

## **MINUTES OF THE 36<sup>TH</sup> MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE (EAC) ON ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF THERMAL POWER PROJECTS HELD ON 25<sup>TH</sup> JANUARY, 2023.**

The 36<sup>th</sup> Meeting of the re-constituted EAC (Thermal Power) organized by the Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road, New Delhi was held on 25<sup>th</sup> January, 2023 through video conference under the Chairmanship of Shri Gururaj P. Kundargi. The list of Members participated in the meeting is at **Annexure**.

### **Agenda Item No. 36.1: Confirmation of the Minutes of the 35<sup>th</sup> EAC meeting**

The Minutes of the 35<sup>th</sup> EAC (Thermal Power) meeting held on 28<sup>th</sup> December, 2022 were confirmed in the meeting.

### **Agenda Item No. 36.2**

**1x660MW Amarkantak Supercritical Thermal Power Project (Expansion) in place of existing Amarkantak Thermal Power Station (Phase – I & II: 290 MW) in area of 90.24ha, Chachai Village, District Anuppur, Madhya Pradesh by M/s M. P. Power Generating Company Ltd. – Reconsideration of Environment Clearance (EC) – reg.**

**[Proposal No. IA/MP/THE/10749/2003; F. No. J-13012/07/2019-IA.I (T)]**

**36.2.1** The proposal is for grant of Environment Clearance to the project 1x660MW Amarkantak Supercritical Thermal Power Project (Expansion) in place of existing Amarkantak Thermal Power Station (Phase – I & II: 290 MW) in area of 90.24ha, Chachai Village, District Anuppur, Madhya Pradesh by M/s M.P. Power Generating Company Ltd.

#### **36.2.2 Observation in Earlier EAC:**

The proposal for grant of Environmental Clearance was last considered by the EAC in its 31<sup>st</sup> EAC meeting held on 11<sup>th</sup> October, 2022.

**Query No.1. PP shall submit alternative site analysis for different land area within the project boundary or reduce CHP land requirement area to save 6.171 ha of the forest land.**

**Reply:** The preparation of plant lay-out for coal based thermal unit along with orientation of facilities within it, is a specialized job and is carried-out by expert agencies. Generally, the alignment of the major facilities viz. Main plant, CHP, AHP, Water facilities and Switchyard etc., are being envisaged in such a manner so as to achieve; not only space optimization but also to ensure the maximum efficiency/output from the proposed Thermal unit, in future. The aforesaid facilities are so inter-linked and depending on each other that their precise proximity plays a very significant role in the performance of units; in terms of Aux. Power Consumption, O&M Expenses and consequently tariff. All these aspects were suitably taken care while finalizing the plant layout. Due to the limitation of the proposed unit to utilize the existing Rail track/ Rail facilities, it does not appear feasible to shift the Coal Handling Plant, in general and the Coal Stock Pile & Stacker-Reclaimer, in particular; to other location within plant boundary. As a matter plant of

fact, to accommodate the proposed unit within the power house premises, we were constrained to relocate few 220 KV feeder bays and Switchyard Control Room, to accommodate the 400 KV Switchyard.

We wish to once again reiterate that the said forest area of 6.171 Ha; proposed to be acquired for the project, contains about 580 trees, out of which 518 trees are Eucalyptus trees, which are more than 10 years old; as also indicated in final EIA report.

**Query No.2.PP shall submit certified letter mentioning that PP will not encroach the lake/pond.**

**Reply:** Khasra-wise certification from the Patwaris of the villages has been submitted, which establishes ownership of MPPGCL on the Reservoir. Still, as desired; an Undertaking, mentioning that the project authorities will not encroach the reservoir has been submitted.

**Query No.3.PP shall submit time bound action plan for implementation of periphery green plantation with survival rate of more than 90% by adopting Scientific methodology.**

**Reply:** The greenbelt will be developed along the periphery 15 m wide three tier plantation using native and perennial plants with survival rate of more than 90% by adopting scientific methodology as per CPCB Guidelines for Developing Greenbelts (PROBES/75/1999-2000) using source-oriented approach method. The length of the periphery along the ATPS is around 6974 m considering width of the three-tier greenbelt as 15 m, the total area for greenbelt along the periphery will be around 103458 m<sup>2</sup> (10.34 Ha). Considering number of plants around 1700 per Ha, the total number of plants proposed will be around 17580.

**Query No.4.PP shall submit the letter including certified map from Patwari mentioning the khasra numbers of the land area is under possession of PP along with total area of Chachai lake (Suthana Reservoir).**

**Reply:** The total area under Suthana Reservoir is 427 Ha, which is falling under five villages; namely Kholi, Mediyaras, Chachai abad, Deori and Kelhauri. In this context, as desired by the EAC, the requisite certifications of the above land areas have been obtained from the concerned Patwari(s) of the villages, in the form of letters & Certified Maps.

**36.2.3** The Project Proponent and the accredited Consultant Ramky Enviro Services Private Limited, made a detailed presentation on the salient features of the project and informed that:

- i. M/s Madhya Pradesh Power Generating Company Limited (MPPGCL), proposes to set up a 1x660 MW coal based Supercritical Thermal Power Station (STPS) in place of retired units of (PH-I (1x20 MW + 1x30 MW) & PH-II (2x120 MW)) = 290 MW at Chachai village, Anuppur district, Madhya Pradesh.
- ii. MPPGCL has retained M/S Ramky Enviro Services Private Limited (RESPL) as their environmental consultant. Technical details of the project are taken from Detailed Project Report (DPR) prepared by M/s Desein Private Limited, New Delhi.
- iii. Terms of Reference (TOR) for undertaking detailed EIA Study in accordance with

the provisions of the EIA notification by MoEF&CC vide its letter dated 10/10/2019.

- iv. Dismantling of existing units, 4 units of PH-I & PH-II are already decommissioned and dismantling of 2 units (30MW + 20MW) of PH-I are completed. Dismantling of 2x120MW of PH-II is in progress as per Construction and Demolition Waste Management Rules 2016. The details of installed capacity and current status of the power plant are as follows:

v.

