



File No: J-13012/19/2008-IA.II(T)
Government of India
Ministry of Environment, Forest and Climate
Change
IA Division



Date 02/03/2026



To,

Sh. Gnanapalan Packiadhas
M/s. Tamil Nadu Power Generation Corporation Ltd
5B Block, First Floor, No.144, Anna Salai, 600002, Chennai, Tamil Nadu
E-mail: cepr@tnebnet.org

Subject: 2x660 MW Udangudi Supercritical Thermal Power Project (Stage-1) by M/s Tamil Nadu Power Generation Corporation Ltd (TNPGL) at Udangudi Village, Tiruchendur Taluk, Tuticorin District, Tamil Nadu - Environmental Clearance (EC) under S.O. 1247 (E) dated 18/03/2021 - regarding

Sir/Madam,

This is with reference to your proposal number IA/TN/THE/557542/2025 dated 08.11.2025 along with a written submission dated 18.02.2026 seeking for grant of Environmental Clearance (EC) under the provisions of the EIA Notification 2006 and as amended thereof for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0601TN5581145N
(ii) File No.	J-13012/19/2008-IA.II(T)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(d) Thermal Power Plants, 1(d) Thermal Power Plants
(vi) Sector	Thermal Projects Ongoing 2x660 MW Udangudi Supercritical Thermal Power Project Stage-1 at Udangudi Village, Tiruchendur Taluk, Tuticorin District, Tamil Nadu
(vii) Name of Project	
(viii) Name of Company/Organization	M/s. Tamil Nadu Power Generation Corporation Ltd
(ix) Location of Project (District, State)	Tuticorin District, Tamil Nadu

3. M/s. Tamil Nadu Power Generation Corporation Limited (TNPGL) has made an online application vide proposal no IA/TN/THE/557542/2025 dated 08.11.2025 and ADS reply dated 20.01.2026 along with copy of EIA/EMP report, Form and Certified compliance report seeking for Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above.

4. The proposed project activity is listed under item no. 1(d) Under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the general condition of the EIA Notification, 2006. The PP has submitted the written information on 18.02.2026. The MoM for the same may be seen using the following web link: <https://parivesh.nic.in>

Details submitted by the project proponent

5. The proposed TPP is interlinked with a Coal Jetty, Pipe Conveyor, Cooling water intake and outfall systems and proponent has obtained the following Clearances from MoEF&CC.

A. Thermal Power Plant

- The existing project was earlier accorded environmental clearance to Tamil Nadu Generation and Distribution Corporation (TANGEDCO) vide letter no. J-13012/19/ 2008-IA. II (T) dated 14.10.2013 for setting up of 2x800 MW Udangadi Super Critical Imported Coal Based TPP at village Udangudi, in Thiruchendur Taluk, in Thoothukudi district, in Tamil Nadu. Subsequently, EC was amended on 26.04.2017 for reduction of unit sizes from 2 x 800 MW to 2 x 660 MW. Thereafter, validity extension of EC was accorded on 10.09.2018 up to 13.10.2020 and on 25/09/2020 till 13/10/2023.
- As per amendment to the EIA Notification, 2006 dated 18/01/2021, the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19). In view of this, validity of the above said EC was till 13/10/2024.
- Consent to Establish (CTE) was accorded by Tamil Nadu State Pollution Control Board vide Ir. No. 2303250084899 under Air and water Act on 09/08/2023 with validity up to 13/10/2024. PP informed that, within the EC validity period, about 90 % of the construction work was completed and could not be commissioned within the validity period of the EC dated 14.10.2013. Therefore, proponent envisages to obtain a fresh EC under the provisions of notification S.O. 1247 (E) dated 18/03/2021.
- Accordingly, fresh ToR was issued by the Ministry vide F. no. J-13012/19/2008-IA. II(T) dated 29.07.2024 in the name of M/s. TANGEDCO for capacity of 2x660 MW TPP, with change of fuel mix i.e., **from 100 % imported coal to use a mix of domestic coal as well as Imported coal in ratio of 50%-50% proportion.**
- Meanwhile, company name for the above project changed from M/s. Tamil Nadu Generation and Distribution Corporation (TANGEDCO) to M/s. Tamil Nadu Power Generation Corporation Limited (TNPGL) as per Tamil Nadu Government Order dated 06.03.2024. Subsequently, **ToR dated 29.07.2024 for the above project was transferred from M/s TANGEDCO to M/s TNPGL vide F. no. J-13012/19/2008-IA. II(T) dated 26/07/2025.**
- Instant proposal by M/s. Tamil Nadu Power Generation Corporation Limited (TNPGL) is for seeking fresh Environmental Clearance for 2x660 MW to complete the commissioning of the constructed facilities as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 which states that “where construction and commissioning of proposed activities have not been completed within the validity period of the Environmental Clearance (EC) and a fresh application for EC has been submitted due to expiry of the said period of the EC, the concerned Expert Appraisal Committee or State Level Expert Committee, as the case may be, may exempt the requirement of public hearing subject to the condition that the project has been implemented not less than fifty percentage in its physical form or construction”.

B. Interlinked Coal Jetty project

- The captive coal jetty and pipe conveyor system are interlinked to this TPP. PP has obtained separate EC+CRZ Clearance from MoEF&CC vide EC identification no. EC22A004TN156490 (F. no. 10-66/2020-IA.III) dated. 03.08.2022 valid till 02.08.2032.

6. Certified compliance report from Regional Office

A. Thermal Power Plant: The Status of compliance of earlier EC of TPP was obtained from Regional Office, Chennai vide letter no. F. No. EP/12.1/8/2013-2014/TN/518 dated 01.04.2025 in the name of M/s. Tamil Nadu Generation and Distribution Corporation (TANGEDCO). Regional Office, MoEF&CC, sought the Action taken report regarding the partially/non-complied conditions for the TPP, Chennai vide letter no. F. No. EP/12.1/8/2013-2014/TN/16 dated 07.01.2025. The action taken report was submitted by TNPGL vide letter dated 21.02.2025. MoEF&CC (RO), Chennai evaluated the same and has issued CCR on 01.04.2025.

B. Captive Coal Jetty: The Status of compliance of earlier EC of Captive Coal Jetty was obtained from Regional Office, Chennai vide letter no. F. No. EP/12.1/8/2013-2014/TN/1940 dated 26.12.2025.

7. Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO₂ emission norms: The status of installation of Flue Gas Desulphurization has been furnished below as per the MoEF&CC Notification dated 11/07/2025:

- Categorization details of TPP : Category –C
- Sulphur content of the coal to be fired in the boiler : Imported coal sulphur content – 0.52% and Domestic coal sulphur content – 0.31%.
- Status of FGD installation for existing unit – Not applicable.
- Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the project: One bi-flue chimney of 275 m stack height shall be installed for 2 x 660 MW plant.

