सत्यमेव जयते

File No: -13012/03/2008- IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division
****

Dated **14/12/2023**

To,

Shri Prateek Gupta
M/s Meja Urja Nigam Private Limited
MUNPL, 5th Floor, Sangam Place, Civil Lines, Allahabad, PRAYAGRAJ, UTTAR PRADESH, , 212301
env.meja@gmail.com

Subject: **Expansion of Meja Coal Based Thermal Power Project from 1320 MW (2x660) to 3720 MW (with 3x800 MW- Stage II) at Tehsil Meja, District Prayagraj, Uttar Pradesh by M/s Meja Urja Nigam Private Limited - Terms of Reference (ToR)- reg**

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project MEJA THERMAL POWER PROJECT STAGE II - COAL BASED 3 X 800 MW submitted to Ministry vide proposal number IA/UP/THE/449702/2023 dated
20/10/2023.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO23A0601UP5598291N
(ii) File No.	-13012/03/2008- IA.II (T)
(iii) Clearance Type	TOR
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(d) Thermal Power Plants
(vi) Sector	Thermal Projects
(vii) Name of Project	MEJA THERMAL POWER PROJECT STAGE II - COAL BASED 3 X 800 MW
(viii) Name of Company/Organization	MEJA URJA NIGAM PRIVATE LIMITED
(ix) Location of Project (District, State)	PRAYAGRAJ, UTTAR PRADESH
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

1. In view of the particulars given in the Para 2 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the Expert Appraisal Committee (EAC) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

2. The above-mentioned proposal has been considered by Expert Appraisal Committee of EAC in the meeting held on 31/10/2023. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

3. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during EAC are annexed to this EC as Annexure (1).

4. The EAC, in its meeting held on 31/10/2023, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).

5. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee hereby decided to grant Terms of Reference for instant proposal of expansion of Meja Coal Based Thermal Power Project from 1320 MW (2x660) to 3720 MW (with 3x800 MW- Stage II) at Tehsil Meja, District Prayagraj, Uttar Pradesh under the provisions of EIA Notification, 2006 and as amended thereof.

6. The Ministry reserves the right to stipulate additional conditions, if found necessary.

7. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

8. This issues with the approval of the Competent Authority.

Copy To

(i) The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
(ii) The Chairman, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delhi - 110 066.
(iii) Deputy Director General of Forests (C), MoEF&CC, Regional Office (CZ) Kendriya Bhavan, 5th Floor, Sector H, Aliganj, Lucknow – 226020
(iv)The Principal Secretary, Department of Environment, Government of Uttar Pradesh, Sachivalaya,
(v) Bapu Bhawan, Adjacent to Vidhan Sabha, Lucknow - 226001 (UP)
(vi)The Member Secretary, Uttar Pradesh Pollution Control Board, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow (UP)
(vii)Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor bagh Road, New Delhi

Guard File/Record File/Monitoring File/Website of MoEF& CC

Annexure 1

Specific Terms of Reference for (Thermal Power Plants)

1. Socio-economic Study

S. No	Terms of Reference
1.1	1. Public Health Delivery Plan including the provisions of drinking water supply for local population shall be in the EIA/EMP Report. 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 need of the labour force and local populace. 2. All the tasks including conducting public hearing shall be done as per the provisions of EIA Notification, 2006 and as amended from time to time. Public hearing issues raised and compliance of the same shall be incorporated in the EIA/ EMP report in the relevant chapter. 3. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the Ministry's OM F. No. 22- 65/2017-IA.III dated 30th September, 2020 shall be submitted. Tentative no. of project affected families shall be identified and accordingly appropriate Rehabilitation &Resettlement plan shall be prepared. 4. Details of settlement in 10 km area shall be submitted.