Phase	Units	Size (MW)	Commissioning Date	Current Status
PH-I	Unit I	30	1965	Decommissioned on 01/04/2009
	Unit II	20	1965	Decommissioned on 01/04/2009
PH-II	Unit III	120	1977-78	Decommissioned on 13/01/2015
	Unit IV	120	1977-78	Decommissioned on 01/05/2014
Total		290		
PH-III	Unit V	210	09/09/2009	Operating (adjacent)

vi. **Project Location:**

Proposed project is planned to be located within existing Amarkantak Thermal Power Station (ATPS) boundary after dismantling PH-I & PH-II units. In addition to the proposed project, 1x210 MW TPP is in operation from year 2009 within ATPS boundary. The project site is located near Chachai village, Anuppur district, Madhya Pradesh. Boundary coordinates of proposed plant and existing ash pond are given below:

ID	Latitude	Longitude	ID	Latitude	Longitude
<b>Proposed plant coordinates:</b>					
A	23° 09' 56.1"N	81° 38' 31.3"E	N	23° 09' 22.1"N	81° 38' 25.1"E
B	23° 09' 50.8"N	81° 38' 24.2"E	O	23° 09' 29.5"N	81° 38' 14.1"E
C	23° 09' 50.0"N	81° 38' 20.2"E	P	23° 09' 49.4"N	81° 38' 10.2"E
D	23° 09' 46.1"N	81° 38' 21.1"E	Q	23° 09' 48.9"N	81° 38' 06.9"E
E	23° 09' 40.7"N	81° 38' 25.3"E	R	23° 09' 52.7"N	81° 38' 06.1"E
F	23° 09' 41.6" N	81° 38' 33.1" E	S	23° 09' 50.8" N	81° 37' 55.9" E
G	23° 09' 44.5" N	81° 38' 42.8" E	T	23° 09' 57.8" N	81° 37' 53.7" E
H	23° 09' 33.9" N	81° 38' 45.8" E	U	23° 09' 58.4" N	81° 37' 57.3" E

I	23° 09' 32.6" N	81° 38' 39.6" E	V	23° 10' 01.1" N	81° 37' 56.6" E
J	23° 09' 30.4" N	81° 38' 38.5" E	W	23° 10' 05.1" N	81° 38' 17.8" E
K	23° 09' 28.5" N	81° 38' 35.1" E	X	23° 10' 06.5" N	81° 38' 17.0" E
L	23° 09' 27.3" N	81° 38' 35.7" E	Y	23° 10' 08.5" N	81° 38' 28.3" E
M	23° 09' 24.3" N	81° 38' 34.3" E			
<b>Existing ash pond coordinates:</b>					
A1	23°10'46.9"N	81°36'45.3" E	A5	23°10'29.6"N	81°37'11.8"E
A2	23°10'43.7"N	81°37'09.2" E	A6	23°10'32.2"N	81°36'54.8"E
A3	23°10'41.5"N	81°37'11.0" E	A7	23°10'35.8"N	81°36'54.4"E
A4	23°10'40.2"N	81°37'17.6" E	A8	23°10'38.2"N	81°36'41.8"E

**vii. Salient features of the project site:**

<b>Particulars</b>	<b>Details</b>
Location	Chachai village, Anuppur district, Madhya Pradesh (within the existing ATPS complex/boundary)
Ground elevation	Elevation of proposed site is 477m to 498 m above MSL.
Land details	223*acres(within ATPS site boundary)
Survey of India(SOI) Toposheet No.	10km radius: F44D11&F44D12 10to 15 km radius: F44D08 &F44D16
Latitude & Longitude	23°9'22.1"Nto23°10'08.5"N & 81°37'53.7"Eto81°38'45.8"E
Nearest Habitation	Chachai village-adjacent(NE)
Nearest town	Amlai-5.5 km (NW)
Nearest Railway Station	Amlai Railway station-3.6km(NW)
Nearest Highway	SH-9A4.4km(W), NH-43- 4.3km(N)
Nearest AirPort	JabalpurAirport-160km(W)
Nearest water body	Suthna reservoir (Chachai lake) - adjacent (E);Sone River:1.8km(E)
Reserved/ Protected Forest	Burhar RF- Adjacent (N) Mauhar RF4.8 km(E) Near Mauhari Village RF 5.2 km (S) Lakhanpur RF 6.9km (S)
Nearest Wildlife Sanctuary/ National	None

Park	
Nearest Historical Places	No archeologically important places exist within 10km of the project site
Surrounding industries	1x210 MW Plant within ATPS boundary; Orient Paper mill, 3.8km (NW)-Amlai
Seismicity Zone	Seismic Zone-III as per IS1893(Part-1):2005
# All distances are aerial distances *Existing Ash pond (67.70acres) outside plant boundary to be utilized for ash disposal	

viii. **Land requirement:**

Total land requirement for proposed plant is 223 acres. Land for main plant & equipment will be available after dismantling of PH-I & PH-II units within the ATPS site boundary. For proposed plant, land requirement is about 0.34 acres / MW against 0.35 acres / MW as per Central Electrical Authority (CEA) guidelines September, 2010. Forest area of 6.171 Ha (15.249 Ac) exists within proposed plant area. ATPS has submitted online application for diversion of forest area under Forest (conservation) Act, 1980, in line with the ministry's Office Memorandum dated, 31/03/2011. There is no additional land acquisition and no R&R involved in the project.

The land area breakup of existing & proposed plant with greenbelt and existing ash pond is provided is as follows:

S. No	Description	1x660MW (acres)	1x210MW (acres)
<b>A. Inside plant boundary</b>			
	Plant area	146.6	109.9
	Green Belt	76.4	35.1
	<b>Total</b>	<b>223</b>	<b>145</b>
<b>B. Outside plant boundary (Existing ash pond)</b>			
	Pond -1	As per TOR existing ash pond shall be used	32.52
	Pond-2		35.18
	<b>Total</b>		<b>67.70</b>
<b>C. Existing green belt developed outside plant boundary</b>			
	Green belt along the road		21
	<b>Total</b>		<b>21</b>
<b>Total Green belt developed for 1x210MW plant(A+C)</b>			<b>56.1</b>
Note: Additional Green Belt developed in colony is 62.3 acres			

ix. **Fuel requirement:**

Project is based on 100% domestic coal supplied by Sangma & Korba side of South Eastern Coalfields Limited (SECL) with a coal linkage/ LOA of

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.

**Fuel transportation:** Coal is transported to project site by Indian Railways & own rail system of MPPGCL. Support fuel LDO of about 2730 KL per year @ 0.5 ml/KWh is required for boiler start-up/support and for subsequent low load operations. Support fuel will be transported to plant handling area by road tankers or by railway wagons.

x. **Water requirement:**

Consumptive water requirement of proposed plant is drawn by dedicated intake from Suthna reservoir (Chachai Lake)/Sone River water to Suthna reservoir. Proposed plant has a water allocation of 5.15 Million Cubic Meters per year (MCM) by Water Resource Department (WRD), Bhopal.