8. The detail of the ToR is furnished as below:

Proposal no with date	Consideration	Details	Date of accord	ToR Validity
IA/TN/THE/468592/2024 dated 08.04.2024	11 th meeting of EAC – Thermal held on 27-28th June 2024	Terms of Reference	29.7.2024	4 years
IA/TN/THE/541675/2025 dated 04.07.2025	-	Application for Transfer of ToR - Form-8	26.07.2025	-

9. Environmental site settings

S.No.	Particulars	Details			Remarks
1.	Total land	380 ha [TNP GCL land: 380 ha]			Land use: Industrial
2.	Land use break up	S. No.	Purpose	Area in Ha	
		1	Main Plant, Transformer yard and Switch yard	26.305	
		2	Coal Yard	26.305	
		3	Cooling Water System	17.402	
		4	Fuel oil system	1.699	
		5	Water system including Chlorination system	7.782	
		6	Ash Dyke	48.562	
		7	Administration building and other non-plant buildings	4.719	
		8	Miscellaneous such as Corridor for CW piping, Ash piping, Intake & outfall, Silo & its utility building, Workshop, Stores, Roads etc.	80.168	
		9	Green Belt (about 33% of total area)	125.4	
		10.	Land for future expansion	41.658	
Total			380 Ha		
3.	Land acquisition	Entire land is under the possession of the project proponent.			Land document

S.No.	Particulars	Details	Remarks																																																																
	details as per MoEF&CC O.M. dated 7/10/2014, 20/02/2025 & 18/12/2025	Relevant State Government Order in this regard has been submitted.	submitted with application																																																																
4.	Existence of habitation & involvement of R&R, if any.	Project site: Nil Study Area: <table><thead><tr><th>S.No.</th><th>Name</th><th>Distance (km)</th><th>Direction</th></tr></thead><tbody><tr><td colspan="4">Habitation</td></tr><tr><td>1.</td><td>Udangudi village</td><td>4.85</td><td>West</td></tr><tr><td>2.</td><td>Kallamozhi</td><td>0.54</td><td>East</td></tr><tr><td>3.</td><td>Kulasekharapatnam</td><td>2.20</td><td>South</td></tr><tr><td>4.</td><td>Nainarpathu</td><td>2.02</td><td>NW</td></tr><tr><td>5.</td><td>Shirgaj/Sirkatchi</td><td>2.02</td><td>NNW</td></tr><tr><td>6.</td><td>Arnaghudi</td><td>1.84</td><td>West</td></tr><tr><td>7.</td><td>Manapad</td><td>4.79</td><td>SSE</td></tr><tr><td>8.</td><td>Vellalanvilai</td><td>3.7</td><td>NW</td></tr><tr><td>9.</td><td>Paramankurichi</td><td>5.17</td><td>NW</td></tr><tr><td>10.</td><td>Soosaikudiyurpu</td><td>3.56</td><td>NE</td></tr><tr><td>11.</td><td>Tiruchendur (Town panchayat)</td><td>7.72</td><td>NE</td></tr><tr><td>12.</td><td>Veerapandianpattinam</td><td>9.01</td><td>NNE</td></tr><tr><td>13.</td><td>Venkatramanujapuram</td><td>6.2</td><td>WNW</td></tr><tr><td>14.</td><td>Meignarpuram</td><td>8.47</td><td>NW</td></tr></tbody></table>	S.No.	Name	Distance (km)	Direction	Habitation				1.	Udangudi village	4.85	West	2.	Kallamozhi	0.54	East	3.	Kulasekharapatnam	2.20	South	4.	Nainarpathu	2.02	NW	5.	Shirgaj/Sirkatchi	2.02	NNW	6.	Arnaghudi	1.84	West	7.	Manapad	4.79	SSE	8.	Vellalanvilai	3.7	NW	9.	Paramankurichi	5.17	NW	10.	Soosaikudiyurpu	3.56	NE	11.	Tiruchendur (Town panchayat)	7.72	NE	12.	Veerapandianpattinam	9.01	NNE	13.	Venkatramanujapuram	6.2	WNW	14.	Meignarpuram	8.47	NW	R & R is not applicable as the entire land is under the possession of project proponent
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S.No.	Particulars	Details			Remarks
		6.	8°26'48.96"N	78° 4'21.30"E	
		7.	8°26'37.67"N	78° 4'16.35"E	
		8.	8°26'37.46"N	78° 4'16.46"E	
		9.	8°26'35.08"N	78° 4'22.09"E	
		10.	8°26'32.63"N	78° 4'20.31"E	
		11.	8°26'32.25"N	78° 4'19.90"E	
		12.	8°26'31.08"N	78° 4'19.09"E	
		13.	8°26'30.52"N	78° 4'17.63"E	
		14.	8°26'29.76"N	78° 4'16.39"E	
		15.	8°26'29.31"N	78° 4'16.01"E	
		16.	8°26'28.80"N	78° 4'15.89"E	
		17.	8°26'28.16"N	78° 4'15.98"E	
		18.	8°26'27.46"N	78° 4'15.38"E	
		19.	8°26'28.98"N	78° 4'12.89"E	
		20.	8°26'26.35"N	78° 4'11.97"E	
		21.	8°26'22.88"N	78° 4'9.42"E	
		22.	8°26'20.47"N	78° 4'6.63"E	
		23.	8°26'10.87"N	78° 3'59.69"E	
		24.	8°26'13.79"N	78° 3'58.01"E	
		25.	8°26'12.56"N	78° 3'56.93"E	
		26.	8°26'10.69"N	78° 3'58.39"E	
		27.	8°26'6.42"N	78° 3'58.25"E	
		28.	8°26'3.97"N	78° 3'57.17"E	
		29.	8°26'3.42"N	78° 3'58.42"E	
		30.	8°25'59.62"N	78° 3'56.37"E	
		31.	8°25'56.43"N	78° 3'52.08"E	
		32.	8°25'57.57"N	78° 3'50.03"E	
		33.	8°25'53.02"N	78° 3'46.93"E	
		34.	8°25'49.25"N	78° 3'44.78"E	
		35.	8°25'47.69"N	78° 3'47.18"E	
		36.	8°25'41.67"N	78° 3'43.31"E	
		37.	8°25'41.37"N	78° 3'40.99"E	
		38.	8°25'36.76"N	78° 3'35.18"E	
		39.	8°25'21.33"N	78° 3'30.30"E	
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		43.	8°25'12.25"N	78° 3'19.78"E	
		44.	8°25'11.13"N	78° 3'16.82"E	
		45.	8°25'9.67"N	78° 3'14.23"E	
		46.	8°25'10.22"N	78° 3'12.54"E	
		47.	8°25'10.18"N	78° 3'11.14"E	
		48.	8°25'10.08"N	78° 3'10.99"E	
		49.	8°25'9.49"N	78° 3'10.71"E	
		50.	8°25'9.39"N	78° 3'10.59"E	
		51.	8°25'10.37"N	78° 3'8.26"E	
		52.	8°25'10.17"N	78° 3'6.53"E	
		53.	8°25'10.74"N	78° 3'6.81"E	
		54.	8°25'10.88"N	78° 3'6.81"E	
		55.	8°25'11.53"N	78° 3'2.39"E	
		56.	8°25'11.63"N	78° 3'2.29"E	
		57.	8°25'14.17"N	78° 3'5.11"E	
		58.	8°25'14.33"N	78° 3'5.16"E	
		59.	8°25'15.36"N	78° 3'2.40"E	
		60.	8°25'15.60"N	78° 3'1.96"E	
		61.	8°25'15.85"N	78° 3'1.68"E	

