CLEARANCE CONDITIONS COMPLIANCE STATUS FOR 2 X 600MW & 3 X 660MW COAL BASED TPP AND CAPTIVE PORT & DESALINATION PLANT -MARCH 2023

EC for Thermal Power Plant	May 31, 2010
Corrigendum to EC for Thermal Power Plant	Aug 14, 2012
Amendment to EC for Thermal Power Plant	Feb 04, 2014
Amendment to EC for Transportation of Coal by Rail	Mar 27, 2015
Extension of EC for Thermal Power Plant	Feb 26, 2018
EC for Captive Port and Desalination Plant	Oct 29, 2010
Extension of EC for Captive Port and Desalination Plant	Mar 05, 2018

I. EC Conditions and Compliance Status for Thermal Power Plant

The condition wise compliance status for environmental clearance issued for thermal power plant at Kothattai, Cuddalore District vide order dated 31/05/2010 is given in below.

EC Conditions and Compliance Status for Thermal Power Plant

S.No.	Conditions	Compliance Status
А	SPECIFIC CONDITIONS	
(i)	Environmental clearance is subject to obtaining CRZ clearance for permissible activities to be located in CRZ areas	Complied. CRZ Clearance obtained.
(ii)	It is noted that the on the western side of the plant area, Buckingham Canal is almost touching the plot area at some of the locations even though a distance of 100 m as per the provisions of CRZ notification is reported to be maintained. The company shall ensure that the distance from the Buckingham Canal shall not be less than 150 m. Building and permanent structures on the western side of the canal shall be designed accordingly.	ITPCL ensured that the distance from the Buckingham Canal is more than 150 m in respect of building and permanent structures on the western side of the Buckingham Canal.
(iii)	In case source of fuel supply, now proposed to be run on imported coal from Indonesia, is to be changed at a later stage, the project proponent shall intimate the Ministry well in advance along with necessary requisite documents for its concurrence for allowing the change. In that case the necessity for re- conducting public hearing shall be determined by the Ministry in consultation with the Expert Appraisal Committee (Thermal).	

S.No.	Conditions	Compliance Status
(iv)	The project proponent should keep space provision for providing the FGD system with all the five units of power plant, so that the systems can be installed whenever required. Sulphur content in the imported coal shall not exceed 0.80%.	Complied. FGD systems are installed, Commissioned and in operation for the 2 Units. Space is reserved for placing FGD systems for future expansion projects.
	Note: As per EC amendment dated 04 th Feb 2014 sulphur content limit is amended from 0.2% to 0.8%	
(v)	A detailed coal analysis from a reputed lab for all contracted coal sources for the project shall be submitted within three months.	Complied. ITPCL uses only imported coal since its inception and will continue to do the same. Coal analysis containing proximate analysis, ultimate analysis, ash analysis reports submitted to Regional Office, MoEF&CC, Chennai, dated 16.10.2017.
vi)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ . Two stack of 275 m each and having exit velocity not less than 22 m/s shall be installed.	Installed high efficiency ESPs having compliance for the specifications stipulated.
(vii)	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Adaguata Dust Extraction System

S.No.	Conditions	Compliance Status
(viii)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM _{2.5} & PM ₁₀), SO ₂ , NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Complied and regularly uploaded. The status of compliance of the stipulated EC conditions, including results of monitored data are uploaded on their website. The criteria pollutant levels are displayed online at the Main gate of the Plant. Monitoring data is being submitted to Regional Office of MoEF&CC, CPCB and TNPCB, every half yearly.
(ix)	The project proponent shall examine in detail the possibility to adopt NIOT technology of desalination through Low Temperature Thermal Desalination (LTTD) process. In case the same is not feasible detailed explanation shall be submitted to the Ministry within six months.	
(x)	The water containing brine shall be discharged only after cooling at ambient temperature in a guard pond such that after the same is made to meet the average salinity of sea water.	Complied. The brine water is diluted with cooling water before disposal, to meet the average salinity of the sea water.
(xi)	monitoring mechanism for marine/coastal water at its own expenses by an independent government organization location in the region such as Annamalai University. A comprehensive	Complied. Monthly marine monitoring is being carried out by engaging Annamalai University and the monitoring reports are being submitted along with six monthly report to the Ministry and TNPCB as well. Same will be continued. Copy of comprehensive marine biological monitoring report was submitted to the Ministry on 19.07.2019 as directed by the Ministry then.
(xii)	Suitable screens (in stages) shall be placed across intake channel to prevent entrainment of life forms including eggs, larvae, juvenile fish, plankton etc. during extraction of sea water.	Complied.