Plant has envisaged installation of Air-Cooled Condenser (ACC) instead of conventional Water-Cooled Condenser (WCC) technology to save consumptive water. Use of ACC in place of WCC technology has following benefits:

- Cooling Tower (CT) water requirement is reduced from 80,000 m<sup>3</sup> to 4,200 m<sup>3</sup> achieving about 94.8% reduction in water requirement.
- CT make up water requirement is reduced from 1457 m<sup>3</sup> / h to 95 m<sup>3</sup> / h achieving about 93.5% reduction in daily water requirement.
- To further optimize water requirement air cooled condenser is envisaged in place of conventional condenser cooling water system. However, for Auxiliary cooling system Induced Draft Cooling Tower (IDCT) is provided. Cooling water will be pumped to Auxiliary cooling water circuit and thereafter shall be discharged into IDCT having a cooling range of 90oC/100oC maintain a minimum Cycle of Concentration (COC) at 5.
- Water requirement of the plant is reduced from 2.5 m<sup>3</sup> / MWh to < 1 m<sup>3</sup> / MWh

Water requirement of 1x210 MW plant is drawn from Suthna reservoir by dedicated intake. Average fresh water requirement of plant is about 726 m<sup>3</sup> /h that is 3.46 m<sup>3</sup> /MWh (about 3.5 m<sup>3</sup> /MWh).

xi. **Ash Handling System (AHS)**

Ash formed due to combustion of pulverized coal in the steam generator will be collected as bottom ash in the bottom ash hopper, coarse ash in economizer, Ash Handling Plant (AHP) and duct hoppers and dry fly ash in ESP and stack hoppers. Bottom ash will be collected in the water impounded bottom ash hopper and conveyed to ash slurry sump through jet pumps and shall be dumped in ash dyke. The dry fly ash collected in silos, shall be transported by rail and road to prospective users/ consumers. The unit has envisaged installation of ACC instead of conventional WCC to save consumptive water.

**Ash utilization:**

To achieve ash utilization of at least 50% of ash generated within 1 year, 70%

within 2 years, 90% within 3 years and 100% within 4 years from commissioning of the units (as per MoEF&CC notification dated 3rd November, 2009) ATPS shall make:

- Identity prospective cement, brick & tiles manufactures and construction companies within 100 km radius and place allocation order for lifting fly ash from the project site.
- Initiate correspondence with all district collectors, concerned state and central government agencies to help enhance utilization of fly ash as per 2009 notification for purposes such as embankment of roads, various construction works etc.
- Initiate correspondence with all identified underground and opencast mines within 40 km radius for placing allocation order for bulk lifting of from the plant. Ash can be utilized as a stowing material.

xii. **Baseline Environment Status:**

Field investigations were undertaken in the study area for collecting existing baseline data during pre-monsoon season (April to June 2019). During field investigations existing baseline data for Land Use Land Cover (LULC), air, water, noise, soil, hydrogeological & geological, ecological and socio-economic conditions were collected.

**a. Land Use Land Cover (LULC)**

LULC features of study area was collected by analyzing Survey of India (SOI) topo sheets, satellite imageries supplied by NRSC and ground validation for interpretation of False Color Composite (FCC) imageries through site visits. Land use pattern of study area mainly falls under following categories: Built-up: 11.17%; Agriculture: 63.03%; Forest: 11.76%; Waste land: 10.53%; Water bodies: 3.27% and others: 0.24%.

**b. Meteorology (Climate)**

Metrological data is collected from nearest IMD station at Pendra road and also at project site with the help of automatic weather monitoring station. Predominant wind direction recorded during monitoring period is NNW to SSE followed by N to S with average wind speed of 2.1 m/s and calm condition recorded is 13.71 %.

**c. Ambient Air Quality (AAQ):**

AAQ was monitored at 11 locations within study area. Monitoring locations were identified w.r.t upwind; cross wind and downwind direction of project site. Air pollutants monitored are Particulate Matter (PM<sub>2.5</sub> & PM<sub>10</sub>), Sulphur Dioxide (SO<sub>2</sub>), Oxides of Nitrogen (NO<sub>x</sub>), Ozone(O<sub>3</sub>), Carbon Monoxide (CO) and Mercury(Hg) as per MoEF&CC guidelines and results were compared with NAAQ 2009 CPCB standards. The PM<sub>10</sub> concentration levels (98th Percentile) recorded are in range of 54.5 to 68.6 µg/m<sup>3</sup> against a standard of 100 µg/m<sup>3</sup>. The PM<sub>2.5</sub> concentration levels (98th Percentile) are in range of 34.9 to 45.9 µg/m<sup>3</sup> against a standard of 60 µg/m<sup>3</sup>. Hence PM<sub>10</sub> & PM<sub>2.5</sub> concentration levels observed in study area are well within standards for industrial, residential, rural & other areas. The SO<sub>2</sub> and NO<sub>x</sub> 24 hr concentration levels (98th Percentile) observed are in the range of 11.4 to 17.1 µg/m<sup>3</sup> and 18.9 to 26.3 µg/m<sup>3</sup> respectively against a standard of 80 µg/m<sup>3</sup>. The observed SO<sub>2</sub>

and NOx concentration levels in the study area are well within the standards for industrial, residential, rural and other areas. The NH3 concentration levels (98th Percentile) recorded are in the range of 15.9 to 24.4 µg/m<sup>3</sup> against a standard of 400 µg/m<sup>3</sup>. The O3 concentration levels (98th Percentile) recorded are in the range of 16.4 to 40.2 µg/m<sup>3</sup> against a standard of 100 µg/m<sup>3</sup>. The CO concentration levels (98th Percentile) recorded are in the range of 660 to 940 µg/m<sup>3</sup> against a standard of 2000 µg/m<sup>3</sup>. The observed NH3, O3 and CO concentration levels in the study area are well within the standards for industrial, residential, rural and other areas. The Hg concentration levels recorded are below detectable levels (less than 0.001 µg/m<sup>3</sup>).

xiii. **Public Hearing (PH)**

PH was conducted by MPPCB, Shahdol on 17th December, 2020 at 11:30 am at Govt. high school premises, gram panchayat Kelhoura, tehsil & district – Anuppur (about 2 Km from project site). Information regarding public hearing was published 30 days before the scheduled date in the national level/ local level newspapers Times of India Jabalpur edition and Raj Express respectively distributed in the Amarkantak Thermal Power Station area. In addition to this publicity was made through announcement via public loud speakers/banners. In the public hearing on dated 17.12.2020, Additional collector (ADM) Shri Sarodhan Singh as the representative of Collector/District magistrate Anuppur and Shri Sanjeev Mehra Regional Officer, Regional Office, MPPCB, Shahdol were present on the public hearing panel. Representatives of industry management and resident citizens and media representatives of the proposed project area were present.

xiv. **Project benefits:**

Contribution of the power plant on local social infrastructure is expected to be significant. The proposed power plant will stimulate the growth of industrial and commercial activities in and around the district, by improving the availability of the power. This Project will provide a significant amount of direct and indirect employment opportunities to the local people with different skills and trades.