S.No.	Particulars	Details			Remarks																		
		62.	8°25'16.51"N	78° 3'2.00"E																			
		63.	8°25'20.77"N	78° 3'3.27"E																			
		64.	8°25'28.83"N	78° 3'5.07"E																			
		65.	8°25'29.29"N	78° 3'4.84"E																			
		66.	8°25'30.02"N	78° 3'3.51"E																			
		67.	8°25'32.25"N	78° 3'3.90"E																			
		68.	8°25'35.47"N	78° 3'5.40"E																			
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7.	Elevation of the project site	2 – 10 m above mean sea level																					
8.	Involvement of Forest land if any.	Status of stage I Forest Clearance: Not applicable Area of the forest land involved: Nil																					
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site: Name – Ellapanaickan surplus course channel adjacent to the project site. Study area: <table><tr><th>Waterbody</th><th>Distance</th><th>Direction</th></tr><tr><td>Karumeni river</td><td>3.75 km</td><td>South</td></tr><tr><td>Thangaikulam</td><td>6.08 km</td><td>West</td></tr><tr><td>Ellapanaickankulam</td><td>4 km</td><td>North</td></tr><tr><td>Avudayarkulam</td><td>7 km</td><td>Northeast</td></tr><tr><td>Kulasaikulam</td><td>1.66 km</td><td>South</td></tr></table> Mitigation measures: Water Quality Monitoring/conservation: •Utilization of waste water for plant reuse to achieve minimum discharge concept. •Treated sewage will be reused for Greenbelt development. • Neutralized effluent will be utilized for Horticulture purposes. •Rainwater harvesting system shall be developed to control run-off as well as to recharge the groundwater. •All ditches will be concrete lined.			Waterbody	Distance	Direction	Karumeni river	3.75 km	South	Thangaikulam	6.08 km	West	Ellapanaickankulam	4 km	North	Avudayarkulam	7 km	Northeast	Kulasaikulam	1.66 km	South	HFL data of Karumeni river is +3.5 m. A copy of WRD letter dated 08.08.2024 is submitted.
Waterbody	Distance	Direction																					
Karumeni river	3.75 km	South																					
Thangaikulam	6.08 km	West																					
Ellapanaickankulam	4 km	North																					
Avudayarkulam	7 km	Northeast																					
Kulasaikulam	1.66 km	South																					

S.No.	Particulars	Details	Remarks
		•Rainfall run-off from the coal storage will be routed to the settling basin for retention and settling of suspended solids. •Tilted Plate interceptor, oil skimmer to bring down the treated water oil level to less than 10 ppm. Neutralization of DM regenerated waste in a neutralizing pit to bring the pH to acceptable levels.	
10.	Existence of ESZ/ ESA/ National park / wildlife sanctuary/ Biosphere reserve/ tiger reserve/ Elephant reserve etc. if any within the study area	Study area - NIL <u>List of Reserved and protected forests:</u> Kuthiraimozhi Theri R.F – 7.8 km (NW) In addition to the above following is present within the study area: Mangroves – 8.12 km (NE) Sand Dunes – 0.5 km (E)	
11.	Archaeological sites monuments/ historical temples etc.	There is no ASI site within the study area. However, there is Tiruchendur temple located at a distance of 8.1 km in NE direction.	
12.	Facility envisaged in CRZ area (Only for Coastal power plant)	<u>Name of the facility in CRZ area</u> Coal jetty, Sea water intake and outfall pipeline <u>Recommendations of CZMA</u> Obtained <u>Status of CRZ clearance</u> EC and CRZ clearance obtained from MoEF&CC vide Lr. No. - EC22A004TN156490, 10-66/2020-IA.III dt. 03.08.2022.	CRZ map indicating HTL/LTL demarcated by the authorized agency in 1:4000 scale has been submitted.
13.	Involvement of Critically Polluted Area / Severely Polluted area as per 2018 CEPI score	Nil within 10 km radius	

10. The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Existing power plant configuration and capacity	Proposed power Plant configuration and capacity	Total	Technology adopted
1.	-	2 x 660 MW	1320 MW	Super critical

11. The details of the fuel (coal /LDO) requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel require -ment (MTPA)	Source	Distance from site (km)	Mode of transport -tation	Coal characteristics	Linkage document
Proposed TPP – Coal	5.893	Import & Indigenous	1.2	Captive jetty followed by Pipe conveyer	Ash - (Imported coal: 8.09% and Domestic coal: 43.5%) Sulphur - (Imported coal: 0.52% and Domestic coal: 0.31%) Moisture (16.25%) GCV – 4350 Kcal/Kg	-
LDO	41500m ³	Indigenous	50	By road	-	-

12. Water requirement: The water requirement for the proposed project is estimated as 2,81,808 m³ /day, out of which 87,168 m³/day of fresh water requirement will be drawn from desalination plant and the remaining 1,94,640m³ /day will be met from the sea for cooling purposes. The water will be transported to the plant site through pipeline. Desalination

Plant Capacity is 16 MLD for which separate EC & CRZ clearance was obtained on 03/08/2022.

13. Power requirement: The power requirement for the proposed project is estimated as 92 MW, which will be sourced from plant itself.

14. Baseline Environmental Studies

Period	March – May 2024	Additional study (if any)															
AAQ parameters at 8 Locations (min and max)	PM _{2.5} = 16 To 27 µg/m ³ PM ₁₀ = 33 To 58 µg/m ³ SO ₂ = BDL (<5) to 8.9 µg/m ³ NO _x = 10.4 To 17.7 µg/m ³ CO = BDL (<0.1) to 0.28 mg/m ³																
Incremental GLC Level	PM ₁₀ = 2.01 µg/m ³ SO ₂ = 6.7 µg/m ³ NO _x = 6.541 µg/m ³																
Ground water quality at 18 locations	pH: 6.84 to 8.02, Total Hardness: 248 to 9100 mg/l, Chlorides: 118 to 7998 mg/l, Fluoride: 0.22 to 0.47 mg/l. Heavy metals are Below Detection Limit (BDL)																
Surface water quality at 3 locations	pH: 7.42 to 7.84; DO: 4.8 to 5.9 mg/l and BOD: BDL (<2) to 2.6 mg/l. COD from 16 to 23 mg/l.																
Effluent generation details and its treatment	Effluent generation from TPP – 720 KLD Mode of treatment & reuse: Effluent generation from Transformer yard, TG hall, floor wash, fuel oil and coal handling area of about 720 KLD will be transferred/ collected/ treated in the Effluent Treatment plant of capacity 720 KLD and reused for horticulture. The RO reject (brine) from the desalination plant will be about 36,840 KLD. This reject will be diluted by mixing it with a large quantity of cooling tower blowdown water of about 1,59,624 KLD before discharge into the sea. Domestic wastewater generation – 24.5 KLD Mode of treatment & reuse: Quantity of sewage generated during operational phase will be 24.5 KLD which will be treated through sequential batch reactor (SBR) based Sewage Treatment Plant of capacity 40 KLD. Treated wastewater from STP will be reused for horticulture.	Sea water outfall will be as per the recommendations of Marine EIA report.															
Noise levels Leq (Day and Night)	47.5 to 53.7 dB(A) for the day time and 40.8 to 44.5 dB(A) for the Night time.																
Traffic assessment study findings	Traffic study has been conducted at SH 176 (Tuticorin - Tiruchendur - Kanyakumari Road) which is approximately 0.12 km (E) from the plant site. Transportation of LDO/Ash will be done by road. Existing PCU is 901.6 PCU/hr on SH 176 and existing level of service (LOS) is: <table><tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr><tr><td>SH-176</td><td>901.6</td><td>1500</td><td>0.60</td><td>A</td></tr></table> PCU load after proposed project will be 901.6 (Existing) + 24.9 (Additional) PCU/hr and level of service (LOS) will be: <table><tr><th>Road</th><th>V</th><th>C</th><th>Existing</th><th>LOS</th></tr></table>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH-176	901.6	1500	0.60	A	Road	V	C	Existing	LOS	
Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS													
SH-176	901.6	1500	0.60	A													
Road	V	C	Existing	LOS													

