>2</sub> emissions, reducing carbon footprint.</li> <li>• <b>Lower Fuel Consumption:</b> USC plants require less fuel thereby reducing overall fuel costs.</li> <li>• <b>Cost Savings:</b> USC plants have higher operational efficiency and reduced fuel consumption leading to lower operational costs over the plant's lifetime.</li> <li>• <b>Improved Flexibility:</b> USC plants are flexible in operation, allowing them to respond better to fluctuations in electricity demand &amp; grid requirements. This flexibility can support the integration of renewable energy sources like wind and solar, which are intermittent in nature.</li> <li>• <b>Longer Lifespan:</b> Advanced materials, design in USC plants contribute to longer operational lifespans, reducing frequency of maintenance shutdowns &amp; improving overall reliability.</li> <li>• <b>Technology Development:</b> Building USC plants encourages the development and deployment of advanced technologies in the energy sector, fostering innovation and supporting economic growth in related industries.</li> </ul>

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
ii.	EC S. No. 9 Under water requirement section : <u>Page No 5 of 17</u>  Std EC condition, I. (v) and VI (i) : <u>Page No 10 &amp; 11 of 17</u>	Induced Draft (Air Cooled Condenser)  Specific water consumption is 2.5 m <sup>3</sup> /MWh	Water Cooled Condenser with Induced Draft Cooling Tower (IDCT) system  Revision in specific water consumption from 2.5 to 3.0 m <sup>3</sup> /MWh	<ul style="list-style-type: none"> <li>• <b>Heat Rate:</b> WCC technology offers 4 - 5 % lesser Heat rate in comparison to ACC.</li> <li>• <b>Thermal Efficiency:</b> WCC has better Thermal efficiency of approx. 1.5 - 1.7% over ACC</li> <li>• <b>Coal Consumption:</b> Lesser coal consumption; causing lesser CO2 emission in comparison to ACC.</li> <li>• <b>Capital &amp; Operational Expenses:</b> Lower capital and operation expenses of approx. 10-15 Paisa/unit (about 50 cr. per annum); than ACC System.</li> <li>• <b>Availability of Vendors:</b> Very few vendors are available for ACC system in the Country.</li> <li>• There will be increase in water consumption in WCC system but adequate water allocation for the project is now available. However, water consumption shall be managed within norms dtd. 28.06.2018 of 3.0 m<sup>3</sup>/MWh.</li> <li>• Lesser quantity of Ash generation will reduce the burden of disposal of Ash.</li> <li>• Emission settled on the soil surface will be considerably reduced.</li> <li>• There will be reduction in stress on ground flora and fauna due to reduction of ash generation and emission.</li> </ul>
iii.	Specific Condition no. xxix: <u>Page No 9 of 17</u>	Development of multi-specialty Hospital	Request for waiving off the condition	<ul style="list-style-type: none"> <li>• Request for waiving off the condition as MPPGCL is not technically equipped for developing &amp; running a Multi-specialty Hospital.</li> <li>• MPPGCL does not have any expertise of doing this and it is also not the core business of MPPGCL.</li> <li>• Two District Hospitals are available in nearby vicinity i.e. at Anuppur (11 Kms) &amp; at Shahdol (within 35 Km)</li> <li>• A Govt. Medical College cum Hospital has recently been established at Distt. Shahdol, nearly 35 Km from Project site; which may also cater the requirement of Multi- Speciality Hospital.</li> </ul>
	EC Sr. No.	Use of existing	Allotment of	<ul style="list-style-type: none"> <li>• Acquisition of additional land for</li> </ul>

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
	9 under Ash pond/Dyke: <u>Page No 4 of 17</u>	Ash pond	additional land for emergency / temporary ash pond and ash dyke.	<p>emergency / temporary Ash Dyke, @ 0.1 Ha/ MW may be permitted in line with MoEF&amp;CC Notification No. S.O. 54819E dated 31st Dec. 2021.</p> <ul style="list-style-type: none"> <li>An area of 66 Ha @ 0.1 Ha per MW and 33% of greenbelt area of 21.78 Ha along the ash dyke, the total requirement will be around 87.78 Ha.</li> <li>For this, MPPGCL is requesting to allow to use 80 Ha. including Green Belt of 20 Ha land adjacent to the existing ash pond. The ash pond will be developed with proper lining which will control the ground water seepage. Hence, no impact on GW.</li> <li>Existing Ash pond has 2 compartments; out of the two permissible raisings, first raising of both the compartments has been done.</li> <li>Second raising of any compartment shall disrupt ash lifting process leading to forced closure of existing 210 MW Unit.</li> <li>Thus, MPPGCL is left with limited capacity commensurate with the day to day lifting of Ash and any hindrance in lifting of Ash will jeopardize the operation of existing 210 MW unit.</li> <li>Project proponent, is accordingly entirely dependent on allotment of land for construction of dedicated temporary storage of ash for the proposed unit.</li> </ul>
iv.	EC Sr. No. 9 Under Fuel and Ash disposal section: <u>Page No 5 of 17</u>	100 mts	155 mts	<ul style="list-style-type: none"> <li>There will be proper dispersion of pollutants with increased stack height .</li> <li>There will be decrease in the GLC, less atmospheric interference, reduce risk of flue gas re-entering into boiler due to “wake effect”</li> <li>Dust deposition on nearby water bodies will be reduced.</li> <li>Reduction in Dust deposition on surface will reduce the pollution stress on the soil surface, conserve the nutrient level of soil surface.</li> <li>Less stress on the vegetation</li> <li>Overall air quality will improve.</li> <li>Movement of avifauna will increase</li> <li>Improvement of workers health due to overall reduction of pollution level in</li> </ul>