The physical infrastructure and socio-economic status of the surrounding areas will be benefited as follows:

- Improvement in existing road & rail connectivity, educational, housing, banking, postal, medical, communication and recreation facilities.
- Improvement in power supply, water supply and sanitation.
- Improvement in the socio-economic status.
- Improvement in economic conditions and recreation facilities
- Training will be given to local people to improve employment potential
- Increase in revenue to State from taxes & duties from development of local businesses

xv. **Project Cost:**

Total estimate cost of the project is Rs. 4665.87 Crores and EMP cost (Capital Cost): Rs. 768.75 Crores



xvi. **Employment:**

Manpower required for project during construction phase shall be mostly sourced from neighboring villages. During operation phase existing manpower of decommissioned units shall be employed. Additional requirement of about 150 people will be taken from neighboring villages. Details of manpower required during construction & operation period is as follows:

S. No	Phase	Number of Employees		
		Permanent	On-Contract	Total
1	Construction Phase	100	3000	3100
2	Operation Phase	200	200	400*

\*Additional man power requirement will be about 150 people out of 400 required

xvii. **Corporate Environmental Responsibility (CER)**

Proposed project is a brown field project. Fund for CER activities are provided as per MOEF&CC OM dated 30.09.2020. Cost are based on the concerns/request received during PH & interaction with local communities and shall update as suggested by EAC/ SEAC.

CER funds will be utilized over a period of three years. Proposed CER activities and budget allocation are given below:

Activities	Details	Frequency	Yearly allocation			Total amount
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
Health Checkups & Medical facilities	Health checkup at Nearby villages & Distribution of medicines to needy	Once a quarter in Villages in core zone & needy villages in other zones	0.9	0.9	0.9	2.7
Rainwater harvesting pits	Technical & financial assistance for rain water harvesting pits in villages	Need based	0.5	0.5	0.5	1.5
Installation of hand pumps	Hand pump & community water filter units in near by villages	Need based	0.5	0.5	0.5	1.5
Installation of solar lights	Solar street lights will be installed in Project area villages	Need based	0.5	0.5	0.5	1.5
Infra structure	Modernization of class rooms,	Need based				

development of schools	provision of potable drinking water and improving sanitation, distribution of school dress and stationary in local Government schools		0.8	0.8	0.9	2.5
Plantation drives	Identified blocks of degraded forests, schools and community building in the project area	Once in six months in project area	0.5	0.5	0.5	1.5
Construction of community toilets	A total of 5 toilets will be constructed for the community use in the needy villages	5 villages will be targeted in the project area. SBM-Rural funding of Rs. 65,000/- for each community toilet will be mobilized. O&M will be provided for first 3 years	0.5	0.5	0.5	1.5
Vocational education training program	Identified youth for nearby villages to be trained in job oriented courses	Half yearly one batch	0.5	0.5	0.5	1.5
Strengthening agriculture	Enhancement of infrastructure in local Mandis /markets	Once in a quarter/Need based	0.5	0.5	0.5	1.5
	<b>Total</b>	<b>5.2</b>	<b>5.2</b>	<b>5.3</b>	<b>15.7</b>	

xviii. The silent features of the project are as under:

<b>Project Details</b>
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Name of the Proposal	1x660MW Amarkantak Supercritical Thermal Power Project (Expansion) in place of existing Amarkantak Thermal Power Station (Phase – I & II: 290 MW) in area of 90.24ha, Chachai Village, District Anuppur, Madhya Pradesh by M/s M. P. Power Generating Company Ltd.
Proposal No.	IA/MP/THE/10749/2003
Location	Chachai Village, District Anuppur, Madhya Pradesh
Company's Name	Madhya Pradesh Power Generating Co. Limited (MPPGCL)
Accredited Consultant and certificate no.	Re Sustainability Solutions Private Limited (formerly Ramky Enviro Services Pvt Ltd) NABET/EIA/1922/RA0140 valid upto March 11, 2023
Inter- state issue involved	No
Seismic zone	Zone - III: Moderate Damage Risk Zone (MSK VII)
<b>Category Details</b>	
Category of the project	Category A
Capacity	Existing 1 x 210 MW Proposed (Expansion) 1 X 660 MW Supercritical TPP
Attracts the General Conditions (Yes/No)	No
<b>4. Project Details</b>	
If expansion, the details of ECs (including amendments and extension of validity) of existing Units etc.	EC details: No. J- 13011/20/2002.IA II(T) dated 29 <sup>th</sup> April 2004
Amendments granted, if Yes details	NA
Expansion / Green Field (new): (IPP / Merchant / Captive):	Expansion (Merchant)
If expansion, the date of latest monitoring done by the Regional Office (R.O) of MoEF&CC for compliance of the conditions stipulated in the environmental and CRZ clearances of the previous phases. A certified copy of the latest R.O. monitoring report shall also be submitted.	Site Visit by done by the Regional Office (R.O) of MoEF&CC on 12/13. 12.2019
Specific webpage address where all EC related documents (including monitoring and compliance related	Not available

reports/documents) of the specific project under consideration are/will be available. Also contact details of PP's officer responsible for updating this webpage/information.	
Average height of: (a) TPP site, (b) ash pond site etc. above MSL	TPP – 477 to 498 m above msl  Ash pond – 477 to 484 m above msl
Whether the project is in the Critically polluted Area (CPA) or within 10 km of CPA. If so, the details thereof:	No
CRZ Clearance	NA
Cost of the Project (As per EC and revised): Cost of the proposed activity in the amendment:	Rs 4665.87 (Crores)
Employment Potential for entire project/plant and employment potential for the proposed amendment (specify number of persons and quantitative information)	Construction Phase: 3100 people (Permanent 100; Temporary 3000) Operation phase: 400 people (Permanent 200; Temporary 200)
Benefits of the project (specify quantitative information)	Employment opportunities, increase in power generation to meet the power requirement of the state, economic development of the state
<b>Electricity Generation Capacity:</b>	
Capacity & Unit Configurations:	Existing plant 1x210 MW Proposed plant 1 x 660 MW Total Capacity after expansion = 870 MW
Generation of Electricity Annually	$(210 \times 24 \times 365 \times 0.85) / 1000 = 1563$ MU $(660 \times 24 \times 365 \times 0.85) / 1000 = 4914$ MU
<b>Details of Fuel &amp; Ash Disposal</b>	
Fuel to be used	Primary Fuel: Domestic coal Support Fuel: Light diesel oil (LDO)
Quantity of Fuel required per Annum:	Proposed TPP has a coal consumption of 4,279 Tonne per MW per Annum @ 85% PLF. Normative requirement of 2.542 MTPA (@ 90% as per CEA norms dated 23.3.2019) Support fuel Light Diesel Oil (LDO) of 2730 KL per year @ 0.5 ml/kwh for Boiler start-up / support and for subsequent low load operations
Coal Linkage / Coal Block: (If Block allotted, status of EC & FC of the Block)	Coal linkage/ LOA of Representative grade G11; Indicative grade G9-G14; with M/s South Eastern Coal fields ltd (SECL) (mines allocation is not finalized). LOA for grant of