Period	March – May 2024				Additional study (if any)
		(Volume in PCU/hr.)	(Capacity in PCU/hr.)	V/C Ratio	
	SH-176	926.5	1500	0.61	B
	* Note: Capacity as per IRC-106-1990 Guide line for capacity for roads. (Only for road transport) Conclusion: The level of service will High, stable flow (B) after including additional traffic due to proposed project.				
Soil Quality at 8 Locations	Bulk density: 1.38 to 1.57 gm/cc; pH range 7.33 to 7.84; Electrical conductivity (EC); 0.097 to 0.214 mS/cm; calcium content: 14.8 to 19 m.eq/100g; sodium: 1.08 to 1.84 m.eq /100g; potassium: 258 to 391 kg/ha; Nitrogen: 45 to 94 kg/ha; Phosphorous: 21.1 to 46.9 kg/ha; Cation Exchange Capacity (CEC) for Ca: 14.8 to 19 meq/100gm; Magnesium: 4.89 to 6.87 m.eq/100g; Sulphur: 14 to 34 mg/kg; Organic Matter: 0.51 to 0.91%				
Flora and fauna	List of schedule I fauna and endangered Flora if any. Yes Fauna, Schedule-I is present in study area: Indian Peafowl (<i>Pavo cristatus</i>) and raptors of the family Accipitridae (Black kite, Braminy Kite, Shikra) Site-specific wildlife conservation plan: Budgetary commitment (Total Budget – Rs. 40 Lakhs, 5 year): Peacock conservation- Budget 7.5 lakh rupees Raptors (Accipitridae family) conservation- Budget 32.50lakh rupees. Mangrove Management plan: Budget 25.05 Lakhs rupees, 5 year. Sand Dune Management plan: Budget 35.00 lakh rupees for 5 year to protect and conserve the turtle nesting grounds and shorebird habitats.				There are three Schedule – I species identified namely Indian peafowl, Shikra & Brahminy kite and the approval for the conservation plan issued by PCCF vide letter dt. 15.12.2025.
Hydrogeology study	Ground water is available in phreatic aquifers in the study area of 10 km radius and in general is colourless, odourless and slightly alkaline. The conductivity ranges from 994 to 1917 μS/cm and major parts are having multilayer aquifers system. Hence, the water quality varies with respect to depth of tapping. It is observed that most of the groundwater is suitable for drinking except groundwater collected at interface line. The proposed plant will not have any direct impact on the canal and fresh water bodies				Hydrological report is included in EIA/EMP report.
Impact study on bio-diversity and aquatic ecology	Recommendations of study report: Recommendations of study report: The detailed study to assess the Impact on bio-diversity and aquatic ecology was carried out. 121 floral species were observed during primary survey. In case of fauna, 10 mammals species and avifauna 42 species was observed and recorded. Three schedule I species are recorded. Terrestrial Ecology: The terrestrial flora in the study area,consisting of various under shrubs and herbs is conspicuous during and after the rainy season only. Herbs and grasses like <i>Boerhavia diffusa</i>, <i>Cynodon dactylon</i>, <i>Achyranthes aspera</i>, <i>Amaranthus spinosus</i>, <i>Ageratum conyzoides</i>, <i>Mimosa pudica</i> etc , and shrub species are <i>Prosopis juliflora</i>, <i>Lantana camara</i>, <i>Datura metel</i>, <i>Calotropis procera</i>, <i>Tecoma stans</i> etc . Various tree species is recorded in study area, which are <i>Cocos nucifera</i>, <i>Azadirachta indica</i>, <i>Musa paradisiaca</i>, <i>Acacia nilotica</i>, <i>Psidium guajava</i> etc.				The detailed study for impact on bio-diversity and aquatic ecology was carried out. 121 floral species were observed during primary survey. In case of fauna species observed and recorded include mammals 10 species, avifauna 42 species & 3 schedule I species.

Period	March – May 2024	Additional study (if any)
	Mangroves was observed and recorded in the study area. For conservation of Mangrove, a mangroves conservation plan is submitted. Fauna in the study area: Mammalian species were observed and recorded within the entire study area (mammalian species Mole rat, large bandicoot Rat, five striped squirrel, Indian Grey Mongoose, Indian Crested Porcupine, Indian Hare, Indian Field Mouse, House mouse, Common house Rat, Indian Wild Boar, etc). Avifauna: Total 43 species was observed and recorded in study area. Three species comes under the schedule-I species, which are <i>Accipiter badius</i> (Shikra), <i>Haliastur indus</i> (Brahminy kite), <i>Pavo cristatus</i> (Indian Peafowl) Reptiles & Amphibians: total 13 species, which includes <i>Boiga dightoni</i>, <i>Naja sp</i>, <i>Bungarus caeruleus</i>, <i>Hemidactylus flaviviridis</i>, <i>Gecko</i>) Butterflies: 15 Species Aquatic Ecology: The plankton species (39 species) such as <i>Chaetoceros lauderi</i>, <i>Thalassionema sp</i>, <i>Nitzchia sp</i>, <i>Biddulphia sinensis</i>, <i>Scourfieldia caeca</i>, <i>Skeletonema sp</i> and <i>Chlorella sp</i> revealed the unpolluted environment near the project site. Further, there is a plenty of sea shells along the seashore were found to be dead shells indicating there is a fishing activity with regard to seashells near to Kulasekaranpatnam and Manapad fishing village. Zooplankton (24 species): <i>Dictyocysta sp.</i>, <i>Eutintin nustenuis</i>, <i>Brachionus sp.</i>, <i>Acartiaerythraea</i>, <i>Calocalanus pavo</i> etc. Fish & other marine community (46 species): <i>Alectis ciliaris</i>, <i>Alepes mate</i>, <i>Ephippus orbis</i>, <i>Leiognathus fasciatus</i>, <i>Liza seheli</i> etc. Marine mammals: There are no reports in recent year about regular occurrence of marine mammals in the coastal waters of Tamil Nadu regions.	
Risk assessment Study	The preliminary risk assessment has been completed for the proposed power plant and associated facilities and the broad conclusions are as follows: • There will be no significant community impacts or environmental damage consequences; and • The hazardous event scenarios and risks in general at proposed plant can be adequately managed to acceptable levels by performing the recommended safety studies as part of detailed design, applying recommended control strategies and implementing a Safety Management System as practiced in the existing plant <u>Risk Reduction Opportunities</u> • Buildings and plant structures designed for cyclone and seismic events (where appropriate), • Provision for adequate water capacity to supply fire protection systems and critical process water; • Isolate people from load carrying/mechanical handling systems, vehicle traffic and storage and stacking locations; • Installation of fit-for-purpose access ways and fall protection systems to facilitate safe access to fixed and mobile plant; • Provision and integrity of process tanks, waste holding tanks and bunded areas as per relevant standards;	Risk Assessment study was carried out and included in EIA/EMP report.