S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
				local area, thus, reducing health problems etc.
v.	Specific Condition No. iii: <u>Page No 7 of 17</u>	<ul style="list-style-type: none"> <li>Sal Plantation on 30.2 ha land and development of Sal Nursery</li> <li>Extensive green cover within 2 Km range of the plant boundary</li> <li>Peripheral Green belt (Three row plantation) with <b>Miyawaki plantation</b> technique of <b>15 M thickness</b> along the plant boundary</li> </ul>	<ul style="list-style-type: none"> <li>Mixed Plantation on 30.2 ha land</li> <li>Request for amending the condition to develop green belt in the nearby area of the Plant Boundary, wherever feasible.</li> <li>Request for waiving off the condition</li> </ul>	<ul style="list-style-type: none"> <li>State Forest Research Institute (SFRI), Jabalpur indicated in April'23 that viability of Sal seed is very less &amp; die back phenomena is high.</li> <li>Subsequently, Div. Manager, MP Rajya Van Vikas Nigam Ltd., Umariya Project Divison, Umariya citing refence of Chief Gen. Manager, MP Rajya Van Vikas Nigam Ltd., Jabalpur intimated in Sept'23 that planting Sal in the area is not possible due to reason indicated above and insisted for consent for 100% Mixed plantation.</li> <li>Thereafter, Div. Manager, MP Rajya Van Vikas, Umariya Project Divison, Umariya in Jan'24 quoting the reference of study carried out by Tropical Forest Research Institute (TFRI) indicated that survival of Sal Plantation on Natural Ground in India is very rare &amp; suggested not to opt for Sal Plantation.</li> <li>A mixed variety plantation of approximately 18,000 trees has been completed over 12 ha. within the plant premises and 3,000 trees planted on 3 ha. of land outside the plant.</li> <li>As such, exemption from development of Sal Nursery and 100% Sal Plantation be granted.</li> </ul>
vi.	Std EC Sr. No. VII (ii) <u>Page No 12 of 17</u>	Sulphur Content in the liquid fuel should not exceed 0.5%	'Sulphur Content' in the liquid fuel to be enhanced to 1.5% (for LDO), as per IS 15770:2008.	Requested; as the IS also calls for a ceiling limit of 1.5% Sulphur in LDO
vii.	EC S.No 7 ; <u>Page No 2 of 17</u>	<ul style="list-style-type: none"> <li>Coal to be supplied from Sangma &amp; Korba siding of SECL.</li> <li>Representative grade</li> </ul>	<ul style="list-style-type: none"> <li>Coal to be supplied from SECL sources.</li> <li>Representative grade</li> </ul>	<ul style="list-style-type: none"> <li>SECL has indicated that Coal shall be supplied from any of their source/ Coal fields. They have accordingly insisted to get specific siding names deleted from the EC.</li> <li>SECL has revised allocation to 2.824 MTPA corresponding to 100% normative requirement.</li> </ul>

S.No.	Specific/General Condition No	Details of Conditions as per ToR/EC	Amendment Sought	Justification
		G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/MW; Normative requirement of 2.542 MTPA @90% as per CEA norms.	G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/MW; Revised Normative requirement of 2.824 MTPA @100% as per CEA norms.	

### Observations and deliberation of the EAC

**29.2.6:** The Committee observed and noted the following:

- Instant proposal is for seeking amendment in various conditions prescribed in the EC dated 08/05/2023 accorded for the project titled “Expansion of 210 MW Thermal Power Plant (Unit V) by installation of 1x660MW Amarkantak Supercritical Thermal Power Project in place of decommissioned power generation units of 290 MW (Units: I, II, III & IV) in an area of 90.24 ha by M/s. Madhya Pradesh Power Generating Company Limited (MPPGCL) located at Chachai Village, District Anuppur, Madhya Pradesh.
- No activity has been commenced at the project site with respect to the implementation of the EC dated 08/05/2023.
- As per the EC accorded, the land requirement for 660 MW Supercritical Thermal Power Project is 90.22 Ha and the area occupied by the 210 MW power generation unit is 58.7 Ha. Total land after the expansion is 148.92 Ha. The land proposed for the expansion project is under the possession of MPPGCL. Out of 90.2 ha, there is 6.171 Ha of forest land involvement for which requisite Stage I FC obtained on vide letter no. 6-MPR009/2022-BHO/I/107197 dated 24/04/2025.
- With respect to the amendment sought by the proponent, for the additional area sought for the ash pond neither the proponent nor the consultant was able to provide the details regarding whether the additional area was considered as part of the appraisal process of the EC dated 08/05/2023, ash pond design parameters and method of lining and mode of ash disposal etc. In view of this, EAC not acceded to this amendment request of the proponent.
- With respect to increased stack height, the committee opined new notification has been issued by the Ministry on 11/07/2025 regarding timelines for achieving sulphur dioxide standards for category A,B,C Thermal Power Plants. Proponent has to revisit

the stack height based on the provisions of the said notification. In view of this, EAC not acceded to this amendment request of the proponent.

- vi. With respect to the remaining amendments sought, the Committee deliberated on the justification provided by the proponent and found it satisfactory.
- vii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and if any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

**Recommendations of the Committee:**

**29.2.7:** In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC dated 08/05/2023 as detailed below **subject to stipulation of following additional specific conditions**. All other terms and conditions prescribed in EC dated 08/05/2023 shall remain unchanged:

S.No.	Specific/General Condition No as per EC dated 08/05/2023	Details of Conditions as per ToR/EC	Amendment Sought	Recommendation of the EAC
i.	EC Sr. No. 10; Page No 6 of 17	Super Critical	Ultra supercritical	<b>Agreed</b>
ii.	EC S. No. 9 Under water requirement section : Page No 5 of 17  Std EC condition, I. (v) and VI (i) : Page No 10 & 11 of 17	Induced Draft (Air Cooled Condenser)  Specific water consumption is 2.5 m <sup>3</sup> /MWh	Water Cooled Condenser with Induced Draft Cooling Tower (IDCT) system  Revision in specific water consumption from 2.5 to 3.0 m <sup>3</sup> /MWh	<b>Agreed</b>
iii.	Specific Condition no. xxix: Page No 9 of 17	Development of multi-specialty Hospital	Request for waiving off the condition	<b>Agreed</b>
iv.	EC Sr. No. 9 under Ash pond/Dyke: Page No 4 of 17	Use of existing Ash pond	Allotment of additional land for emergency / temporary ash pond and ash dyke.	<b>Not agreed</b>
v.	EC Sr. No. 9 Under Fuel and Ash disposal section: Page No 5 of 17	100 mts	155 mts	<b>Not agreed</b>
vi.	Specific Condition No. iii: Page No 7 of 17	• Sal Plantation on 30.2 ha land and	• Mixed Plantation on 30.2 ha land	<b>Partly agreed</b>

S.No.	Specific/General Condition No as per EC dated 08/05/2023	Details of Conditions as per ToR/EC	Amendment Sought	Recommendation of the EAC
		<p>development of Sal Nursery</p> <ul style="list-style-type: none"> <li>• Extensive green cover within 2 Km range of the plant boundary</li> <li>• Peripheral Green belt (Three row plantation) with <b>Miyawaki plantation</b> technique of <b>15 M thickness</b> along the plant boundary</li> </ul>	<ul style="list-style-type: none"> <li>• Request for amending the condition to develop green belt in the nearby area of the Plant Boundary, wherever feasible.</li> <li>• Request for waiving off the condition</li> </ul>	
vii.	Std EC Sr. No. VII (ii) <u>Page No 12 of 17</u>	Sulphur Content in the liquid fuel should not exceed 0.5%	'Sulphur Content' in the liquid fuel to be enhanced to 1.5% (for LDO), as per IS 15770:2008.	<b>Agreed</b>
viii.	EC S.No 7 ; <u>Page No 2 of 17</u>	<ul style="list-style-type: none"> <li>• Coal to be supplied from Sangma &amp; Korba siding of SECL.</li> <li>• Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Normative requirement of 2.542 MTPA @90% as per</li> </ul>	<ul style="list-style-type: none"> <li>• Coal to be supplied from SECL sources.</li> <li>• Representative grade G11; Indicative grade G9-G14; Annual coal consumption @85% PLF 4279 TPA/ MW; Revised Normative requirement of 2.824 MTPA @100% as per CEA norms.</li> </ul>	<b>Agreed</b>



S.No.	Specific/General Condition No as per EC dated 08/05/2023	Details of Conditions as per ToR/EC	Amendment Sought	Recommendation of the EAC
		CEA norms.		

### Additional Specific Conditions

- i. Project proponent shall strengthen the Government Primary Health Centres/ Community Health Centres in the nearby vicinity of the project site. Project proponent shall prepare an action plan for implementing the budget proposed for the same, by visiting each PHC/CHC and identifying the needs of all the PHCs/CHCs individually. A day care centre will be constructed and maintained by PP in each Government PHCs/CHCs. The time-bound action plan along with the financial outlay for strengthening the PHCs/ CHCs shall be submitted to the concerned Regional Office of MoEF&CC along with the six-monthly compliance report.
- ii. 6.171 ha of forestland on which stage – I forest clearance has been accorded shall not be disturbed until the stage – II forest clearance is accorded for the same as per the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.
- iii. PP shall install at least 2 MW solar PV for power generation within the project site. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of amendment in the EC.
- iv. Project proponent shall carry out mixed plantation in 30.2 Ha of land comprising of atleast 30% sal plantation. In addition to this, peripheral Green belt with Miyawaki plantation technique along the plant boundary shall also be carried out.

### Agenda No 29.3

- 29.3 Proposed Expansion of 1200 MW to 2000 MW by installing 1X800 MW Plant Unit by **M/s Jindal India Power Limited** at Village-Derang, Post-Kaniha, **District-Angul, State- Odisha – Prescribing of Terms of Reference – regarding.**

**[Proposal No. IA/OR/THE/542805/2025; F. No. J-13011/40/2008-IA-II(T)]**

**29.3.1:** M/s Jindal India Power Limited has made an application online vide proposal no. IA/OR/THE/542805/2025 dated 28/6/2025 along with application in prescribed format (CAF, Form-I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA Notification, 2006 for the project mentioned above. The project activity is listed at item no. 1(d) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

**Name of the EIA consultant:** M/s. **Mantec Consultants Private Limited** [NABET Certificate No.: NABET/EIA/23-26/RA 0305\_Rev.01, Valid till 20.04.2026].

**29.3.2:** The EAC noted the following during the EAC meeting:

- i. The existing TPP of 2x600 MW was accorded environmental clearance vide letter dated 29/09/2008 from Ministry of Environment and Forest. It has been reported that

the said TPP has been implemented and under operation. Instant proposal is for obtaining Terms of Reference (ToR) for undertaking EIA/EMP study for the proposed addition of 1x800 MW TPP within the premises of existing 2x600 MW TPP.