	coal linkage with SECL (minutes of 34th CLOA meeting dated 20th Dec 2019). Coal likely to be sourced from Sangma & Korba side of SECL
Details of mode of transportation of coal from coal source to the plant premises along with distances	Coal will be transported to project site by Indian railways & own rail system of MPPGCL (Tentative distance about 50 Km)
Fly Ash Disposal System Proposed	High / Medium / Lean concentration slurry.: Slurry
Ash Pond/ Dyke (Area, Location & Co-ordinates) Average height of area above MSL (m)	(If expansion project state additional area required for ash pond): As directed by EAC existing ash pond of 1x210 unit will be utilized. The available ash pond area (1x210 TTP) is 67.7 Ac (27.4 Ha). Proposed project, as per notification no. S.O.54819E 31st Dec, 2021 is eligible for an emergency or temporary ash pond with an area of 163.1Ac (66 Ha) @ 0.1 Ha per MW. Even if the directives of EAC to utilize ash pond of 210 MW is considered, the project is eligible for a differential ash pond area of 95.4 Ac (38.6 Ha [(163.1 Ac – 67.7 Ac) or (66 Ha – 27.4 Ha)] which including the 33% greenbelt area 31.6 Ac (12.8 Ha) along the ash dyke, the requirement will be to the tune of 127 Ac (51.4 Ha) say 52 Ha. Hence, we request the honourable EAC to allow to utilize 128 Ac (52 Ha) of land for new ash pond. On approval from EAC / MOEF&CC, we will utilize 128 Ac (52 Ha) for ash pond, within which 33% of area will be developed as Green Belt. Ash Pond Location: 23°10'40.26"N 81°36'59.52"E. Elevation: 477 to 484 m above msl
Quantity of a. Fly Ash to be generated b. Bottom Ash to be generated:	Fly Ash Worst coal: 1.12 MTPA Linked coal: 0.79 MTPA Bottom Ash Worst coal: 0.48 MTPA Linkage coal: 0.34 MTPA
Fly Ash utilization (details)	(MoU with Cement/Brick Manufactures/ Others): Utilization will be as per the applicable MoEF&CC guideless from time to time (MOEF&CC, New Delhi notification S.O. 54819E dated 31 <sup>st</sup> December 2021)
Stack Height (m) & Type of Flue	100 (m) (new for 1x660 MW unit) Single/Bi/Tri Flue: Single
<b>Water Requirement</b>	

Source of Water:	Suthna Reservoir/ Sone River	
Quantity of water requirement:	5.15 MCM allotted with Water Resources Department, MP Government	
Distance of source of water from Plant:	Distance of sone river is 1.8 km from plant & Suthna reservoir is adjacent to plant	
Whether barrage/ weir/ intake well/ jack well/ others proposed:	No	
Mode of conveyance of water:	Pipeline	
Status of water linkage:	(Date of allocation obtained): 07/03/2020	
(If source is Sea water) Desalination Plant Capacity	Not applicable	
Mode / Management of Brine:	Not applicable	
Cooling system	Induced/ Natural draft: Induced draft (Air cooled condenser)	
<b>Land Area Break-up</b>		
TPP Site	TPP Site: Proposed 223 Ac (90.2 Ha), existing 145 Ac (58.7 Ha), Total after expansion 368 Ac (148.92 Ha). Ash Pond: Existing ash pond of 1x210 MW unit [67.70 Ac (27.4 Ha) outside plant boundary] Proposed Greenbelt 76.4 Ac (30.9 Ha), Existing 56.1 Ac (22.7 Ha) [35.1 Ac (14.2 Ha) inside the plant and 21 Ac (8.5 Ha) outside the plant boundary along the road]	
Ash Pond		
Township		
Railway Siding & Others		
Raw Water Reservoir		
Green Belt		
Others		
Total (if expansion state additional land requirement)		
Status of land acquisition	Land for proposed unit is in possession of MPPGCL. However, acquisition of 14.249 Ac (6.171 Ha) forest land located within Power House premises is under process	
Status of the project:	Not started waiting for EC	
If under construction phase: please specify the reasons for delay, works completed till date and balance works along with expected date of completion	NA	
If under operation phase, date of commissioning (COD) of each unit. Whether the plant was under shutdown since commissioning, details and reasons.	NA	
<b>Presence of Environmentally Sensitive areas in the study area</b>		
Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate /letter / Remarks
Reserve Forest/Protected Forest Land	Yes	-
National Park	No	-
Wildlife Sanctuary	No	-
Archaeological sites	No	-

monuments/historical temples etc.			
Names & distance of National parks, Wildlife sanctuaries, Biosphere reserves, Heritage sites Rivers, Tanks, and Reserve Forests etc. located within 10 km from the plant boundary:	<b>Name</b>	<b>Distance (km)</b>	<b>Direction</b>
	<b>Forests</b>		
	Burhar RF	Adjacent to site	N
Additional information (if any)	No		
<b>Court Case Details</b>			
Any litigation/ Court Case pertaining to the project	No		
Is the proposal under any investigation? If so, details thereof.	No		
Any violation case pertaining to the project:	No		
Additional information (if any)	Court case No.35/2022(CZ); with respect to Ash dyke breach, against existing unit 1X210 MW at ATPS is pending before NGT, Central Zone, Bhopal.		

#### **36.2.4 The EAC during deliberations noted the following:**

The proposal is for grant of Environmental Clearance to the project for 1x660MW Amarkantak Supercritical Thermal Power Project (Expansion) in place of existing Amarkantak Thermal Power Station (Phase – I &II: 290 MW) in area of 90.24ha, Chachai Village, District Anuppur, Madhya Pradesh by M/s M.P. Power Generating Company Ltd.

The project/activity is covered under category A of item 1(d) ‘Thermal Power Plants’ of the Schedule to the Environmental Impact Assessment (EIA) Notification, 2006, as amended and requires appraisal at Central level by the sectoral EAC in the Ministry.