Period	March – May 2024	Additional study (if any)
	· Containment of hazardous materials; · Security of facility to prevent unauthorized access to plant, introduction of prohibited items, and control of onsite traffic; and · Development of emergency response management systems commensurate with site-specific hazards and risks (fire, explosion, rescue and first aid). Recommendation of Risk assessment report and mitigation measures are- · Storage tanks with level instruments and alarm · Dyke should be leak proof · Tank details Painted on storage tank · Proper earthing and bonding · Securing and surveillance in storage area · Firefighting facility · Integrity of tank piping · PPE · Preventive and predictive maintenance · Emergency response Mock drills	
Marine impact assessment study (Only for coastal based TPPs)	The desalination outfall is located at 1.6km inside the sea from plant. Lat: 8°25'57.180'' N Long: 78° 5'5.430'' E. Temperature: 30 to 33 °C DO: 4.51 to 6.90 mg/l Sediment quality parameters, including pH and total organic carbon, showed no evidence of abnormal accumulation or degradation attributable to project activities. Marine biodiversity assessment documented a total of 126 species, encompassing finfishes, elasmobranchs, crustaceans, molluscs, echinoderms, cnidarians, and seaweeds. Based on the findings of the present monitoring period, it is concluded that the project will not cause any significant adverse impacts on coastal ecology, groundwater quality, sediment quality, or marine biodiversity. If any abnormality observed after commissioning the plant necessary mitigation measures with additional cost for conservation will be earmarked and included in EMP.	Continuous monitoring of marine biology is being conducted by the Fisheries college and Research Institute, Tuticorin. Samples were collected on 25.07.2025. The water, sediment and sea shell samples were collected and the results are within prescribed limit. Quarterly report for the period from October to December 2025 received from the Institute.

15. The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Sr. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal
1.	Domestic Solid waste	Bio-degradable waste	15.914 TPA	Organic Waste Convertor	Disposed through Udangudi town panchayat
2.	Domestic Solid waste	Non bio degradable waste	23.871 TPA	-	Disposed through Udangudi town panchayat
3.	Domestic Solid waste	Sludge from STP	1.29 TPA	-	Manure for green belt
4.	Solid waste	ETP Sludge	206 TPA	-	TSDF site
Hazardous waste generation					
5.	Glass Wool	Overhauling	1 TPA	-	TSDF site
6.	Resin	DM plant	2 TPA	-	TSDF site
7.	Waste oil	Maintenance	1.6 TPA	-	TSDF site

Sr. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal
8.	E waste	Administrative office, control room, etc.	0.0195		Approved recyclers approved by MoEF&CC/CPCB/SPCB for recycling of respective type of e-waste
9.	Plastic waste	Domestic	4.77		Disposed through Udangudi town panchayat

16. Public Consultation: The public hearing for the project was originally conducted on 07/02/2009. Proposed project is exempted from conduct of fresh public hearing as per provisions of the MoEF&CC Notification S. O. 1247(E) dated 18 March 2021. However, Public Consultation (Written submission only) was conducted by TNPCB by publicizing the draft EIA/EMP report/Summary on the TNPCB website on 2.01.2025. TNPCB vide letter dated 08/04/2025 communicated to MoEF&CC, New Delhi stating that no views in writing had been received by them.

Action plan (with budgetary allocation) for the issues raised during public hearing held on 07/02/2009 as per MoEF&CC O.M. dated 30/09/2020 -

Sl.No.	Key area Identified under Socio-EMP (CER) based on issue raised during Base Assessment Survey	Time bound (Year wise) Expenditure (Rs. in Crore)			Budget
		FY 2018 - 2020	FY 2025-26	FY 2026-27	
A	As on date spent on equipment purchase/ repair/ alteration in government hospitals, construction of fish landing centre and temporary protection of sea erosion, etc. in nearby villages	10.843	-	-	10.843
B	Construction & Renovation of compound wall & buildings, facility arrangements for Government Schools in Nainarpathu and Kallamozhi villages		4.4655	4.4655	8.931
C	Renovation of primary health centre for Kulasekharapattinam, Meinganapuram villages and Thiruchendur Town panchayat.		0.75	1.25	2
D	Solar power, street light provisions for Udangudi town panchayat, Nainarpathu, Kallamozhi, Alanthalai and Kulasekharapattinam villages.		3	2	5
E	Construction of Drinking water supply arrangements, Road infrastructure and drainage works for Kallamozhi, Alanthalai, and Kulasekharapattinam villages.		1.5	1.5	3
F	Construction of Community Hall, library, playground and park arrangements at Periyathalai village and Udangudi Town panchayat		0.2	0.3	0.5
G	Fishermen welfare facilities like supply of out board motor for boats, supply of life jackets, first aid kit etc. in Alanthalai, Kallamozhi and Kulasekharapattinam villages. Total no. of. Boats planned = 294 & 1176 Life jackets		1	1.42	2.42
Total budget		10.843	10.9155	10.9355	32.694

17. Capital of project: The capital cost of the proposed project is Rs. 13076.705 Crore and the capital cost for environmental protection measures is proposed as Rs. 1,017.164 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 62.01 Crore. The employment generation from the proposed project / expansion is 545 Nos. The details of EMP cost for environmental protection measures is as follows:

S.No.	Particulars	Capital Cost (Rs. in Crores)	Recurring Cost (Rs. In Crores)
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S.No.	Particulars	Capital Cost (Rs. in Crores)	Recurring Cost (Rs. In Crores)
1	Air		
	i) ESP	60.00	12.00
	ii) Dust Suppression system for coal handling area	3.00	0.60
	iii) Dry fog system	1.00	0.20
	iv) Crushing and Transfer tower areas	0.50	0.20
	v) Boiler modification for Low NOx Burner	442.00	8.84
2	RCC Chimney	60.00	6.00
3	Cooling towers	60.00	6.00
4	Bottom ash and fly ash collection, storage and disposal system	160.00	16.00
5	ETP & STP	3.00	0.30
6	Greenbelt development	4.17	0.42
7	Pollution monitoring instrument / equipment	3.00	0.20
8	Outfall arrangements	120	2
9	Energy conservation measures	3.6	0.5
	i). Solar panel	24	0.4
	ii). Solar power plant of 4MW		
10	Solid waste management (including OWC)	0.2	0.05
11	Others (Socioeconomic development)		
	I. Occupational health & services (for establishment of PHC at site)	37.00	7.30
	II. Public consultation issues	2.00	1
12	CER amount including PH/Consultation issues	32.694	-
13	Conservation plan for Schedule-I species, Mangrove management plan & Sand dune management plan approved by PCCF	0.8150	-
14	Additional cost of Marine Biodiversity conservation in case of any abnormality observed during project operation	0.185	-
	Total	1,017.164	62.01

18. Green belt development: Proposed greenbelt will be developed in 125.4 ha which is about 33% of the total project area. Thus, total of 125.4 ha area (33% of total project area) will be developed as greenbelt. A 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted. Total no. of 3,13,500 saplings will be planted and nurtured in 125.4 hectares in 2 years.

19. Ash management

Details	Annual generation (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Fly Ash	1.054	1.054	100	-	4 Nos. of 1000 Tonne each
Bottom Ash	0.26	0.26	100	-	HDPE Lined Ash Dyke of 1760382.5 m ³

Ash Pond details:

S.No.	Details of Ash Pond	Ash pond
1.	Area (Ha)	48.562

S.No.	Details of Ash Pond	Ash pond
2.	Dyke height (m)	5
3.	Volume (m ³)	1760382.5
4.	Quantity of ash to be disposed (Metric Tons/Annum)	1.31
5.	Expected life of ash pond (number of years and months)	6 years 2 months
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE lining
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	MoEF&CC norms for ash utilization will be followed. i) 100% Fly ash utilization will be done by e-auction. ii) Bottom ash will be disposed in ash dyke (LCSD).
8.	Ratio of ash: water in slurry mix:	1:5
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m ³)	Not applicable
11.	Details regarding dyke stability study and name of the organization who conducted the study:	Stability study was carried out by M/s. Bharat Heavy Electricals Limited (BHEL)

Ash utilization plan: The ash generated from Udangudi thermal power plant will be disposed through E-auction as per the practice of TNPGCL which will be utilised as per Ash notification dated 31.12.2021 and its subsequent amendments for the eco-friendly purposes such as fly ash-based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels; Cement manufacturing, ready mix concrete; Filling up of low-lying area, etc.

20. Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: Nil

Any violation case pertaining to the project on following: i. The Environment protection Act, 2006 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. iii. The Wild Life (Protection) Act, 1972	Nil
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21. Written submissions: The proponent vide letter dated 11th February 2026 has submitted the following written submission as suggested by the EAC during the meeting.

S. No.	Particulars	Compliance
1.	Greenbelt to be revised to maintain 33%	The greenbelt is revised to 33%. The revised greenbelt area is 125.4 Ha. and total 3,13,500 Nos. of. Trees are proposed to be planted.
2.	Carbon Sequestration to the effect of 33% and installation of 4MW Solar Power Plant	The carbon sequestration calculation is revised for 33% which will be sequestering 5.91% of the total CO ₂ emission when the plant growth reaches to 25 – 30 years. In order to offset the initial CO ₂ emission, 4MW of solar power plant is planned to be installed. The sequestration at the rate of 5250 tCO ₂ /year is accounted w.r.t solar power plant. Hence, the total estimated sequestration is about 5.97%.
3.	Physical targets of CER like name of the villages with activity.	The CER amount planned to be taken in the villages viz., Nainarpathu, Kallamozhi, Kulasekharapattinam, Meinganapuram, Alanthalai, Periyathalai villages, Thiruchendur Town panchayat and Udangudi Town panchayat which are in the vicinity of TPP.
4.	Additional fund allocation for Marine Biodiversity Conservation in case of abnormality observed during operation along with revised EMP cost	As directed, in case of abnormality observed during operation of TPP, additional fund of Rs. 0.185 Crore is earmarked for Marine Biodiversity Conservation. Accordingly, EMP is revised. Similarly, the cost of solar power plant is also included in the EMP.

S. No.	Particulars	Compliance
5.	Ash utilization plan	TNPGCL will adhere the Ash notification dated 31 st December 2021 and amendments. Detailed ash utilization plan is submitted.
6.	Clarification regarding the Schedule – I species	As mentioned in the presentation and report, there are three Schedule – I species identified namely Indian peafowl, Shikra & Brahminy kite only.

Observations and deliberation of the EAC

22. The Committee observed and noted the following:

- i. Instant proposal is for seeking fresh Environmental Clearance for 2x660 MW (1320 MW) to complete the commissioning of the constructed facilities as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 which states that “where construction and commissioning of proposed activities have not been completed within the validity period of the Environmental Clearance (EC) and a fresh application for EC has been submitted due to expiry of the said period of the EC, the concerned Expert Appraisal Committee or State Level Expert Committee, as the case may be, may exempt the requirement of public hearing subject to the condition that the project has been implemented not less than fifty percentage in its physical form or construction”.
- ii. As per the information provided by M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL), the physical progress report of 2x660 MW TPP till the time of expiry of existing EC is about 90%. Beyond the EC expiry, no construction activity was carried out. Undertaking in this regard has been submitted.
- iii. The existing project was accorded Environmental clearance for setting up of 2x800 MW vide letter dated 14.10.2013. EC was amended on 26.04.2017 for reduction of unit sizes from 2 x 800 MW to 2 x 660 MW with validity extended till 13.10.2024. Consent to Operate was accorded by Tamil Nadu State Pollution Control Board vide letter dated 09/08/2023 with validity up to 13/10/2024.
- iv. The instant TPP is under construction and about 90% of TPP construction activities have been completed. Further, M/s. Bharat Heavy Electricals Limited (BHEL) has conducted Structural Condition/Stability Assessment of already erected buildings, Systems & their foundation of existing TPP and duly ensured the structural stability for proposed TPP (2 x 660 MW) vide letter/certificated dated 22/01/2026.
- v. The power plant will be operated with blended coal (50% imported & 50 % indigenous) as fuel with super critical technology to generate 1320 MW power (2x660 MW). Total 5.893 MTPA coal will be required and transported through Pipe conveyor system for the proposed TPP.
- vi. The proposed project have its own captive coal jetty at Udangudi with transportation of coal through pipe conveyor system to the power plant to handle coal up to 15.33 million tonnes per annum. IITM, Chennai has studied the feasibility of the coal jetty. Based on the feasibility study NIO, Goa has finalized the location by model studies. The captive coal jetty and pipe conveyor system are interlinked to this SCTPP which has obtained EC+CRZ Clearance from MoEF&CC vide Letter dated 03.08.2022.
- vii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.
- viii. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.
- ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.
- x. The Status of compliance of earlier EC was obtained from Regional Office, Chennai, MoEF&CC on 01.04.2025. The Action taken report regarding the partially/non-complied conditions has been submitted by TNPGCL to RO, MoEF&CC, Chennai vide letter dated 21.02.2025. The Status of compliance of earlier EC of Captive Coal Jetty was obtained from Regional Office, Chennai vide letter dated 26.12.2025. The report was deliberated by the committee and found it

satisfactory.

xi. ToR was granted for the ongoing project for capacity of 2×660 MW TPP vide letter dated 29.07.2024 in the name of M/s. TANGEDCO and later was transferred to M/s TNPGL vide letter dated 26/07/2025.

xii. Public Hearing (PH) was exempted by the EAC as per S.O. 1247(E) dated 18.03.2021, however, Public consultation was conducted through a public independent base assessment survey on 16.4.2025. The budget of Rs. 32.694 Cr has been allocated to address the public needs raised during public hearing held on 07/02/2009. The capital cost of EMP cost is proposed as Rs. 1,017.164 Crore and annual recurring cost towards the environmental protection measures is proposed as Rs. 62.01 Crore.

xiii. Total land of 380 Ha. is required for the proposed project. The land is already under the possession of M/s TNPGL. Out of total project area of 380 Ha., an area of 125.4 Ha (about 33%) is proposed for green belt.

xiv. There is no involvement of forestland. However, there is a Reserve Forest and Protected Forest within 10 km distance from the project site as ascertained from DSS.

xv. As per the revised categorization given in the Wildlife (Protection) Amendment Act, 2022, total 03 Schedule I Species found in the buffer zone during field survey and secondary sources. A Wildlife Conservation & Management Plan (WLCP) has been prepared and approved by the Principal Chief Conservator of Forest (Wildlife), Govt. of Tamil Nadu vide letter dated 15.12.2025.

xvi. The project area is located on the sea shore and thereby the Bay of Bengal is the largest waterbody in the 10 km radius. Recommendations of CZMA has been obtained. CRZ map indicating HTL/LTL demarcated by the authorized agency in 1:4000 scale has been submitted.

xvii. Karumeni River is located at 3.75 km from the project boundary. Water Resource Department, Korampallam Aru Basin Division, Thoothukudi, vide letter dated 08/08/2024 has given certificate regarding HFL level of Karumeni River at Manapad village, which is +3.50 m, while the plant is at an elevation of approx. 2-10 m above mean sea level.

xviii. There are mangroves and sand dunes within the study area at 8.12 km (NE) and 0.5 km (E) of the project site, respectively. Conservation plan has been approved by PCCF, Chennai vide letter dated 15.12.2025.