- ii. As per the application submitted proposal involves an forest land of 1.45 Ha. However, in the brief summary and the presentation it has been reported that there is no involvement of forest land.
- iii. In Application form total greenbelt area is written as 128.49 Ha whereas in Brief writeup in Sl. No. 4 in Environmental Setting section it is written as 125.45Ha.
- iv. Neither the project proponent nor the consultant was able to explain the salient features of the proposed expansion project as ash pond design for the proposed expansion, area earmarked for the green belt development and the land use break up for the existing and proposed expansion project.
- v. Land use break up provided is observed to be very confusing as the same has been bifurcated for BGT, CHP, Raw Water Reservoir, Water System Including IDCT, AHP, Fuel Oil Storage, Switchyard, Miscellaneous, Construction Yard, Roads, Green Belt, Ash Dyke Area Township for the existing and proposed expansion separately. It is not clear from the records made available that new facilities will be established for the proposed expansion (or) existing infrastructural facilities will be catering to the proposed expansion.
- vi. There are two rivers in the vicinity of the project site namely Tikra and Othani iver located at distance of 0.18 km and 1.28 km respectively. HFL data of these rivers have not been made available.
- vii. The capacity of ETP proposed is less than actual effluent generation.
- viii. There are 10 temples names have been mentioned under Archaeological sites monuments and details of NOC obtained have not been made available.
- ix. As per the photographs furnished in the presentation, high volume samplers have been kept at the ground level which is not in accordance with the CPCB norms of monitoring. Besides, in the down wind direction, no AAQ station have been established.
- x. Total coal requirement is reported to be 11.7 MTPA and the same would be transported by road and conveyor. The Right of Way for the conveyor belt has not been provided.
- xi. Plant layout does not contain details regarding existing and proposed green belt development.
- xii. In the brief write up submitted the liquid effluents have been given under solid and hazardous waste generation. Further, with respect to ash disposal, no details are provided with respect to the life of the ash pond. Besides, the mode of ash disposal is mentioned as dry disposal with no water, however ash water recirculation system is in place has been reported. Thus, confusing statements have been mentioned for ash disposal.

## Recommendations of the Committee

**29.3.3:** In view of the foregoing and after deliberations, the Committee **recommended to return the proposal in its present** form and asked the proponent to revisit the entire application by incorporating all the technical shortcomings inter-alia including the above and thereafter proposal shall be submitted by the proponent for fresh consideration by the EAC.

### Agenda 29.4

29.4 Expansion of 1x270 MW Thermal Power Project by addition of 2x175 MW coal based thermal power plant by **M/s. Ideal Energy Projects Limited** located at Mouza Khursapar Kinhala, Near village Bela, Tal. Umred, **Dist. Nagpur, Maharashtra – Prescribing of Terms of Reference – regarding.**

**[Proposal No: IA/MH/THE/542684/2025; File No: J-13012/06/2025-IA.I(T)]**

**29.4.1:** Ideal Energy Projects Limited has made an application online vide proposal no. IA/MH/THE/542684/2025 dated 11/07/2025 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToR's for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category “A” of the schedule of the EIA Notification, 2006 and do not attract the general conditions of the EIA Notification, 2006.

**Name of the EIA consultant:** M/s. Reijg GreenLogic Pvt. Ltd., Hyderabad [NABET Certificate No.: NABET/EIA/22-27/IA 0135; Valid up to 28/01/2027].

**Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:**

**29.4.2:** The existing project of 270 MW TPP was accorded environmental clearance vide letter dated 15/05/2009 from SEIAA -Maharashtra. Thereafter, corrigendum to the EC was accorded on 27/11/2009. Total existing area is 101 Ha. Project has been implemented and the units are under operation. Consent to Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide Ir. No. MPCBCONSENT-0000178101/CR/2312000892 dated 08/12/2023. The validity of CTO is up to 31/08/2026.

**29.4.3:** Implementation status of the existing EC dated 15/05/2009

S.No.	Configuration	Capacity (MW)	As per EC dated 15/05/2009	Implementation Status as on date	Production as per CTO
1.	Subcritical Coal Fired Power Plant (CFPP)	270	270 MW	270 MW	270 MW

**29.4.4:** Environmental site settings

S.no.	Particulars	Details	Remarks
1.	Total land	101 ha [Private: 101 ha; Govt.:0 ha; Agriculture: 0 ha;]	Land use: Industrial

S.no.	Particulars	Details	Remarks																														
2.	Land use break up	The proposed expansion will be carried out within the existing premises of 101 Ha. No additional land is required for the proposed expansion. Out of 101 Ha, total green belt will be 37.60 Ha and no additional ash pond is envisaged for the proposed expansion.	Total area: 101 Ha																														
3.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014& 20/2/2025	The entire land of 101 ha is already under the possession of the project proponent.																															
4.	Existence of habitation & involvement of R & R, if any.	<p><b>Project site:</b> Mouza Khursapar Kinhala, Near Village-Bela, Tal- Umrer, Dist – Nagpur</p> <p><b>Study Area:</b> 20°48'36.57"N 79°3'14.76"E Mouza Khursapar.</p> <table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Khursapar Village</td><td>0.85 km</td><td>E</td></tr><tr><td>Bela village</td><td>3.8 km</td><td>SW</td></tr></table> <p>Schools: Satpute house (praful Satpute) - High school : 2.40 Km (SSW) Z. P. Upper Primary School Salairani : 2.80 Km (SSW) Zilla Parishad Uchh Prathmik Shala Bela : 4.40 Km (SW) Z. P. Upper Primary School, Rama : 5.40 Km (WNW)</p>	Habitation	Distance	Direction	Khursapar Village	0.85 km	E	Bela village	3.8 km	SW	R&R is not applicable for this project.																					
Habitation	Distance	Direction																															
Khursapar Village	0.85 km	E																															
Bela village	3.8 km	SW																															
5.	Latitude and Longitude of all corners of the project site.	<p><b>A. Plant Site</b></p> <table><tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>20°48'28.58"N</td><td>79°02'48.02"E</td></tr><tr><td>B</td><td>20°48'47.87"N</td><td>79°03'13.13"E</td></tr><tr><td>C</td><td>20°48'56.18"N</td><td>79°03'16.36"E</td></tr><tr><td>D</td><td>20°48'46.72"N</td><td>79°03'31.09"E</td></tr><tr><td>E</td><td>20°48'39.04"N</td><td>79°03'30.28"E</td></tr><tr><td>F</td><td>20°48'36.67"N</td><td>79°03'42.76"E</td></tr><tr><td>G</td><td>20°48'27.51"N</td><td>79°03'42.51"E</td></tr><tr><td>H</td><td>20°48'24.27"N</td><td>79°03'27.37"E</td></tr><tr><td>I</td><td>20°48'22.00"N</td><td>79°03'13.83"E</td></tr></table>	S. No.	Latitude	Longitude	A	20°48'28.58"N	79°02'48.02"E	B	20°48'47.87"N	79°03'13.13"E	C	20°48'56.18"N	79°03'16.36"E	D	20°48'46.72"N	79°03'31.09"E	E	20°48'39.04"N	79°03'30.28"E	F	20°48'36.67"N	79°03'42.76"E	G	20°48'27.51"N	79°03'42.51"E	H	20°48'24.27"N	79°03'27.37"E	I	20°48'22.00"N	79°03'13.83"E	
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I	20°48'22.00"N	79°03'13.83"E																															