2. Environmental Management And Biodiversity Conservation

S. No	Terms of Reference
2.1	1. Cumulative Environmental Impact Assessment study of all the existing and proposed projects in the 15-km radius of the proposed project shall be conducted. 2. PCCF letter shall be obtained stating that no wildlife corridor is passing through the project boundary. 3. Wildlife conservation plan shall be prepared, in consultation with State forest and wildlife department, with adequate fund for wildlife habitat management, preserving wildlife and its corridors and be submitted along with EIA/EMP report. Human-Wildlife Conflict issue shall be studied and such incidences reported in the study area during last 10 years shall be submitted. No provision for purchasing the vehicle shall be made in the wildlife conservation plan. 4. Details of the existing rail, road networks and alignment of transmission lines along with quantity of coal being transported/to be transported for existing units and proposed expansion, its source and transportation mode shall be submitted. 5. 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. 6. A comparative chart shall be prepared with changes observed from previous baseline study and present baseline study. 7. Existing green plantation carried out by the project proponent (within or outside the plant boundary) with its survival rate shall be submitted and a plan shall be made to maintain survival rate upto 90%. 8. Detailed action plan shall be prepared for maintenance of air pollution control equipment. 9. Details of Ash management of existing (since operation of the plant) and proposed project shall be submitted, along with 5-year plan for 100 % ash utilization.

S. No	Terms of Reference
	10. Details of Dry Ash handling system along with supplementary coal handling system shall be submitted. 11. Proper protection measures like HDPE lining, appropriate height of bund and adequate distance between proposed Ash pond and water body (minimum 500 meter) etc. shall be planned so as to reduce the possibility of mixing of leachate with any fresh water body for under construction ash pond. High Density Slurry disposal plan shall be prepared. 12. 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. 13. Baseline Study for Heavy metals in Ground water, Surface water and soil to be carried out and incorporated in EIA/EMP report. 14. Details pertaining to water source, treatment and discharge should be provided. 15. Zero Liquid Discharge plan shall be submitted. 16. Action plan for development of green belt (40% of total project cover area) along the periphery of the project boundary with 80% survival rate shall be provided with a video clip of existing green belt. The plan shall be prepared in consultation with State Forest Department considering the project site is located in rocky area. 17. PP shall submit action plan for using treated Sewage/Domestic wastewater for its operations. 18. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report. 19. An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution. 20. A detailed plan need to be submitted for undertaking extensive green plantation within 10 km radius of the plant focusing on water reservoir, school, hospital and other institutional area and same need to be incorporated in EIA/EMP report. 21. A detailed note w.r.t. compliance of MoEF&CC notifications dated 31.12.2021 and 30.12.2022 defining the eligibility of thermal power plants for having additional ash pond shall be submitted by the IRO in its compliance report.

3. Disaster Management

S. No	Terms of Reference
3.1	Disaster Management Plan shall be prepared and incorporated in EIA/EMP report.

4. Miscellaneous

S. No	Terms of Reference
4.1	1. Certified compliance report of previous EC to be submitted certified by Regional office of the

S. No	Terms of Reference
	MoEF&CC. IRO shall provide specific observations on the status of OCMS, ash utilization, green cover and emission control equipment of all units of the plant. 2. PP shall submit details of court cases and its status for the project. 3. 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 analyze the samples. 4. Arial view video of project site shall be recorded through drone and be submitted.

Standard Terms of Reference for (Thermal Power Plants)

1. Statutory Compliance

S. No	Terms of Reference
1.1	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.
1.2	Vision document specifying prospective long term plan of the project shall be formulated and submitted.
1.3	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.

2. Details Of The Project And Site

S. No	Terms of Reference
2.1	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.
2.2	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.
2.3	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.
2.4	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.

S. No	Terms of Reference
2.5	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
2.6	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.
2.7	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.
2.8	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.
2.9	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
2.10	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.
2.11	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.

3. Ecology Biodiversity And Environment

S. No	Terms of Reference
3.1	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.
3.2	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.
3.3	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.
3.4	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-

S. No	Terms of Reference
	circulation of effluents.
3.5	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.
3.6	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.
3.7	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
3.8	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.
3.9	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.
3.10	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.
3.11	Feasibility of near zero discharge concept shall be critically examined and its details submitted.
3.12	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
3.13	Plan for recirculation of ash pond water and its implementation shall be submitted.
3.14	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.
3.15	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence

4. Environmental Baseline Study And Mitigation Measures

S. No	Terms of Reference
4.1	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 analysisand 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.
4.2	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).
4.3	A list of industries existing and proposed in the study area shall be furnished.
4.4	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.
4.5	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
4.6	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
4.7	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
4.8	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.
4.9	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.
4.10	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.

5. Environmental Management Plan

S. No	Terms of Reference
5.1	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.
5.2	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.
5.3	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.
5.4	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.