S.No.	Conditions	Compliance Status
(xiii)	COC of at least 1.3 shall be adopted. The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant (as may be required).	
(xiv)	No ground water shall be extracted for use in operation of the power plant even in lean season	•
(xv)	No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.	•
(xvi)	There should not be any contamination of soil, ground and sur4face waters (canals & village pond) with sea water in and around the project sites. In other wards necessary preventive measures for spillage from pipelines, such as lining of guard pond used for the treatment of outfall and intake should be adopted. This is just because the areas around the projects boundaries fertile agricultural land used for paddy cultivation.	There is no contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. The Company has taken all measures for prevention of spillage from pipelines.

S.No.	Conditions	Compliance Status
(xvii)	To absorb the ground level pollutants, to act buffer against strong winds arising out of tropical cyclones/ storms, to reduce heat load and ameliorate environment, there is a need for shelterbelts/greenbelts/ tree cover along the coastline, bunds around marshy areas, roadsides, around the project protected monuments, forts, waste places, School Campuses and other vacant lots. Coconut plantations can be developed along the coastline and near villages, School and forts. Stands of Casuarina should also be developed on some dunes and along coasts. Bamboos, neem and other native trees should be planted in and around at the villages.	The specific Conditions are mostly complied except along the coastline since this region is vulnerable and frequently affected by natural calamities like cyclones, Flood, low depressions and affected by Tsunami at times. However, we have planted around 3,35,169 trees of native species in an area of 268 acres (which is more than 33% of land corresponding to Phase
(xviii)	No waste water should be discharged onto channel systems, backwaters, marshy areas and seas without treatment. The outfall should be first treated in guard pond and then discharge into deep sea (12 to 15 m depth). Similarly, the intake should be from deep sea to avoid aggregation of fish. The brine that comes out from desalinization plants should not be discharged into sea but shall be recycled.	No waste water is discharged into channel systems, backwaters, marshy areas and sea without treatment. The outfall is first treated in guard pond and then discharged into deep

S.No.	Conditions	Compliance Status
(xix)	Utilisation of 100% Fly Ash generated for Phase- I shall be made from 4 th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Implementation status is periodically
(xx)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	Fly Ash is collected in dry form and stored in Fly Ash Silo (1433 m ³ capacity) which is disposed off to cement industries regularly. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) analysis and monitoring is
(xxi)	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	HDPE lining is provided in the ash pond to avoid the leachate effect. Concreting as well as stone pitching
(xxii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved	

S.No.	Conditions	Compliance Status
(xxiii)	Green Belt shall consist of 3 tiers of plantations as cited above and largely comprising of native species around the power plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Regional office of the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %.	To comply with the conditions, Three tier plantations are carried out around the power plant in some of the locations like ash dyke and coal yard and sustained. However, three
		Plantations is made to 100 m width wherever possible and minimum not less than 50 m width is maintained in other possible areas. Green belt development and tree plantation is a continuous activity as part of our Sustainability initiatives and till March 2023, around 3,35,169 saplings are planted in an area of 268 acres and tree density of (>2500trees per Ha) is maintained in and around the project site.
		All dust generation areas have engineering controls like wind barriers around coal yard, dust suppression systems and dust extraction systems at the point source of emissions like coal unloading area, transfer towers, coal crushers etc. Fly ash and bottom ash is handled in closed conveyors, pipe line transfers etc. and hence dust generation is avoided.