S.no.	Particulars	Details	Remarks																		
		<div>B. Ash pond</div> <table><tr><td>S. No.</td><td>Latitude</td><td>Longitude</td></tr><tr><td>A</td><td>20°48'08.97"N</td><td>79°03'13.04"E</td></tr><tr><td>B</td><td>20°48'06.06"N</td><td>79°03'28.25"E</td></tr><tr><td>C</td><td>20°47'56.41"N</td><td>79°03'15.27"E</td></tr><tr><td>D</td><td>20°48'04.49"N</td><td>79° 03'16.84"E</td></tr><tr><td>E</td><td>20°48'05.47"N</td><td>79° 03'12.24"E</td></tr></table>	S. No.	Latitude	Longitude	A	20°48'08.97"N	79°03'13.04"E	B	20°48'06.06"N	79°03'28.25"E	C	20°47'56.41"N	79°03'15.27"E	D	20°48'04.49"N	79° 03'16.84"E	E	20°48'05.47"N	79° 03'12.24"E	
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D	20°48'04.49"N	79° 03'16.84"E																			
E	20°48'05.47"N	79° 03'12.24"E																			
6.	Elevation of the project site	277 m above mean sea level																			
7.	Involvement of Forest land if any.	Nil and Not applicable	Not Applicable, as forest land is not involved at project site.																		
8.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Canal : Passing through Plant Boundary Veena River : 1.15 Km (W) Nand Nadi : 5.30 Km (SSW) Wadgaon Reservoir : 0.31 Km (N) Amghat Nala : 5.50 Km (SE) Muradpur Talav : 4.60 Km (ENE) Nishanghat Talav : 4.80 Km (E)																			
9.	Archaeological sites monuments/ historical temples etc.	Nil	Not Applicable																		
10.	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	<b>Study area</b> <b>Name of the ESZ/ESA: NA</b> <b>Status of Notification: NA</b> <b>Distance of project from ESZ/ESA: NA</b> <b>Authenticated map of ESZ projecting distance of ESZ from project site: NA</b> Status of NBWL approval: NA <b>List of Reserved and protected forests: Munia Reserve forest - 4 km (approx.)</b>	Munia forest - 4 km (approx.)																		
12.	Involvement of Critically Polluted Area / Severely Polluted area as	<b>Involvement of CPA/SPA:</b> Not applicable <b>Proximity to CPA/SPA:</b> Not applicable	Not applicable Proposed additional environmental																		

S.no.	Particulars	Details	Remarks
	per 2018 CEPI score		safeguards as per MoEF&CC OM dated 31/10/2019

**29.4.5:** The unit configuration and capacity of existing and proposed project is given as below:

Sr.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity*	Total	Technology adopted
1	1 x 270 MW Subcritical Coal Fired Power Plant (CFPP)	2 x 175 MW Subcritical Coal Fired Power Plant (CFPP)	620 MW (2 x 175MW, 1 x 270 MW)	Subcritical Coal Fired Power Plant (PF & CFPP)

*\*Note – It has been submitted by the proponent with respect to the instant expansion proposal based on subcritical technology, a meeting was held in the Ministry of Power on 04/08/2025. As per the minutes of the said meeting submitted by the proponent (F.No. 11/72/2025-Th II dated 25/08/2025 of Ministry of Power), it has been decided to permit the deployment of subcritical CFBC technology for all expansion projects, subject to maintaining biomass co-firing ratio at minimum 20% on annual basis. In view of this, instant was proposal considered by the EAC based on subcritical CFBC technology.*

**29.4.6:** The details of the fuel (coal/gas/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (kms)	Mode of Transportation	Coal characteristics (Worst case scenario)
Existing TPP	1 x 270 MW	SHAKTI scheme coal	40	Road	Ash - (30%) Sulphur - (0.4 to 0.6%) Moisture (10%) GCV –Avg. 4000 Kcal/Kg
Proposed TPP	2 x 175 MW	SHAKTI scheme coal	40	Road	Ash - (30%) Sulphur - (0.4 to 0.6%) Moisture (10%) GCV –avg 4000 Kcal/Kg

**29.4.7: Water Requirement:** Existing water requirement is 15,098 m<sup>3</sup>/day, water requirement is obtained from Wadgaon Dam and permission for the same has been obtained from Irrigation Department, Nagpur vide Agreement dated 04/05/2023. The water requirement for the proposed project is estimated as 25,855 m<sup>3</sup> /day, out of which 21,168 m<sup>3</sup>/day of fresh water requirement will be obtained from the Wadgaon Dam and the remaining requirement of 4,687 m<sup>3</sup>/day will be met from the recycled ETP water. The permission for drawl of surface water is obtained from Irrigation Department, Nagpur Vide

Agreement dated 04/05/2023. The water will be transported to the plant site through pipes/canal and pump house is installed at project site. The specific water consumption for the power plant will be 2.5 m<sup>3</sup>/MWhr.

**29.4.8: Power Requirements:** Existing power requirement of 18 MW is obtained from MSEB / construction power. The power requirement for the proposed project is estimated as 23 MW, all of this will be obtained from the Construction Power / MSEB. (Required power shall be supplied from the existing plant).