6. Green Belt Development

S. No	Terms of Reference
6.1	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 CO2 and other gaseous pollutants and hence a stratified green belt should be developed.
6.2	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

7. Socio-economic Activities

S. No	Terms of Reference
7.1	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.
7.2	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

S. No	Terms of Reference
	construction & operation phases of the Project.
7.3	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.
7.4	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.
7.5	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). CERdetails done in the past should be clearly spelt out in case of expansion projects.
7.6	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.
7.7	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.
7.8	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-conducive 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.

8. Corporate Environment Policy

S. No	Terms of Reference
8.1	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.
8.2	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.
8.3	What is the hierarchical system or Administrative order of the company to deal with the

S. No	Terms of Reference
	environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
8.4	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.

9. Miscellaneous

S. No	Terms of Reference
9.1	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
9.2	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
9.3	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.

10. Additional Tor For Coastal Based Thermal Power Plants Projects (Tpps)

S. No	Terms of Reference
10.1	Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
10.2	If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agencies shall be submitted.
10.3	The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their embankments should be strengthened and desilted.
10.4	Additional soil required for levelling of the sites should as far as possible be generated within the site itself in such a manner that the natural drainage system of the area is protected and improved.
10.5	Marshy areas which hold large quantities of flood water to be identified and shall not be disturbed.
10.6	No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. Wherever feasible, the outfall should be first treated in a Guard Pond and then only discharged into deep sea (10 to 15 m depth). Similarly, the Intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from Desalinization Plants (if any) should not be discharged into sea without adequate

S. No	Terms of Reference
	dilution.
10.7	Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in Study Area.
10.8	A common Green Endowment Fund should be created by the project proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.
10.9	Impact on fisheries at various socio economic level shall be assessed.
10.10	An endowment Fishermen Welfare Fund should be created out of CER grants not only to enhance their quality of life by creation of facilities for Fish Landing Platforms / Fishing Harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.
10.11	Tsunami Emergency Management Plan shall be prepared wherever applicable and Plan submitted prior to the commencement of construction work.
10.12	There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipelines, such as lining of Guard Pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries could be fertile agricultural land used for paddy cultivation.

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Existing	Proposed	Total	Unit	Mode of Transport / Transmission
Electricity	Electricity	1320	2400	3720	Mega Watt (MW)	Through Transmission line
Fly Ash	Fly Ash	1843000	3351000	5194000	Tons per Annum (TPA)	Combination of two or three modes
Gypsum	Gypsum	101405	184372	285777	Tons per Annum (TPA)	Combination of two or three modes

Annexure (3)

The details of the project

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

i. M/s Meja TPP (Stage-I) is a 1320 MW (2x660MW) Power Plant located in Village Kohdar, Meja Tehsil, Prayagraj (UP).

ii. MoEF&CC had accorded EC for Stage-I (2x660 MW) vide letter no J-13012/03/2008- IA.II (T) dated 10.01.2011 and both the Units are under Operation. EC for Stage-I was amended as follows:

Date of EC Amendment	**Amendment Details**
21.07.2017	Permission for road transportation of 2 Lakh Tons of coal by road for temporary period of one year or till the commissioning of railway siding whichever is earlier.
08.01.2018	Time extension for the validity of Environment Clearance
28.03.2019	Temporary permission for transportation of coal by road
08.08.2019	Extension of validity of EC for further period of one year
25.09.2020	Extension of validity of EC for further period of one year

iii. **Land Requirement:**

- About 1295 Ha of land has been acquired for Meja TPP during Stage-I. The plant facilities of Stage-II shall be accommodated within the existing premises of the Meja STPP.
- Additional area proposed to be acquired is 114 Ha for Ash Dyke and Railway Siding for Stage-II.

iv. The Salient features of the project are as under:

Project details:

Name of the Proposal	3 X 800 MW (Stage II) Meja Coal Based Thermal Power Project at Tehsil Meja, District Prayagraj, Uttar Pradesh by M/s Meja Urja Nigam Private Limited - Terms of Reference (ToR)- reg
Proposal No.	IA/UP/THE/449702/2023

Location	Post Kohdar, Tehsil Meja, District Prayagraj
Company's Name	M/s Meja Urja Nigam Private Limited
Accredited Consultant and certificate no.	EQMS Global Pvt. Ltd. formerly known as EQMS India Pvt. Ltd. NABET/EIA/2225/RA 0303 Valid upto: 23/11/2025
Inter- state issue involved	No
Seismic zone	Zone II

Category details:

Category of the project	Thermal, Category - A
Capacity	**Under Operation** Stage-I: 1320 MW (2x660 MW) **Proposed Expansion** Stage-II: 3x800 MW (2400MW)
Attracts the General Conditions (Yes/No)	No
Additional information (if any)	Meja Thermal Power Project (Stage-I) is in commercial operation. This proposal is for expansion by additional capacity of 2400 MW (3x800MW) as Stage-II based on pulverized coal fired thermal power generation technology, Air Cooled Condenser System & compliant with applicable emission norms.