The ToR for the project was granted on 10.10.2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 17.12.2020.

Earlier the environmental clearance was granted by the Ministry vide letter No. J- 13011/ 20/2002.IA-II(T) dated 29<sup>th</sup> April 2004 for 1X210 MW Amarkantak Thermal Power Plant.

The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing have been duly addressed by the project proponent.

**36.2.5** *The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** for grant of Environmental Clearance to the project 1x660MW Amarkantak Supercritical Thermal Power Project (Expansion) in place of existing Amarkantak Thermal Power Station (Phase – I &II: 290 MW) in area of 90.24ha, Chachai Village, District Anuppur, Madhya Pradesh by M/s M.P. Power Generating Company Ltd subject to compliance of following specific environmental safeguard conditions, in addition to the standard EC conditions stipulated for the thermal power*

*plants:*

### **Environmental Management**

- i. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- ii. Peripheral Green belt (Three row plantation) with Miyawaki plantation technique of 15 m thickness along the plant boundary shall be developed with more than 90% survival rate of the plant species. It would be ensured that total 33% area of total project cover area is under green cover focusing on Ash Dyke area.
- iii. Sal Plantation shall be done in 30.2 ha land available within project cover area at southern-east side of the plant as committed by the Project Proponent. Dedicated Nursery for Sal plantation shall be developed within two years. PP shall submit progress on Sal plantation & Nursery in six monthly compliance report to IRO, MoEF&CC.
- iv. Extensive green cover within 2 km range of the plant boundary shall be developed. An action plan in this regard to be prepared in consultation with CPCB/expert institution and submitted before Regional Office of the Ministry within 3 months.
- v. 24X7 online monitoring system for ambient air quality shall be established with its connectivity with SPCB and CPCB server. Stack monitoring shall be done through 24X7 online monitoring system. The emission Standards for Municipal Solid Waste based Thermal Power Plants as per Municipal Solid Waste Rules, 2016 dated 8.4.2016 (S.O. 1357 (E)) shall be complied (Refer Part C of Schedule II of Municipal Solid Waste Rules, 2016 dated 8.4.2016 (S.O. 1357 (E))).
- vi. Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as waste delivery points, transfer areas and other vulnerable dusty areas shall be provided along with an environment friendly sludge disposal system. Water Sprinkling on roads shall be done in every 6 hours in winter season and 3 hours in summer season of roads within 1 km range approaching the plant. A logbook shall be maintained for the activity and be in six-monthly compliance report.
- vii. LED display of air quality (Continuous Online monitoring) shall be installed on the roadside (within 1 km range) and nearby hotspots viz. residential colony, Schools Hospitals; maintenance of devices shall be done on regular basis.
- viii. Everyday cleaning of road/Paved roads within 1 km range of plant site shall be ensured throughout the year through vaccum based vehicle.
- ix. Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
- x. Project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality / local bodies/ similar organization located within 50km radius of the proposed power project to minimize the water drawl from surface water bodies.



- xi. A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Zero liquid discharge shall be adopted. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
- xii. Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
- xiii. Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.
- xiv. Fly ash handling shall be done strictly as per extent rules/regulations of the Ministry/CPCB issued from time to time.
- xv. Monitoring of surface water quality and Ground Water quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report.
- xvi. A well designed rain-water harvesting system shall be put in place within six months, which shall comprise of rain water collection from the built up and open area in the plant premises and detailed record kept of the quantity of water harvested every year and its use.
- xvii. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/ operation of the power plant. A list of all small and large water bodies shall be prepared after physical survey within 10 km radius of the project. A detailed conservation plan for all these water bodies shall be prepared and submitted before the Regional Office of the Ministry within 3 months. Implementation status of conservation plan be submitted in 6 monthly compliance report.
- xviii. Watershed development plan shall be prepared focusing on micro watershed development within 10 km radius of the project.
- xix. A detailed ecological monitoring and survey covering forestry, fisheries, wildlife and its habitat shall be done once in two years to assess the impacts of project on the local environment and ecology. Monitoring report shall be uploaded on the Parivesh Portal and a copy of the same be submitted to the regional office of MoEF&CC.
- xx. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

- xxi. An Environmental Cell headed by the Environment Manger with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
- xxii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- xxiii. The energy sources for lighting purposes shall preferably be LED based.

### **Socio-economic**

- xxiv. Public grievance redressal system shall be established under supervision of project head. The functioning of the system shall be reviewed every month.
- xxv. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5km radius of the project cover area, creation of sacred groves etc. shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
- xxvi. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
- xxvii. The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of Environmental Clearance for undertaking the CER activities, committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
- xxviii. *Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.*
- xxix. *A multi-specialty Hospital shall be established to cater the need of population living within 10 km.*

### **Miscellaneous**

- xxx. *Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.*

xxxi. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

### **Agenda Item No. 36.3**

**Expansion of existing 106.617 MW and 112.45 MW gas based TPP by addition of 395 mw gas based TPPP at village Dhuvaran, Taluk Kahambat, District Anand (Gujarat) by M/s Gujarat State Electricity Corporation Limited (GSECL) - Reconsideration of Amendment in Environmental Clearance – reg.**

**[Proposal No. IA/GJ/THE/20425/2011; F. No. J-13012/103/2007-IA.II (T)]**

**36.3.1** The proposal is for grant of amendment in Environment Clearance for Expansion of existing 106.617 MW and 112.45 MW gas based TPP by addition of 395 MW gas based TPPP at village Dhuvaran, Taluk kahambat, District Anand (Gujarat).

#### **36.3.2 Observation in Earlier EAC:**

The proposal for grant of Environment Clearance was last considered by the EAC in its 32<sup>nd</sup> EAC meeting held on 2<sup>nd</sup> November, 2022.

**Query No.1: Project Proponent shall submit details about the ground water resources, along with comparison of ground water EC/TDS and canal water EC/TDS and quality of water.**

**Reply:** There are three types of water sources at DGBPS. 1. Brackish Water Borewell, 2. Sweet (fresh) water Bore well and 3. Kanbha Pond (canal water). The brackish water requirement of DGBPS is met from 17 nos. bore wells located in its plant and colony premises, water from which used in Cooling Tower makeup water. To meet the fresh water requirement there are 14 nos. of Fresh water borewell located about 10 to 12 Km from DGBPS plant, water from which is use for domestic use, DM plant make up and plant service water. A detail of borewells is attached as Annexure 1a. Canal water is also used in CT makeup water which is supplied from Pond located at Kanbha village 12 km away from DGBPS plant.