**29.4.9: Solid and hazardous waste Management:** The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Sr .	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1.	Municipal solid waste	Domestic activities	22	Collection and segregation	Local authority	-
2.	Fly Ash	Burning of Coal	940831.56	Shall be sent to Cement Manufacturing Plant	Shall be sent to Cement Manufacturing Plant	
3.	Bottom Ash	Burning of Coal	256807.89	Shall be sent to Cement Manufacturing Plant	Shall be sent to Cement Manufacturing Plant	
4.	STP Sludge	STP	9	Used as manure in landscaping	Used as manure in landscaping	Sewerage carrying vehicle with pump & closed tank.
5.	Used or spent oil	DG set and Equipment	19.2	Authorized Recyclers	Authorized Recyclers	-
6.	Chemical sludge from waste water treatment	Waste water treatment	55	CHWTSDF	CHWTSDF	-
7.	Wastes or residues containing oil	Oil tanks	32.4	CHWTSDF	CHWTSDF	-
8.	E-waste such as used computers, keyboards, mouse etc.	Electronic equipment	0.1	Authorised recycler	Authorised recycler	-
9.	Battery Waste	Batteries	0.5	Authorised recycler	Authorised recycler	-

**24.4.10: Cost of project:** Existing capital cost of project was Rs. 1800 Cr. The expansion

cost of the proposed project is Rs. 2400 Cr. The employment generation from the proposed project/ expansion is 560 (380-Permanent. 180-Contractual).

**24.4.11: Green belt development:** Existing green belt has been allocated in 35 ha area which is about 34.69 % of the total project area of 101 ha with total existing Trees of 22,000 nos. Total area of 37.60 ha area will be developed as greenbelt. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

**24.4.12: Ash management for last three years**

Year	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No of storage silos with capacity
The Plant was operational in Oct. 2022.					
2022-23	141417.87	17728.38	12.53	1.23689494	Silo 1 - 1000 MT Silo 2 - 400 MT
2023-24	410637.09	136630.88	33.27	2.7400621	
2024-25	376402.23	319271.07	84.82	0.57131157	

**a. Fly ash Details for last three years=362275.9849 TPA**

Sr.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Cement manufacturing	362275.9849	48.77%	Consent to Operate valid till 31.08.2026
	<b>Total</b>	362275.9849	48.77%	

**b. Bottom ash generation for last three years =185691.43 MT**

Sr.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Use in overburden dumps	0.1604451	8.64 %	NOC from MPCB has been obtained by the mine owner.
	<b>Total</b>	0.1604451	8.64 %	

**c. Legacy ash details= Not Applicable**

**d. Ash Pond details**

Sr.	Details of Ash pond	Ash pond 1	Total
1.	Area (Ha)	14.162	14.162
2.	Dyke height (m)	5	5
3.	Volume (m <sup>3</sup> )	457450	457450
4.	Quantity of ash disposed (Metric Tons)	473630.334	473630.334



Sr.	Details of Ash pond	Ash pond 1	Total
5.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	42.47 349779.666	42.47 349779.666.
6.	Expected life of ash pond (number of years and months)	25 Years	N.A.
7.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE	N.A.
8.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	N.A.
9.	Ratio of ash: water in slurry mix (1: __):	70 : 30	N.A.
10.	Ash water recycling system (AWRS) installed and functioning :	Yes	N.A.
11.	Quantity of wastewater from ash pond discharged into land or water body (m <sup>3</sup> )	NIL	N.A.
12.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	NIL	N.A.
13.	Last date when the audit was conducted and name of the organization who conducted the audit:	28.12.2024 Department of Civil Engineering, Visvesvaraya National Institute of Technology, Nagpur	N.A.

#### E. Proposed ash utilization plan for expansion project

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash Fly & Bottom)	481950	657951	1139901	1025910	90%	113990	A.1000MT B.400MT

**Ash pond details: Existing ash pond will be utilized. No new ash pond is envisaged.**

**29.4.12:** Proposed Terms of Reference (Baseline data collection period of March to May 2025)

Attributes	Parameters	Sampling		Remarks
Air		No. of stations	Frequency	

Attributes	Parameters	Sampling		Remarks
Meteorological parameters	1	1	1	-
AAQ parameters	SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub> , Pb, CO, NH <sub>3</sub> , C <sub>6</sub> H <sub>6</sub> , BaP, As, Ni	8	24	-
Noise	24 hours	8		-
Water				
Surface water	Colour, Odour, pH value, Turbidity, Biochemical Oxygen Demand, Total Dissolved Solids, Aluminium, Ammonia, Boron, chlorides, Copper, Fluoride, Iron, Magnesium, Nitrate, Selenium, Sulphate, Total alkalinity, Total Hardness, zinc, Cadmium, Lead, Arsenic	4	1	-
Ground water quality parameters	Colour, Odour, pH value, Turbidity, Biochemical Oxygen Demand, Total Dissolved Solids, Aluminium, Ammonia, Boron, chlorides, Copper, Fluoride, Iron, Magnesium, Nitrate, Selenium, Sulphate, Total alkalinity, Total Hardness, zinc, Cadmium, Lead, Arsenic	1	1	-
Land				-
a. Soil quality b. Land use		8	1	-
Biological a. Aquatic b. Terrestrial		1	1	-
Socio-economic parameters		1	1	-

**29.4.13:** Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

**A. Summary of court cases:** No court cases pending to the project

**B. Summary of Show Cause Notices:** There are no Show Cause Notices pertaining to existing and proposed project.

**C. Summary of violation:** There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

**29.4.14: Written submissions:** Project proponent made the following written submission during the meeting

1. Point no. 2, Land use break-up.

There is no requirement for additional space for Ash Pond in the expansion project. This land will be added to the Green Belt. The total green belt shall be 37.60 Ha instead of 33.28 ha, as mentioned earlier.

2. Point no. 6,

a. The fuel requirement for the existing plant of 1 x 270 MW is 4050 TPD, i.e. 1.3 MMT per Year.