S.No.	Conditions	Compliance Status
(xxiv)	To meet the expenditure on plantations and their management, 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	Presently the company is undergoing debt restructuring.
(xxv)	The project proponent shall submit a time bound implementation plan for regeneration/ preservation of Pichavaram Mangroves and others, if any, and the fund earmarked and committed for the same amounting to Rs 6.0 Crores shall not be diverted for any other activity. Road map for implementation shall be submitted within six months to the Ministry	The Project Authority earmarked Rs.6 crore for regeneration /

S.No.	Conditions	Compliance Status
(xxvi)	A dedicated Environment Management Cell with suitable qualified personnel constituting of Marine Biologist and an ecologist shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Environment Management Cell Established and under the control of
(xxvii)	The project proponent shall not hamper the vocation of the fishing community in the area and it shall be ensured that local fishing community shall be allowed to carry out their vocation. The project proponent shall adopt the fishing communities displaced / affected by the power plant and in particular those residing in and around 3.0 km of the site.	There is no displacement of the people and ensured that vocation of the fishing community is not impacted due to the formation and operation of the plant.
(xxviii)	An endowment of Fishermen Welfare Fund shall be created not only of enhance their quality of life through 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.	As per the current arrangement mandated by consortium of banks and RBI policy, we are allowed to open only one account for our
(xxix)	Local employable youth shall be identified and trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Department concerned from time to time.	Complied The Company continues to engage local employable youth and as on date, about 1015 people from local area have been given employment

S.No.	Conditions	Compliance Status
(xxx)	Two nearest villages shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school etc. shall be developed by the project proponent at its own cost in co-ordination with the district administration	Complied. The following villages are adopted under CSR scheme and basic amenities are being regularly provided. Karikuppam, Kottatai, Ariyagoshti, K.Panchankuppam, V.Panchankuppam, Pudhupettai, Pudhukuppam, Pudhuchathiram, Chinoor Indira Nagar & Samiyarpettai, etc.
(xxxi)	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months form the date of issue of this letter	hence this condition is not
(xxxii)	An amount of Rs 80.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 16.0 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation	Complied. An amount of Rs.2.48 Crore spent during this period (Apr'2022 to Mar'2023) for CSR activities. Action plans have been prepared and submitted on 16/04/2010 as an addendum to the EIA. A copy of CSR Implementation report such as educational initiatives, health care and other initiative, development of infrastructure and fisherman welfare (community hall, grave yard, library, road, toilet, fishing creek, fishing net, maintenance shed, livelihood & vocational training center, etc. submitted to Regional Office, MoEF&CC, Chennai, dated 16.10.2017.

S.No.	Conditions	Compliance Status
(xxxiii)	with action plan which can help in up-liftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self- employment and jobs. In addition a special scheme for upliftment of SC/ST's and marginalized population in the study area out of CSR programme shall be formulated and submitted to the Ministry within six months	The focus areas of the CSR initiatives undertaken by the Company are given below: Primary education and support basic requirements to schools and educational institutions. Support Basic Health Care needs of surrounding villages and ambulance service made available for medical emergency. Support Women Empowerment programmes. Initiatives for sustenance of livelihood. Vocational training and skill enhancement programmes for youth surrounding villages.
(xxxiv)	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time	All the Cohemer or required by the
В.	GENERAL CONDITIONS:	
(i)	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt / plantation	

S.No.	Conditions	Compliance Status
(ii)	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished	Complied. 10 nos. Rain water recharging structures constructed along the storm water drain. Details of Rain water Harvesting report submitted to Regional Office, MoEF&CC, Chennai, dated 16.10.2017.
(iii)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry	The details of Fire Fighting Equipments and Portable Fire Extinguishers, Fire Pump House and
(iv)	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil	
(v)	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project	As per analysis, data with reference to heavy metals is within the limits.
(vi)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase	Complied.

S.No.	Conditions	Compliance Status
(vii)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas	Acoustic enclosure is provided to Turbines to control Noise. Personal protective equipment like earplugs/ear muffs etc. is provided to employees working in high noise area. The noise level measurement results are well within the limit.
(viii)	Regular monitoring of ground level concentration of SO_2 , NOx , $PM_{2.5}$ & PM_{10} and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company	concentrations being done by NABL approved laboratory and reports are being submitted periodically to Regional Office, MoEF&CC, Chennai.
(ix)	Provision shall be made for the housing of construction labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	Necessary housing and other infrastructures were provided for the construction labour during construction phase. The temporary
(x)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <u>http://envfor.nic.in</u>	Advertisements was given in two local newspapers on 17.06.2010 in Dinamalar (Tamil) & in Times of India (English) and copy of the same was submitted.