**Query No.2:PP shall submit time period from which ground water is being withdrawn along with its quantity.**

**Reply:** Ground water is withdrawn to meet the water requirements of DGBPS since commissioning of plant along with pond water. Last five year Ground Water withdrawn data has been submitted.

**Query No.3:PP shall submit water balance (water utilization) for the month of March to June and July to February.**

**Reply:** The water balance diagram for period of March-21 to June-21 and July-21 to Feb-22 has been submitted. This water balance includes the quantity of water supplied to all units of DGBPS and to colony for domestic use and also for CSR purpose in surrounding village.

**Query No.4:Details about the treatment of STP sewage and utilization. It shall be justified that why STP treated water can't be used for power generation.**

**Reply:** Details of unit wise treatment process at STP of 350 m<sup>3</sup>/day has been submitted. Treated STP waste water from DGBPS is used in gardening/plantation in premises as well as plant industrial use. It is also please be noted that reuse of 10 MLD of treated waste water from STP of Khambhat Nagar Palika as per GOG policy dtd 28.05.2018 for reuse of TWW for TPP is also under course of development stage.

**Query No.5: Yearly Ground Water recharge rate, 10 years rainfall data (within 5km radius of the plant boundary), percolation rate of rain water harvesting system, its locations, future plan to recharge the ground water and surface plan of borewell location shall be submitted.**

**Reply:** At DGBPS ground water recharge rate is about 5400m<sup>3</sup> per year. 10 yrs rainfall data has been submitted. Further details of existing Rainwater harvesting structure at DGBPS with location and percolation rate has also submitted. Moreover, since entire DGBPS plant and colony area are covered with Rainwater harvesting well structures, there is not any future plan for new additional GW recharge structure. Further surface plan of borewell location has been submitted.

**Query No.6:Water auditing study shall be carried out to justify the quantity of the water has been conserved by the PP.**

**Reply:** The process of carrying out water audit study of Dhuvaran GBPS is currently under progress. Budgetary offers invited from accredited consultant as per CGWA notification requirement. subsequent process of work contract will take time as per work order placement procedure.

**Query No.7:A study shall be carried out on impact of TPP by drawing of ground water on nearby estuaries and its mitigation measures, if any.**

**Reply:** Details of impact of DGBPS drawl of ground water on near estuaries i.e. surface water and its mitigation measure is submitted, which is taken from Impact Assessment Report(IAR) study recently for DGBPS Ground water NOC as per CGWA requirement through accredited consultant. Also as per modeling study carried out with IAR study, it will be having a local effect and not a regional effect. Thus it will not be having any significant effect on the ground water regime and the saline water in this region.

**Query No.8:**An EIA accredited consultant shall attend the next EAC to present all technical details.

**Reply:** M/s Sujlam Consultant, Nagpur will be informed to attend next VC meeting with all technical details.

**36.3.3** The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

- i. The Environmental Clearance (EC) for "Expansion of existing 106.617 MW and 112.45 MW Gas Based TPP by addition of 395 MW Gas Based TPP at Village Dhuvaran, in Khambhat Taluka in Anand District, in Gujarat" was accorded by MoEF&CC vide letter dated 13.01.2011.
- ii. At time of grant of EC water requirement will be 13.8 MLD, which will be obtained from Mahi Canal and Reservoir at Kanbha village from existing pipeline.
- iii. PP submitted proposal dated 14.10.2022 and has sought following amendments in EC dated 13.01.2011:

S.No.	EC Condition no.	Stipulated in EC	Amendment requested
1.	2.	<p>The Ministry of Environment &amp; Forests has examined the application. The proposal is for expansion of existing 106.617 MW and 112.45 MW Gas Based TPP by addition of 395 MW Gas Based TPP at village Dhuvaran, in Kahambhat Taluk, in Anand Distt., in Gujarat. Besides the above units other units which will be de-commissioned are 4x63.5 MW Oil Fired Plant; 2x27 MW Open Cycle Gas Turbine and 2x140 MW Open Cycle Gas Turbine. Land requirement will be 30 acres, which is available within the existing premises. The co-ordinates of the site are at Latitude 22°14'03.76" N to 22°14'09.95" N and Longitude 72°45'30.39" E to 72°45'30.75" E. Gas requirement will be 1.8 MMSCMD, which will be obtained from GAIL/GSPCL.</p> <p><b>Water requirement will be 13.8 MLD, which will be obtained from Mahi Canal and Reservoir at Kanbha village from existing pipeline.</b> There are no national park, wild life</p>	<p>The Ministry of Environment &amp; Forests has examined the application. The proposal is for expansion of existing 106.617 MW and 112.45 MW Gas Based TPP by addition of 395 MW Gas Based TPP at village Dhuvaran, in Kahambhat Taluk, in Anand Distt., in Gujarat. Besides the above units other units which will be de-commissioned are 4x63.5 MW Oil Fired Plant; 2x27 MW Open Cycle Gas Turbine and 2x140 MW Open Cycle Gas Turbine. Land requirement will be 30 acres, which is available within the existing premises. The co-ordinates of the site are at Latitude 22°14'03.76" N to 22°14'09.95" N and Longitude 72°45'30.39" E to 72°45'30.75" E. Gas requirement will be 1.8 MMSCMD, which will be obtained from GAIL/GSPCL.</p> <p><b>Water requirement will be 13.8 MLD, which will be obtained from Mahi Canal and Reservoir at Kanbha village from existing pipeline for a period whenever the water is available from this source. Alternatively, in case of non-availability of water from Mahi Canal and Reservoir at Kanbha village, the water can be obtained from the sweet / brackish water borewells in and around the plant premises.</b></p>

		sanctuary, biosphere/ tiger/ elephant reserves, heritage sites etc within 10km of the project boundary. Public hearing was held on 29.09.2010. Cost of the project will be Rs. 1433.85 Crores.	<b>Brackish water from borewells can be used for cooling systems and sweet borewell water can be used for potable use / DM Water / Plant services.</b> There are no national park, wild / life sanctuary, biosphere / tiger / elephant reserves, heritage sites etc within 10km of the project boundary. Public hearing was held on 29.09.2010. Cost of the project will be Rs. 1433.85 Crores.
2.	Specific condition (vi)	<b>No ground water shall be extracted for the project work at any stage.</b>	As the water from Mahi canal and Reservoir at Kanbha village is not available on regular basis, brackish / sweet ground water can be used for the project, in case of non-availability of this water.

**36.3.4** The EAC during deliberations noted the following:

The proposal is for amendment in Environmental Clearance (EC) granted by the Ministry vide letter dated 13.01.2011 for the project Expansion of existing 106.617 MW and 112.45 MW gas based TPP by addition of 395 MW gas based TPP at village Dhuvaran, Taluk Kahambat, District Anand (Gujarat) in favour of M/s Gujarat State Electricity Corporation Limited (GSECL).