Since IEPL is supplying power to MAHAGENCO, under Case IV bidding, the coal equivalent to 200 MW is being procured against MAHAGENCO's quota. For the remaining 70 MW, coal is being procured through the SHAKTI scheme.

b. For the proposed unit of 2 x 175 MW, the fuel shall be as follows, based on 20% Bio-Mass on a Heat equivalent basis.

Coal : 4040 TPD i.e. 1.33 MMT Per Year

Bio-Mass (Less than 15% Moisture Basis) : 940 TPD i.e. 0.31 MMT Per Year.

c. For the existing unit, coal is being transported by road, mostly from mines of WCL Umred area, situated around 40 km from the site. For the expansion project, if required, coal will be transported over Indian Railways, up to Butibori Station on Nagpur - Wardha Line, from where it will be transported by Road up to the plant and the distance involved is 22 kms.

Bio-mass will be transported in either loose/ briquetted form, depending on the distance, while taking due precautions.

While transporting by road, the concerned MPCB guidelines shall be followed.

3. Point No. 9

9.2 Fly Ash @ 34% - 0.71 MMT Per Year (This includes ash generated through Unit I and Unit II.

Fly Ash generated from Bio-Mass: 0.021 MMT Per Year .

9.3 Bottom Ash @20% - 0.17 MMT per year.

B. Other Points Discussed

- a. Source of Water shall be Wadgaon Dam on the river Vena, which is under the Water Resource Department, Government of Maharashtra.
- b. Sewage Treatment Plant (STP) of Nagpur Municipal Corporation (NMC) is more than 70 km away, and most of the quantity is being utilised by MAHAGENCO. If required, a Certificate shall be obtained from NMC.
- c. Existing Ambient Air Quality Monitoring Report, considering Unit-I in operation, sample reports attached as Annexures.
- d. Bio-Mass Ash utilisation - Feasibility for separation and usage in cement shall be explored separately. Impact of Bio-Mass ash contamination in coal ash, in respect of the required quality for cement manufacture to be ascertained.
- e. Impact of air pollution, if any, while transporting coal will be assessed separately. Meanwhile, it is to reiterate that for the existing unit, all guidelines of the Maharashtra Pollution Control Board are being followed.
- f. Baseline data collection sampling shall be as suggested in the meeting i.e. AAQ 10 station, Surface Water - 8 GroundWater - 6.
- g. Renewable Energy will be 1 MW instead of 840 KW.

- h. Slide No. 26 of the presentation : With the consent of MPCB, bottom ash is utilised for mine void (filling of abandoned stone quarries). The mention of landfill refers to mine void.

### **Observations and deliberation of the EAC**

**29.4.15:** The Committee observed and noted the following:

- i. Instant proposal is seeking for expansion of 1x270 MW Thermal Power Project by addition of 2x175 MW coal based thermal power plant based on subcritical technology by M/s. Ideal Energy Projects Ltd located at Village Khursapar Kinhala near village Bela in Umrer Tehsil of Nagpur district.
- ii. The EAC noted that with respect to the instant expansion proposal based on subcritical technology, a meeting was held in the Ministry of Power on 04/08/2025. As per the minutes of the said meeting submitted by the proponent (F.No. 11/72/2025-Th II dated 25/08/2025 of Ministry of Power), it has been decided to permit the deployment of subcritical CFBC technology for all expansion projects, subject to maintaining biomass co-firing ratio at minimum 20% on annual basis. In view of this, instant was proposal considered by the EAC based on subcritical CFBC technology.
- iii. The existing project of 270 MW TPP was accorded environmental clearance vide letter dated 15/05/2009 from SEIAA -Maharashtra. Thereafter, corrigendum to the EC was accorded on 27/11/2009. Total existing area is 101 Ha. Project has been implemented and the units are under operation. Consent to Operate for the existing unit was accorded by Maharashtra State Pollution Control Board vide Ir. No. MPCBCONSENT-0000178101/CR/2312000892 dated 08/12/2023. The validity of CTO is up to 31/08/2026.
- iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH.
- v. The proposed expansion will be carried out within the existing premises of 101 Ha. No additional land is required for the proposed expansion. Out of 101 Ha, total green belt will be 37.60 Ha and no additional ash pond is envisaged for the proposed expansion.
- vi. There is no involvement of forest land in the proposed project.
- vii. Wadgaon Dam is located at a distance of 0.31 km in North direction. PP should submit detailed mitigation measures for the protection of the same.
- viii. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.
- ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.
- x. Munia Reserve Forest is situated approx. 4 km from the project site.



- xi. Existing water requirement is 15,098 m<sup>3</sup>/day, water requirement is obtained from Wadgaon Dam and permission for the same has been obtained from Irrigation Department, Nagpur vide Agreement dated 04/05/2023. The water requirement for the proposed project is estimated as 25,855 m<sup>3</sup> /day, out of which 21,168 m<sup>3</sup>/day of fresh water requirement will be obtained from the Wadgaon Dam and the remaining requirement of 4,687 m<sup>3</sup>/day will be met from the recycled ETP water. The permission for drawl of surface water is obtained from Irrigation Department, Nagpur Vide Agreement dated 04/05/2023. The water will be transported to the plant site through pipes/canal and pump house is installed at project site. The specific water consumption for the power plant will be 2.5 m<sup>3</sup>/MWhr.
- xii. Existing power requirement of 18 MW is obtained from MSEB / construction power. The power requirement for the proposed project is estimated as 23 MW, all of this will be obtained from the Construction Power / MSEB. (Required power shall be supplied from the existing plant).
- xiii. Zero liquid discharge (ZLD) will be adopted for the proposed plant using suitable effluent treatment plant, sludge thickener and RO systems.
- xiv. Existing capital cost of project was Rs. 1800 Cr. The expansion cost of the proposed project is Rs. 2400 Cr. The employment generation from the proposed project/ expansion is 560 (380-Permanent. 180-Contractual).
- xv. Existing green belt has been allocated in 35 ha area which is about 34.69 % of the total project area of 101 ha with total existing Trees of 22,000 nos. Total area of 37.60 ha area will be developed as greenbelt. A 10 m. wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare.
- xvi. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.
- xvii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