S.No.	Conditions	Compliance Status
(xi)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent	No suggestions and representation received from the said authorities and hence a physical copy was not sent to them. Notwithstanding to that. Environment Clearance was
(xii)	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	Complied. As detailed at S.No. (xxvi) of specific condition.
(xiii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Six monthly report pertaining to the period upto September 2022 is submitted on 25 th November 2022 and for the period upto March 2023 is
(xiv)	The environment statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail	uploaded. Environmental Statement for FY 2021-22 submitted to Regional Office, MoEF&CC, Chennai dated 27.09.2022; Ref. ITPCL-S/ GEN/22-23/3555.
(xv)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests	uploaded.

S.No.	Conditions	Compliance Status
(xvi)	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant	
(xvii)	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Being complied. Allocated Rs. 779.51 crore as capital cost for installation of requisite equipment/instruments/ structures to operate the Plant for the entire capacity i.e.,3600 MW as per EC and the actual expenditure incurred is Rs.1744.99 crore as on 31 st Mar 2023 for present operation capacity of 1200 MW. Additional measures for environmental protection including abatement of pollution, prevention of pollution during Operation & Maintenance period as follows; FY 2017-18 - Rs. 31.36 Crores FY 2018-19 - Rs. 34.71 Crores FY 2019-20 - Rs. 32.01 Crores FY 2020-21 - Rs. 34.044 crores FY 2021-22 - Rs. 29.095 crores FY 2022-23 - Rs. 35.51 Crores
(xviii)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Land development and project activities started during 2011 after obtaining Consent to Establish from

S.No.	Conditions	Compliance Status
(xix)	Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.	extended to the Authorities.
4	The Ministry of Environment and Forests reserves the right to revoke the clearance of conditions stipulated are not implement to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	
5	The environmental clearance accorded shall be valid for a period 5 years to start operations by the power plant.	Noted and Complied. First EC accorded was valid upto May 2017 (MoEF&CC had amended the validity of Environment clearance as 7 years vide SO1141(E) dated 20 th April 2015) Phase 1 of TPPs (2 x 600 MW), Unit 1 and Unit 2 operations started in September 2015 and April 2016 respectively.
6	Concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	
7	In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.	
8	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under. Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments the Public Liability Insurance Act, 1991 and its amendments.	

S.No.	Conditions	Compliance Status
9	Any appeal against this environmental clearance shall be lie with the National Environment Appellate Authority, if preferred within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	

Corrigendum to EC dated August 14, 2012 and Compliance Status for Thermal Power Plant

S.No.	Conditions	Compliance Status
8.	Under para no. 4, the specific condition no. (iv) read as: 'The project proponent should, keep space provision for providing the FGD system with all the five units of power plant, so that the systems can be installed whenever required. Sulphur content in the imported coal shall not exceed 0.20 % ', shall now be substituted as under: 'The project proponent shall install Flue Gas De-Sulphurisation (FGD) system to reduce the overall stack emissions of S02- It shall be ensured that waste (brine) from FGD System is disposed off in an environmentally sound manner. Sulphur content in the imported coal shall not exceed 0.20 %'.	As per the corrigendum issued, FGD systems for each Units installed separately and in operation. Space is reserved for placing FGD systems for future expansion projects. The Plant continues to ensure the sulphur content in the imported fuel is within 0.8% as per the amendment dated 04 th Feb 2014.
3.	Under para no. 4, the specific condition no (xxix) read as: 'Local employable youth shall be identified and trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Department concerned from time to time, shall now be substituted as under: 'A study on the identification of local employable youth shall be immediately carried out and training shall be imparted for eventual employment in the project itself. The status of implementation shall be submitted to the Regional Office of the Ministry and the concerned Dept. in the State Govt, within six months'.	About 1015 people from local area have been given employment and compliance is submitted vide every six monthly report to MoEFCC, CPCB and TNPCB.