Earlier, The environment clearance was granted by the Ministry for Expansion of existing 106.617 MW and 112.45 MW gas based TPP by addition of 395 MW gas based TPP at village Dhuvaran, Taluk Kahambat, District Anand (Gujarat) vide letters no J-13012/103/2007-IA.II (T) dated 13.01.2011.

**36.3.5** *The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** for proposed amendment and allowed to withdrawal of 12.3 MLD Brakish water from borewells during month of March to June only and withdrawal of 0.8 MLD fresh water only for domestic purpose from borewells throughout the year, subject to compliance of following additional conditions: -*

(i) *The project proponent shall withdraw 12.3 MLD Brakish water from borewells during month of March to June only.*

(ii) *Fresh water withdrawal shall be 0.8 MLD only for domestic purpose from borewells.*

(iii) *Automatic water level recorder shall be installed and continuous monitoring shall be carried out for both Fresh and Brakish water in borewell. Periodical monitoring (once in 3 months) of Fluoride, Nitrate and Heavy metals shall also be carried out.*

(iv) The project proponent shall conduct Salinity test of ground water during Pre and Post monsoon. The Salinity test report shall be submitted to concerned IRO of the MoEF&CC.

(v) Water audit study shall be conducted and the study report be submitted to the concerned IRO of the MoEF&CC. (after completion)

**Agenda Item No. 36.4**

**Proposed expansion by addition of 1000 MW (2x500 MW) Lignite Based TPP at Neyveli, in Kurinjipadi Tehsil, in Cuddalore Distt., in Tamil Nadu by M/s Neyveli Lignite Corporation Ltd.- Amendment in Environmental Clearance – reg**

**[Proposal No. IA/TN/THE/296458/2023; F. No. J-13012/250/2007-IA.II (T)]**

**36.4.1** The proposal is for amendment in Environmental Clearance (EC) granted by the Ministry vide letter dated 21.10.2010 for the project proposed expansion by addition of 1000 MW (2X500 MW) Lignite based TPP at Neyveli, in Kurinjipadi Tehsil, in Cuddalore Distt., in Tamil Nadu in favour of M/s Neyveli Lignite Corporation Ltd.

**36.4.2** The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

- i. The Environment Clearance (EC) for proposed expansion by addition of 1000 MW (2X500 MW) Lignite based TPP at Neyveli, in Kurinjipadi Tehsil, in Cuddalore Distt., in Tamil Nadu was accorded by MoEF&CC vide letter dated 21.10.2010.
- ii. PP submitted proposal dated 6.1.2023 for amendment in Environmental Clearance for Discharge of Treated Trade Effluent into the Existing drain for Neyveli New Thermal Power Station (2X500 MW), Neyveli, Kurinjipadi Tehsil, Cuddalore District, Tamil Nadu.
- iii. The amendment has been sought with the details as under:

S. No.	Details as per EC	Amendment sought	Justification
	General Conditions, Sr.no (i) stipulated that, “The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon	Amendment in Environmental Clearance condition for Discharge of treated trade effluent from NNTPS into existing drain	Around Neyveli, Project affected persons who had given their land for Mines and Thermal Power Station were living in nearby villages.  Projected affected persons had given their representation to let out the treated water from NNTPS

			to their Agricultural lands for their livelihood.  Further, TNPCB also instructed to obtain EC amendment from competent authority
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**36.4.3** The EAC during deliberations noted the following:

The proposal is for amendment in Environmental Clearance (EC) granted by the Ministry vide letter dated 21.10.2010 for the project proposed expansion by addition of 1000 MW (2X500 MW) Lignite based TPP at Neyveli, in Kurinjipadi Tehsil, in Cuddalore Distt., in Tamil Nadu in favour of M/s Neyveli Lignite Corporation Ltd.

Earlier, the environment clearance was granted by the Ministry for proposed expansion by addition of 1000 MW (2X500 MW) Lignite based TPP at Neyveli, in Kurinjipadi Tehsil, in Cuddalore Distt., in Tamil Nadu vide letters no J-13012/250/2007-IA.II (T) dated 21.10.2010.

The project proponent could not justify that amendment requested will not pose negative impact on the surrounding environment. It was also noted that PP has not submitted the certified compliance report of existing environmental clearance. It is necessary to have a detailed study on the possible environmental impacts on application of industrial waste water into agricultural fields in the nearby area of the project site by the reputed expert institute.

**36.4.4** The EAC after detailed deliberations not accepted the amendment as requested and **returned the proposal in present form.**

**Agenda Item No. 36.5**

**Raghunathpur Thermal Power Station Phase -II (2x660 MW) in an area of 3353 acres located at district of Purulia, West Bengal by M/s Damodar Valley Corporation – Terms of Reference (ToR) – reg**

**[Proposal No. IA/WB/THE/414071/2023; F. No. J-13011/22/2007-IA.II (T)]**

The project proponent vide email dated 24.1.2023 has informed that due to some unavoidable reasons they will not be able to attend the EAC meeting.

The EAC therefore deferred the proposal.

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

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**ATTENDANCE**

<b>S. No.</b>	<b>Name</b>	<b>Role</b>	<b>Attendance</b>
1.	Shri Gururaj P. Kundargi	Chairman	P
2.	Dr. Narmada Prasad Shukla	Member	P
3.	Dr. Santosh Kumar Hampannavar	Member	P
4.	Dr. Umesh Kahalekar	Member	P
5.	Shri K.B. Biswas	Member	P
6.	Dr. Nandini N	Member	P
7.	Professor S. S. Rai,	Member	P
8.	Shri M.P. Singh	Member (Representative of CEA)	P
9.	Shri Yogendra Pal Singh	Member Secretary	P
10.	Dr Saurabh Upadhyay	Representative of MoEF&CC	P

## **APPROVAL OF THE CHAIRMAN**

**From:** [gpkundargi@gmail.com](mailto:gpkundargi@gmail.com)

**To:** "Yogendra Pal Singh" <[yogendra78@nic.in](mailto:yogendra78@nic.in)>

**Sent:** Monday, February 13, 2023 10:26:47 AM

**Subject:** Re: Draft MOM of the 36TH EAC (Thermal) held on 25.01.2023-reg.

Dear Dr Yogendra ji

Draft minutes are fine with me.

You may add under Sal plantation that

" PP shall submit progress on Sal plantation & Nursary in six monthly report to IRO ,MOEF."

With this Minutes are approved for further needful

Thank you.

G P Kundargi