#### Recommendations of the Committee:

**29.4.16:** The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission** on PARIVESH Portal under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

##### [A] Environmental Management and Biodiversity Conservation

- i. Project proponent shall submit an action plan for maintaining biomass co-firing ratio at minimum 20% on annual basis in the proposed expansion project as committed.
- ii. A Cumulative Environmental Impact Assessment study of all the existing and proposed projects in the 10-km radius of the proposed project shall be conducted and

- the same shall be included the in EIA/EMP report. Details of industrial units present in 10 Km radius of the power plant shall be earmarked in map and submitted.
- iii. Proponent shall submit details of mitigation measures to be adopted for protection of Wadgaon Dam.
  - iv. Certified compliance report containing compliance to the prescribed EC conditions for the 1x270 MW as per the MoEF&CC O.M. dated 08/06/2022 shall be submitted.
  - v. Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.
  - vi. Certificate from concerned District Magistrate/ Authorised Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain of canal passing through the project site corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
  - vii. All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent.
  - viii. Project proponent shall also obtain recommendations from the State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
  - ix. EIA/EMP study shall take into consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.
  - x. Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of release of cooling tower water on aquatic life and action plan for complying with the mitigation measures shall be submitted.
  - xi. Project proponent shall commission a study on Hydrology and Hydrogeology of the project site as well as the study area of the project site through a NABET accredited consultant. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
  - xii. Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.
  - xiii. PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 33 % of the project area. The PP should submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
  - xiv. Action plan for development of three-tier plantation programme (33.0% of total project cover area) along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.

- xv. Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.
- xvi. Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.
- xvii. Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
- xviii. Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
- xix. Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body (minimum 60 meters) etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.
- xx. Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied, and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP report.
- xxi. Details pertaining to water source, treatment and discharge should be provided.
- xxii. PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.
- xxiii. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
- xxiv. An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.
- xxv. PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG-based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.
- xxvi. PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.
- xxvii. PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
- xxviii. Details on renewable energy (solar plant) proposed to be installed as energy conservation measures and action plan for the same shall be submitted.
- xxix. The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.
- xxx. Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of



the notification number G.S.R 465 (E) dated 11/07/2025 related to sulphur di-oxide standards.

- xxxi. Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
- xxxii. Carbon emission due to TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
- xxxiii. PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. An action plan in this regard shall be submitted.

#### **[B] Disaster Management**

- i. A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.

#### **[C] Socio-economic study**

- i. Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
- ii. Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation & Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.
- iii. A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
- iv. Demographic details and land use change details in 10 km area shall be submitted.

#### **[D] Miscellaneous**

- i. Plot the wind rose diagram using the Typical Meteorological Year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
- ii. PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.
- iii. PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
- iv. Detailed description of all the court cases along with its current status shall be submitted.



- v. PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
- vi. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyse the samples.
- vii. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- viii. PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.
- ix. Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.
- x. Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted.
- xi. The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
- xii. PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
- xiii. All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
- xiv. Necessary coordination shall be made with concerned SPCB (who is responsible for Compliance of OM dated 14.01.2025) regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024 through which projects requiring prior EC were exempted from requirement of CTE.

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**ANNEXURE-I**

**LIST OF PARTICIPANTS OF EAC (THERMAL) IN 29<sup>th</sup> MEETING HELD ON 29<sup>TH</sup> AUGUST, 2025 THROUGH VIRTUAL MODE**

S. No.	Name & Address	Role	12.08.2025
1.	Shri Inder Pal Singh Matharu, (I.F.S. Retd.)	Chairman	Present
2.	Shri Lalit Kapur	Member	Present
3.	Dr. Umesh Jagannathrao Kahalekar	Member	Present
4.	Dr. Santosh Kumar Hampannavar	Member	Present
5.	Shri Savalge Chandrasekhar	Member	Present
6.	Shri K. B. Biswas	Member	Present
7.	Prof. Shyam Shanker Singh	Member	Present
8.	Dr. Vinod Agrawal	Member	Present
10.	Shri Mahi Pal Singh, Chief Engineer	Representative of Central Electricity Authority (CEA)	Present
11.	Shri Harmeet Sawhney, Scientist 'E'	Representative of Indian Meteorological Department (IMD)	Absent
12.	Prof. R M Bhattacharjee	Representative of IIT/ISM Dhanbad	Absent
13.	Shri Prasoon Gargava, Scientist 'F'	Representative of Central Pollution Control Board	Absent
13.	Shri Sundar Ramanathan	Scientist 'F' & Member Secretary	Present
14.	Dr. Rajesh Prasad Rastogi	Scientist 'D'	Present

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**ANNEXURE-II**

**APPROVAL OF CHAIRMAN – EAC**

9/9/25, 2:44 AM

(203 unread) - Inbox - Mail (rp.rastogi@gov.in)

**Re: FINAL MOM OF 29 EAC THERMAL HELD ON 29/08/2025**

Inderpal Singh Matharu <matharu0204@gmail.com>

Mon, 08 Sep 2025 2:26:54 PM +0530 INBOX

"Sundar Ramanathan" <r.sundar@nic.in>, "RAJESH PRASAD RASTOGI" <rp.rastogi@gov.in>

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Dear Sundar ji ji,

I have gone through the final draft MoM of the 29th EAC- Thermal held on 29th August 2025 sent by you. In this all the points have been incorporated including the amendments done in Zero draft of it. I agree with the above Final draft of MoM.

Hence I approve the final MoM of the 29th EAC- Thermal .

Sincerely yours

Inder Pal Singh Matharu

Chairman

EAC Coal mining and Thermal power

MoEF&CC

Gol