S.No.	Conditions	Compliance Status
4. (xxxv)	Under para no.4, after specific condition no. (xxxiv) the following conditions shall be now added: Sea water quality shall be continuously monitored for salinity, turbidity and temperature at selective sites across the impacted zone including estuarine waters. Mitigative measures shall be undertaken through institutes such as Annamalai University for continuous preservation of mangroves and their ecology. The monitoring data shall be uploaded on the company's website and also submit to Regional Office of the Ministry every six months	Sea water Quality study is undertaken through Annamalai University and Marine monitoring report is regularly submitted to the ministry vide 6 monthly compliance report.
(xxxvi)	In order to preserve and improve the health of the Pichavaram mangroves, required maintenance dredging shall be undertaken to keep the Vellar river mouth open at all times to ensure good tidal exchange.	Health of the mangroves is unaffected in the present operations of the plant. As
(xxxvii)	To minimize entrapment of even small marine flora and fauna, state of the art low aperture intake screens with high effectiveness for impingement and entrainment and fishnet around intake shall be installed.	Complied. Duplex velocity cap with mesh is provided to prevent the entrainment of life forms
(xxxviii)	Fish catch along the impacted zone of sea should be monitored periodically by the Department of Fisheries, Government of Tamil Nadu. The project proponent shall accordingly take up the matter with the Fishery Dept., Govt, of Tamil Nadu from time to time.	The Company has made a written request to Department of Fisheries, Tamilnadu

S.No.	Conditions	Compliance Status
(xxxix)	In order to stabilize the shoreline and control the erosion, sand bypassing shall be carried out on the northern side of the project.	Agreed. Currently there is no break water construction taken up as part of Captive port and hence sand bypassing is not required at this stage. Will be complied in future during the restarting of Captive port project construction activities.
(xl)	The project proponent shall upload environmental quality monitored data on a regular basis on its website.	Complied. Environmental quality monitoring is being done and reports uploaded on website regularly.
(xli)	and impact on their livelihoods shall be assessed separately. Accordingly, sustainable welfare scheme/measures shall	For enhancing quality of life of fisherman, Project Proponent has incurred expenditure of Rs.13.96 Crore as on March 2023. Further, ITPCL has provided relief to fishermen during emergency situations. In November, 2015 during the flood in Parangipettai Area. Flood Relief Welfare Provided to following vilages: C. Pudhupettai,
(xlii)	Since the dredged material is reported to be dumped 13 km away from the dredging site, the quality of sediments at the dumping site in sea should be monitored periodically and its impact on benthic fauna, if any, should be mitigated.	Since the Captive port project

S.No.	Conditions	Compliance Status
(xliii)	A state-of-the-art environmental laboratory at the project site shall be established such that the laboratory has facilities for long term monitoring of sea water quality and sediment in the impacted zone over and above and ambient air, soil quality analysis of the area. The proponent shall undertake mitigative measures if there are any negative impacts	Well-equipped Environmental laboratory is established to monitor the intake and outfall sea water quality on a daily basis. 6 continuous online AAQMS stations have been installed for monitoring of ambient
(xliv)	A long term study on radio activity and heavy metals contents in coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in- built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	The radioactivity in coal, fly ash and bottom ash is being monitored on a regular basis by survey meter (model PCRM - 152D) from July 2016 onwards.
(xlv)	Continuous monitoring for heavy metals in and around the existing ash pond area shall be immediately carried out by reputed institutes like IIT, Chennai.	Hony motols analysis boing done by
5.	All other conditions mentioned in this Ministry's letter of even no 31.05.2010 shall remain the same	

Amendment to EC dated February 04, 2014 and Compliance Status for Thermal Power Plant