Project Details:

If expansion, the details of ECs (including amendments and extension of validity) of existing Units etc.	It is an expansion project. Ministry of Environment, Forests and Climate Change (MoEF&CC) had accorded Environmental Clearance (EC) for 2x660 MW (Stage-I) Supercritical Technology Coal Based Meja Thermal Power Plant near Kohadar, Bhagdeva & Mai Kalam villages, in Meja Taluk, in Allahbad Distt., in Uttar Pradesh vide letter no. J-13012/03/2008-IA.II (T) dated 10.01.2011.
Amendments granted, if Yes details	• Amendment dated 21.07.2017 for coal transportation by road.

	• Amendment dated 08.01.2018 for EC validity extension • Amendment dated 28.03.2019 for coal transportation by road • Amendment dated 08.08.2019 for EC validity extension and waive off CSR recurring expenditure stipulation • Amendment dated 25.09.2020 for EC validity extension
Expansion / Green Field (new): (IPP / Merchant / Captive)	Expansion of existing Stage-I 1320 MW (2x660MW) by additional capacity of 2400 MW (3x800MW) as Stage-II
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.	Certified Compliance report shall be submitted along with Final EIA report.
Specific webpage address where all EC related documents (including monitoring and compliance related 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.	www.munpl.co.in Head of Project, Meja Thermal Power Plant Village – Kohadar, Bhagdeva, Mai Kalam Taluk – Meja District – Allahbad State – Uttar Pradesh Pin - 212301
Co-ordinates of all four corners OF TPP Site:	Latitude :25°08'18" N, 25°06'40"N, 25°09'12"N, 25°08'37"N Longitude: 81°58'34" E, 81°55'45"E, 81°56'10"E, 81°55'16"E
Average height of: (a) TPP site, (b) Ash pond site etc. above MSL	(a) 127 M (b) 115 M
Whether the project is in the Critically Polluted Area (CPA) or within 10 km of CPA. If so, the details thereof:	No
CRZ Clearance	Not Applicable
Cost of the Project (As per EC and revised): Cost of the proposed activity in the amendment:	Cost of the Existing Project at current price level (in Lakhs) [A] : 1302922

	Cost of the proposed expansion/ modernization of Project at current price level (in Lakhs) [B]	2247997
	Total Cost of the project/ Activity (in lakhs) [A+B]	3550919
Employment Potential for entire project/plant and employment potential for the proposed amendment (specify number of persons and quantitative information).	The project will generate direct and indirect employment opportunities as well as opportunities for self-employment. The no. of NTPC employees during construction and operation phases are 554 and 720 respectively. Workforce employed during construction phase by the EPC contractors would be much higher (about 4000-5000 during peak deployment). In addition to the people directly involved in construction and operation of the power project, employment opportunities in subsidiary industries and service sectors as well as self-employment opportunities shall also be generated.	
Benefits of the project (Specify quantitative information)	Construction and operation of the project will generate employment potential both directly or indirectly. Local people will have employment opportunities as skilled, semi-skilled and unskilled laborers as well as self-employment opportunities. Thus, there will be overall improvement in the socio-economic status of the people of the surrounding areas. Power plant will have a positive effect on the socio-economic conditions of the people nearby, the project and service activities will generate steady source of income for local people. With the implementation of the project, employment opportunities, communication, medical facilities, education and skill up-gradation facilities etc. in the area will be further improved. Besides, there will be marked improvement for various facilities in the local areas as shown below. ➢ Improvement in medical and health care system. ➢ Improvement in educational services. ➢ Improvement of drinking water & sanitation facilities. ➢ Vocational training facilities for local	

	eligible youth of local community to enable them to seek employment in suitable project operations and elsewhere. ➢ Benefit to the State and the Central governments through financial revenues from this project directly and also indirectly. ➢ Employment opportunities to local persons of different skills and trades. ➢ Improvement in the socio-economic conditions of the inhabitants of the area

Electricity generation capacity:

Capacity & Unit Configurations:	**Under Operation** Stage-I: 1320 MW (2x660 MW) **Proposed Expansion** Stage-II: 2400MW (3x800 MW)
Generation of Electricity Annually	Stage-II: 21 Billion Units annually (2400 MW @ 85% PLF)

Details of fuel and Ash disposal

Fuel to be used:	Coal
Quantity of Fuel required per Annum	Stage-II: 9.94 Million MT at 85% PLF
Coal Linkage / Coal Block: (If Block allotted, status of EC & FC of the Block)	SLC (LT) in its meeting held on 21.02.2023 had recommended grant of coal linkage to Stage-II (2x660 MW), which was further enhanced for the revised capacity of 3x800 MW in SLC (LT) Meeting held on 19.09.2023. However, as per practice of coal allocation, the Coal Block is yet to be allocated. The likely coal sources are NCL and CCL.
Details of mode of transportation of coal from coal source to the plant premises along with distances	Rail (NCL-280 to CCL-480 km)
Fly Ash Disposal System Proposed	The fly ash shall be extracted in dry form from the electrostatic precipitator hoppers. This dry ash shall either be taken to buffer hoppers for its onward transportation in dry form for

	utilization or shall be slurrified in wetting units for its ultimate disposal in ash disposal area using HSCD System. The bottom ash shall be extracted and disposed-off in wet form. It is envisaged to have disposal system sized for 100% generation of ash. The ash management scheme for fly ash and bottom ash involves dry collection of fly ash, supply of ash to entrepreneurs for utilisation, promoting ash utilisation and safe disposal of unused ash. NTPC shall make maximum efforts to utilise the fly ash for various purposes. Unused fly ash and bottom ash shall be disposed-off in the ash pond. A blanket of water shall be maintained over the entire ash pond to control fugitive dust emission. After the ash pond is abandoned, it shall be reclaimed through green vegetation.
Ash Pond/ Dyke (Area, Location & Co-ordinates) Average height of area above MSL(m)	For Stage-II, Land still to be Acquired (Proposed Area: 110 Ha.) adjacent to existing Ash dyke 115 M
Quantity of a. Fly Ash to be generated b. Bottom Ash to be generated:	Stage-II: a. Fly Ash 3.02 Million Metric TPA b. Bottom Ash 0.76 Million Metric TPA
Fly Ash utilization (details)	The Ash Utilisation shall be done as per Ministry of Environment, Forests and Climate Change Notification dated 31-12-2021 as amended on 31.12.2022. To utilize ash and also to comply the stipulations of MoEF&CC's Gazette Notification on fly ash dated 31-12-2021 following actions would be taken up by NTPC: • NTPC shall provide a system for 100% extraction of dry fly ash along with dedicated dry ash silos

	for storage of at least sixteen hours of ash based on installed capacity having separate access roads so as to ease the delivery of fly ash. Provision shall also be kept for segregation of coarse and fine ash, loading this ash to closed/ open trucks and also for loading fly ash into rail wagons. This will ensure availability of dry fly ash required for manufacture of Fly Ash based Portland Pozzolana Cement (FAPPC) for cement plants and Ready Mix Concrete plants. • NTPC shall also promote, adopt and set up the ash based product manufacturing facilities within its premises & fly ash brick thus produced shall be utilized in in-house construction works as well as for supply in the market on price. • NTPC shall make efforts to motivate and encourage entrepreneurs to set up ash based building products such as fly ash bricks, blocks tiles, fly ash based aggregate etc. in the vicinity of proposed power plant. • To promote use of ash in agriculture/low lying areas/wasteland development-show case project shall be taken up in the vicinity of proposed thermal power station. • NTPC shall make efforts with authorities of coal mines and other minerals mines for use of ash in reclamation of mines located within 300 km of proposed power station. • All government/ private agencies responsible for construction/ design of buildings, road embankment, flyover bridges and reclamation/ development of low lying areas within 300 km of the plant areas shall be persuaded to use ash and ash based products

	in compliance of MoEF&CC's Gazette Notification on fly ash. • With all the efforts mentioned above, it is expected that fly ash generated at proposed thermal power station shall be utilized in the areas of cement, concrete & building products manufacturing, road embankment construction, land development, mine filling, shoreline protection structure, agriculture etc.
Stack Height (m) & Type of Flue	One twin flue chimney of 220 M height & one single flue chimney of 150 m

Water Requirement:

Source of Water:	Ganga River
Quantity of water requirement:	Stage-II (With Air Cooled Condenser) 30 Cusec
Distance of source of water from Plant:	29 km
Whether barrage/ weir/ intake well/ jack well/ others proposed:	Intake Well
Mode of conveyance of water:	Pipeline
Status of water linkage:	Stage-II: Quantity Available - 5 Cusecs An additional allocation of 25 Cusecs shall be required from WRD, GoUP. Under approval with GoUP.
(If source is Sea water) Desalination Plant Capacity	NA
Mode / Management of Brine:	NA
Cooling system	Air Cooled Condenser

Land Area Breakup:

<table>
<tr><td>Land Requirement:
a. TPP Site
b. Ash Pond
c. Township
d. Railway Siding & Others
e. Raw Water Reservoir
f. Green Belt
g. others
h. Total (if expansion state additional land requirement)</td><td>Land Requirement: Existing (Proposed)
a. 328 Ha (Nil)
b. 302 Ha (110 Ha)
c. 85 Ha (Nil)
d. Railway Siding 171 Ha (4 Ha)
e. 75 Ha (Nil)
f. Included above 133.1 ha (20 ha)
g. 334 Ha (including available for expansion)
h. Total 1295 Ha (114 Ha)</td></tr>
<tr><td>Status of Land Acquisition:</td><td>To be taken up</td></tr>
<tr><td>Status of the project:
If under construction phase: please specify the reasons for delay, works completed till date and balance works along with expected date of completion.
If under operation phase, date of commissioning (COD) of each unit. Whether the plant was under shutdown since commissioning, details and reasons</td><td>Construction of Stage-II not yet started

Stage-I Both units commissioned</td></tr>
<tr><td>Break-Up of land-use of TPP site:
a) Total land required for project components
b) Private land
c) Government land
d) Forest Land</td><td>
<table>
<tr><th>Nature of Land involved in (Ha)</th><th>Area Existing (Ha)</th><th>Additional Area Proposed (Ha)</th><th>Total Area required after expansion (Ha)</th></tr>
<tr><td>Govt. Land</td><td>535</td><td>62</td><td>597</td></tr>
<tr><td>Pvt. Land</td><td>760</td><td>52</td><td>812</td></tr>
<tr><td>Forest Land</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Total</td><td>1295</td><td>114</td><td>1409</td></tr>
</table>
</td></tr>
</table>

Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/ Environmental Sensitivity Zone	Yes/ No	**Details of Certificate/ letter/Remarks**
Reserve Forest/Protected Forest Land	Yes	Forest Located in 10 km area: 1. Badiha R.F -7.0 km East 2. Gadaria R.F – 5.0 km East 3. Singhpur khurd R.F.- 0.9 km SW 4. Salaiya Kalan R.F. – along the southern boundary 5. Salaiya Khurd R.F. – along the southern boundary 6. Kohdr R.F. – along the eastern boundary 7. Murpela R.F- 2.7 km East 8. Chandhs R. F. – 8.0 km East 9. Sukh P.F.- 8.5 km east
National Park	No	
Wildlife Sanctuary	No	
Archaeological sites monuments/ historical temples etc.	No	
Names & distance of National parks, Wildlife sanctuaries, Biosphere reserves, Heritage sites Rivers, Tanks, Reserve Forests etc. Located within 10 Km from the plant boundary:		Forest Located in 10 km area: 1. Badiha R.F -7.0 km East 2. Gadaria R.F – 5.0 km East 3. Singhpur khurd R.F.- 0.9 km SW 4. Salaiya Kalan R.F. – along the southern boundary 5. Salaiya Khurd R.F. – along the southern boundary 6. Kohdr R.F. – along the eastern boundary 7. Murpela R.F- 2.7 km East 8. Chandhs R. F. – 8.0 km East 9. Sukh P.F.- 8.5 km east

		River in 10 km area - Tons River 1.5 km in North
Additional information (if any)		

Availability of Schedule-I species in study area – At the time of EIA for Stage-I, Blackbuck was reported by State Forest Deptt. & Conservation plan prepared & implemented for the same. However, as per recent reports wild species like Jackal, Wolf, Mongoose, Porcupine are also reported. Details shall be presented in EIA study report.

Court case details:

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)	-

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Signature Not Verified

Digitally Signed by : Mr Lalit Bokolia
Member Secretary, MoEFCC (EC)

Date: 14/12/2023