xix. The water requirement for the proposed project is estimated as 2,81,808 m³ /day, out of which 87,168 m³/day of fresh water requirement will be drawn from desalination plant and the remaining 1,94,640m³ /day will be met from the sea for cooling purposes. The water will be transported to the plant site through pipeline. No extraction of ground water is envisaged. Water requirement for the operation phase will be met through captive desalination plant of 16 MLD capacity.

xx. The power requirement for the proposed project is estimated as 92 MW, which will be sourced from plant itself.

xxi. Proposed greenbelt will be developed in 125.4 Ha. which is about 33% of the total project area. Thus, total of 125.4 Ha. area (33% of total project area) will be developed as greenbelt. A 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted. Total no. of 3,13,500 saplings will be planted and nurtured in 125.4 hectares in 2 years.

xxii. The required area of Ash pond will be about 48.562 Ha considering the bund height of 5m for both fly and bottom ash. The Fly Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilised through E-auction as per the practice of TNPGL in Cement Industries, reclamation of abandoned mines, manufacturing of bricks, road construction, and aggregate replacement in concrete, etc. as per Fly Ash Notification, 31st December'2021. Provision will be made for disposal of un-utilized ash in high concentration slurry form to ash dyke.

xxiii. The capital cost of the proposed project is Rs. 13076.705 Crore and the capital cost for environmental protection measures is proposed as Rs. 1,017.164 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 62.01 Crore. The employment generation from the proposed project / expansion is 545.

xxiv. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, Dry fog system, Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also twin flue chimney of 275 m. height will be provided to control & regulate the air emission from the proposed project.

xxv. Committee deliberated on the action plan of Hydrogeology study; Bio-diversity/aquatic ecology study, Risk assessment study, Marine impact assessment study, and found it satisfactory.

xxvi. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant (STP: 40 KLD capacity) for treatment of about 24.5 KLD domestic waste water and treated sewage water shall be utilized for horticulture purpose. Effluent generated (~ 720 KLD) will be treated in the Effluent Treatment plant (ETP) of capacity 720 KLD and reused for horticulture. In addition, about 1,59,624 m³/day of cooling tower makeup water will be discharged into sea and 15,314.4 m³/day of ash water recovery will be recirculated to ash water pump house. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xxvii. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxviii. No court cases and show cause notices related to Environment are pending against the proposed project.

xxix. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xxx. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

23. The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** for grant of Environmental Clearance to the proposed “2x660 MW Udangudi Supercritical Thermal Power Project (Stage-1) by **M/s Tamil Nadu Power Generation Corporation Ltd (TNPGL)** at Udangudi Village, Tiruchendur Taluk, Tuticorin District, Tamil Nadu”, under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and standard/general conditions (**Annexure 1**).

24. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environmental Clearance to **M/s. Tamil Nadu Power Generation Corporation Ltd (TNPGL)** for “2x660 MW Udangudi Supercritical Thermal Power Project (Stage-1), located at Udangudi Village, Tiruchendur Taluk, Tuticorin District, Tamil Nadu” subject to compliance of the Specific/General environmental conditions (**Annexure 1**).

25. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

26. The Environmental Clearance 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.

27. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

28. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a

period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

29. General Instructions:

(i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.

(iii) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

(v) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(vi) The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(vii) Validity of EC is as per the provision of EIA Notification, 2006 and its subsequent amendment.

30. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

31. This issue with an approval of the Competent Authority

Yours faithfully,

(Sundar Ramanathan)

Scientist 'F'

Tel: 011- 20819378

Email- r.sundar@nic.in

Copy To

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
3. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34.
4. Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001

5. Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai- 600 032, Tamil Nadu.
6. The District Collector, Tuticorin, State Government of Tamil Nadu.
7. Guard file/Monitoring file/PARIVESH Portal

Annexure 1

Specific EC Conditions for (Thermal Power Plants)

1. [A] Environmental Management

S. No	EC Conditions
1.1	Project proponent shall adopt 100% utilization of ash generated from the proposed TPP in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the ash pond proposed for the project of 2x660 MW shall not exceed 48.562 Ha as committed
1.2	Project proponent shall install three (03) continuous ambient air quality monitoring station (CAAQMS) at suitable locations in and around project site in consultation with Tamil Nadu State Pollution Control Board (TNPCB) within one year from the date of grant of EC as committed
1.3	Project proponent shall comply with the recommendations made in the aquatic Ecology & Biodiversity assessment report, Hydrogeology and Hydrogeology study, Risk assessment Study and Marine-EIA in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
1.4	The coal requirement for the proposed project is about 5.893 MTPA and same would be met from the imported and domestic coal from subsidiaries (Talcher Coal field of Mahanadi coal field limited) of M/s. Coal India Limited (CIL). Coal shall be transported to the plant site only through a captive jetty followed by pipe conveyor system and no road transportation is permitted at all.
1.5	The total water requirement for the proposed project is estimated as 2,81,808 m ³ /day, out of which 87,168 m ³ /day of fresh water requirement will be drawn from desalination plant and the remaining 1,94,640m ³ /day will be met from the sea for cooling purposes. The water will be transported to the plant site through pipeline. No extraction of ground water is envisaged. Water requirement for the operation phase will be met through captive desalination plant of 16 MLD capacity only. Usage of surface as well as ground water for the project is not permitted.
1.6	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
1.7	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 1,017.164 Crores (Capital) and Rs. 62.01 crores (recurring) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
1.8	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to

S. No	EC Conditions
	the concerned Regional Office of the MoEF&CC.
1.9	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/ CNG vehicles in a time bound manner, replacement of the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people if possible and all efforts for adopting heavy E-vehicles/CNG Vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
1.10	The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to SO ₂ emission norms. Along with Particulate Matters, SO ₂ , NO _x and Hg, CO and CO ₂ shall also be monitored for stack emissions.
1.11	Ash pond area and fly ash utilization shall be as per Fly Ash Notification issued by Ministry/ CPCB from time to time.
1.12	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
1.13	Effluent of 710 KLD will be treated through Effluent Treatment Plant and domestic wastewater shall be treated with Sewage treatment plant of 40 KLD capacity. All the treated water shall be reused.
1.14	Sea water outfall location shall be as per the recommendation of the Marine Environment Impact assessment (M-EIA) report. The outfall should be located at an optimum distance from the coastline to ensure maximum dispersion and minimum impact on the marine ecosystem around the discharge point.
1.15	PP shall install 4 MW Solar Energy Plant for conservation measures. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of EC. PP should explore more opportunities to put solar PV in nearby Schools and other Government buildings also.
1.16	PP shall implement the concurrent plantation plan in a time bound manner. Total of 125.4 Ha. area (33 % of total plant area of 380 Ha) will be developed as greenbelt. A 3m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover within 2 years after receiving the EC as per CPCB guidelines. The height of the saplings to be planted should be of 2 meter height. The budget earmarked for the green belt plantation shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
1.17	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities and shall also develop green belt around the nearby schools within 5 years in time bound manner. Regular watering of saplings planted in the

S. No	EC Conditions
	nearby schools will be carried out by Project Proponent to mitigate the air and noise pollution. Further, PP shall organize awareness programs regularly for school students to educate them on the significance and preservation of environment/trees.
1.18	Wildlife conservation plan and mangroves and sand dunes conservation and regeneration plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan and mangroves and sand dunes conservation and regeneration plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of two months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
1.19	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
1.20	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
1.21	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
1.22	Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
1.23	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. 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.
1.24	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
1.25	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. 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. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
1.26	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.
1.27	All relevant parameters as inferred from the M-EIA report shall be periodically monitored by the NABL accredited laboratory to ensure proper thermal and salinity dilution to protect the marine ecosystem.