S.No.	Conditions	Compliance Status
2 (i)	The matter was placed before the Expert Appraisal Committee (Thermal Power) in its 4th Meeting held during November 18-19, 2013. In acceptance of the recommendation of the EAC and in view of the information/ clarification furnished by you with respect to the above mentioned power project, the following amendments shall be made in the EC accorded to you vide this Ministry's letter of even no. dated 31.05.2010 and its amendment dated 14.08.2012. The TPP configuration shall be 2X600 MW and	
(')	3X660 MW instead of 2X600 MW and 3X800 MW.	
(ii)	Under para no. 4, the specific condition no (iv) read as: The project proponent shall install Flue Gas De-Sulphurisation (FGD) system to reduce the overall stack emissions of SO_2 . It shall be ensured that waste (brine) from FGD System is disposed off in an environmentally sound manner. Sulphur content in the imported coal shall not exceed 0.20 %'. shall now be substituted as under:	FGD has been already installed to reduce the overall stack emission of SO ₂ .
	'The project proponent shall install Flue Gas De- Sulphurisation (FGD) system to reduce the overall stack emissions of SO_2 . It shall be ensured that waste (brine) from FGD System is disposed off in an environmentally sound manner. Sulphur content in the imported coal shall not exceed 0.80 %'.	
(iii)	The ash pond shall be relocated to a nearby location which is contiguous to the main plant and 500 m to the East of the current location. The proposed ash pond area will be 107 acres and the greenbelt around the ash dyke would be 129 acres.	The ash pond has been constructed in the designated
3 (xlvi)	Further under Para no. 4, of this Ministry's letters of even no. dated 31.05.2010 and its amendment dated 14.08.2012, after specific condition no. (xlv) the following conditions shall be added.	Considering the safety of plant, we installed 151 KWP in the first
	Harnessing solar power within the premises of the plant particularly at available roof tops shall be undertaken and status of implementation shall be submitted periodically to the Regional Office of the Ministry.	panels will be considered after evaluating the performance of existing 151 KWP and financial
(xlvii)	Mercury emissions from stack shall also be monitored on periodic basis	Complied. Mercury emission from stack is being monitored on regular basis by NABL approved laboratory.

S.No.	Conditions	Compliance Status
(xlviii)	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.	Complied. Wind barrier of 15 m height is installed around the coal yard. Dust Extraction System, Dust Suppression System, Bag Filters and enclosures provided to control the fugitive emissions.
(xlix)	Hydrogeological study of the area shall be reviewed annually and report submitted to the ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/operation of the power plant.	Complied Hydro geological study was carried out during January 2023 and inferred that the hydrogeological profile is not impacted due to the operations of our Thermal Power Plant. Hydrogeological report is attached as Annexure C There was no water body including natural drainage within the plant area and hence the profile is not changed or modified. Also ground water is not tapped for either construction or operation
(l)	characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the	100% fly ash generation from the plant is utilised by disposing to cement industries in Tamilnadu under contractual agreement. Ash utilisation details are regularly furnished to Regional office of MoEF&CC, CPCB and TNPCB vide six monthly

S.No.	Conditions	Compliance Status
(li)	Three tier green belt shall be developed all around Ash Pond over and above the Green Belt around the plant boundary.	Complied. The Company has developed Three tier green belt in many places around ash pond. However, due to natural land formation, soil condition and proximity to railway track, three tier green belt could not be sustained in some locations. Further, we state that there is no possibility of dust generation from Ash dyke as there is no Fly ash discharge into our Ash Pond for the last 5 years and our Fly ash Generations is 100% utilised in the Cement Plants.

S.No.	Conditions	Compliance Status
(lii)	A common Green Endowment Fund shall be created and the interest earned out of it shall be used for the development and management of green cover of the area.	Presently the company is undergoing debt restructuring.
(liii)	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	Complied. The Company has implemented Corporate Environment Policy and

S.No.	Conditions	Compliance Status
	All other conditions mentioned in this Ministry's letter of even no 31.05.2010 and its amendment dated 14.08.2012 shall remain the same.	