S. No	EC Conditions
1.28	There are sand dunes within the study area at 0.5 km (E) of the project site. PP shall ensure that the Sand dunes located at 500 m shall be protected making it essential that they are not disturbed.
1.29	All the Conditions stipulated in the Environmental and CRZ clearance letter dated 03.08.2022 shall be implemented.
1.30	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
1.31	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

2. [B] Socio-economic

S. No	EC Conditions
2.1	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 5 km radius of the project cover area 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.
2.2	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.
2.3	The budget proposed for PH is Rs. 32.694 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
2.4	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

3. [C] Miscellaneous

S. No	EC Conditions
3.1	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.
3.2	Project proponent shall obtain environmental safeguards from TNPCB within 30 days from the date of grant of environmental clearance as per OM dated 25/11/2025. Compliance in this regard shall be submitted to the Ministry and Regional Office of MoEF&CC.
3.3	Consent 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.
3.4	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

Standard EC Conditions for (Thermal Power Plants)

1. Statutory Compliance

S. No	EC Conditions
1.1	Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
1.2	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
1.3	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
1.4	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

2. Ash Content/mode Of Transporatation Of Coal

S. No	EC Conditions
2.1	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

3. Air Quality Monitoring And Management

S. No	EC Conditions
3.1	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to SO ₂ emission norms.
3.2	Low NO _x Burners with Over Fire Air (OFA) system shall be installed to achieve NO _x emission standard of 100 mg/Nm ³ .
3.3	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm ³ .
3.4	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO ₂ , No _x and Particulate Matter as per extant rules.
3.5	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
3.6	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM ₁₀ , PM _{2.5} , SO ₂ , NO _x within the plant area at three locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
3.7	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
3.8	Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

4. Noise Pollution And Its Control Measures

S. No	EC Conditions
4.1	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
4.2	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
4.3	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

5. Human Health Environment

S. No	EC Conditions
5.1	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account

S. No	EC Conditions
	of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
5.2	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

6. Water Quality Monitoring And Management

S. No	EC Conditions
6.1	The water requirement for the project shall be met from seawater. The usage of surface water as well as ground water for the project is not permitted.
6.2	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
6.3	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6.4	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
6.5	Wastewater generation of 720 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
6.6	Sewage generation of 24.5 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Faecal Coliforms (Most Probable Number): <1000 per 100 ml.

7. Risk Mitigation And Disaster Management

S. No	EC Conditions
7.1	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
7.2	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the

S. No	EC Conditions
	extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Low sulphur fuel shall be used.
7.3	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
7.4	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
7.5	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

8. Green Belt And Biodiversity Conservation

S. No	EC Conditions
8.1	Green belt shall be developed in 125.4 Ha area (33% of total project area) of the total plant area with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
8.2	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.

9. Waste Management

S. No	EC Conditions
9.1	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
9.2	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
9.3	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached. Fencing and plantation should be done all along the periphery of the ash dyke.
9.4	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Fly Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
9.5	Unutilized ash shall be disposed off in the ash pond in the form of HCSD/LCSD method. Ash water recycling system shall be set up to recover supernatant water.

10. Monitoring Of Compliance

S. No	EC Conditions
10.1	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
10.2	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
10.3	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
10.4	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
10.5	The project proponent shall (Post-EC Monitoring): - Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; - Upload the clearance letter on the web site of the company as a part of information to the general public. - Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. - Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; - Monitor the criteria pollutants level namely; PM (PM10& PM2.5 in case of ambient AAQ), SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company; - Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; - Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; - Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

11. Corporate Environmental Responsibility (Cer) Activities

S. No	EC Conditions
11.1	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of

S. No	EC Conditions
	implementation with appropriate budgeting. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the shall be submitted.

12. Marine Facilities

S. No	EC Conditions
12.1	As the seawater intake systems are required for the plant fall in CRZ area, recommendations from State Coastal Zone Management Authority (SCZMA) as per CRZ Notification shall be implemented.
12.2	Marine intake and outfall pipelines shall be located as per the recommendations State Coastal Zone Management Authority (SCZMA).

13. Sea Water Intake

S. No	EC Conditions
13.1	Seawater intake system shall be so designed and constructed to ensure sufficient sweater in terms of quantity and quality.
13.2	The withdrawal of seawater shall be preferably through a pipeline with a riser equipped with a velocity cap arrangement and bar screen to arrest the impingement of large marine organisms.
13.3	In all tide conditions (particularly at spring low tides) the riser head must be flooded with the required submergence of seawater above its top.

14. Effluent Release

S. No	EC Conditions
14.1	At the effluent release point, maximum temperature of the discharge water shall not be more than 50C and salinity shall not exceed 50 ppt with respect to that of the ambient seawater.
14.2	Use of antifouling agents like chlorine / hypochlorite, shall be carefully controlled. The chlorine concentration shall not exceed 0.2 ppm at the effluent release point.
14.3	The effluent when released at the selected location shall attain sufficient dilution so that near ambient water quality (particularly temperature and salinity) is attained within 500 m from the release location, at low tide.
14.4	The location of the diffuser shall be marked with a solar lighted buoy to avoid accidents.
14.5	The site selected based on mathematical modeling shall ensure absence of recirculation of the effluent plume in the seawater intake area under all tidal conditions.

S. No	EC Conditions
14.6	The effluent shall be released through a properly designed multiport diffuser above the seabed to facilitate its efficient initial mixing with the receiving seawater.
14.7	Efficacy of the diffuser shall be ascertained at least once in 2 years through scientific studies and corrective actions such as cleaning of the diffuser from marine growth, removal of silt deposits, etc. shall be taken up, if warranted.
14.8	Continuous online monitoring system for Temperature and Salinity shall be installed to monitor the quality of effluent.

15. Common To Intake And Effluent

S. No	EC Conditions
15.1	The pipeline shall be buried below the seabed at a depth to ensure its stability under rough sea conditions particularly during cyclone / tsunami. The depth of burial will depend on the seafloor strata but normally the top of the pipeline shall be at least 1 m below the bed level. In the surf and intertidal zones, the pipeline shall be buried below the maximum scour level.
15.2	In case of open channel, the channel shall be constructed as per the recommendations of State Coastal Zone Management Authority (SCZMA).
15.3	If the substratum is rocky the pipeline may be anchored to the rock provided the geology of the area satisfactorily supports the structure which shall be ascertained through geo-technical investigations.
15.4	Exposed pipeline section and riser shall be protected by armour stone from waves, boats anchoring, fishing activities etc.
15.5	The location of the riser & diffuser shall be marked with a solar lighted buoy to avoid accidents from boats.
15.6	Marine / Sea water quality shall be monitored at effluent release location at the center. Parameters to be monitored shall be as follows: a. Physico-chemical: Temperature, Salinity, pH and Dissolved Oxygen. b. Biological: Primary Productivity, Phytoplankton (Chlorophyll a, Phaeophytin, Population, Species), Zooplankton (Biomass, Population, Species) and Benthos (Biomass, Population, Species).
15.7	Mangrove plantation shall be taken up as per the conservation plan approved by the State Forest Department vide letter dated 15/12/2025. Compliance status in this regard shall be submitted to the Regional Office along with the six monthly compliance report. Further, Mangrove plantation proposed in the backwater canal area located on the northern side of the Tiruchendur Subramania Swamy Temple, with the objective of enhancing coastal ecology and contributing to sustainable environmental management shall be carried out, as committed.