Amendment to EC for Transportation of Coal by Rail dated March 27, 2015 and Compliance Status for Thermal Power Plant

S.No.	Conditions	Compliance Status
3. (i)	The matter regarding amendment of EC for transportation of coal by rail route was placed before the Expert Appraisal Committee (Thermal Power) in its 18 th Meeting held during 31 st July and 1 st August, 2014. In view of the order of Hon'ble Supreme Court and in acceptance of the recommendation of the Expert Appraisal Committee (Thermal Power) and the information/clarification submitted by you for the project, the Ministry now accords amendment of EC for temporary transportation of coal by rail route till the captive port is operational subject to the following additional conditions. The above amendment is subject to the outcome of the Appeal pending before Hon'ble Supreme Court	Coal is transported by rail from Karaikal port to the project site.
(ii)	The PP shall advertise in the newspaper and place on the website, the amendment issued by the Ministry for public information.	Complied ITPCL has advertised in "The Hindu" Newspaper, dated: 28.10.2015 and also uploaded in the website.
3.	All other conditions mentioned in this Ministry's letter of even no. 31.05.2010, 14.08.2012 and 04.02.2014 shall remain the same.	

Extension of Validity EC dated 26.02.2018 and Conditions and Compliance Status for Thermal Power Plant

Additional Condition:

S.No.	Subject	Compliance Status
i.	Concrete action plan as to when the dredging activity is likely to start and sediment analysis may be started.	
ii.	Action plan as to when long term study on radio activity and heavy metal content in coal will be conducted. Further, in house analysis reports may be submitted	The beauty motals and radioactivity
iii.	Capacity and details of the solar power in addition to the 151 kW which is being installed.	Complied. Considering the safety of plant, we installed 151 KWP in the first phase and commissioned on 22.03.2018. Additional solar panels will be considered after evaluating the performance of existing 151 KWP and financial improvement of the company.
7.	All other conditions specified in the Ministry's letters of even no. dated 31.05.2010, 04.02.2014, 14.08.2012 and 27.03.2015 shall remain the same, as applicable	

EC Conditions and Compliance Status for Captive Port and Desalination Plant

The condition wise compliance status for Environmental and CRZ clearance issued for Captive Port and Desalination Plant at Kothatai, Cuddalore District vide order dated 29/10/2010 is given below.

Sl. No.	Conditions	Compliance Status
5.	SPECIFIC CONDITIONS	
i.	"Consent for Establishment" shall be obtained from Tamil Nadu Pollution Control Board (TNPCB) under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site	Complied. Consent for Establishment was obtained from Tamilnadu Pollution Control Board.
ii.	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Noted and Complied.
iii.	The area selected for dumping of dredge spoil at a depth of 30 m contour shall be adequate to ensure that reduction in depth is nor more than 0.50 m and appropriately demarcated during execution and a suitable field monitoring programme shall be submitted.	Noted but not applicable currently Since the Captive port project construction is under hold from FY 2018-19, dredging requirement does not arise at this stage.
iv.	Once the breakwater is constructed the Vellar river mouth is vulnerable to accretion and mouth is likely to get closed due to prevailing coastal processes. The mouth also helps to drain large flood during northeast monsoon rain and cyclone. The tidal exchange through Vellar river mouth also supports the mangroves nested with Pichavaram. The river mouth has to be maintained along with its natural hydrology and tidal prism and hence appropriate remedial action programme to keep the mouth open shall be monitored regularly and details shall be submitted to the Ministry.	Condition would be complied in future while restarting the Captive Port construction.
۷.	The volume of annual gross and net littoral drift reported for this coastal region where the breakwaters are proposed appear to be very low and probably needs to be confirmed by actual field data on waves and other accepted software tools. It is suggested to undertake one year directional wave measures to evaluate actual volume of littoral drift.	Noted and would be complied in future since the Captive port project construction is under hold since FY2018-19
vi.	Programme for preservation of the existing mangrove on the southern side of the plant are lying whthin 10 km radius and proposed additional plantation shall be developed	Complied. The Project Authority earmarked Rs.6 crore for regeneration and

Environmental and CRZ Clearance for Captive Port and Desalination Plant

Sl. No.	Conditions	Compliance Status
	together with EMP and submitted.	preservation of Pichavaram Mangroves in a phased manner for entire capacity of the Plant and the same has not been diverted to any other activity. So far 30,000 mangrove saplings and propagules have been planted to conserve Pichavaram Mangrove area.
vii.	The present EIA study is confined to the proposed project and does not cover the possible environmental issues arising out of developments at the adjacent areas. A comprehensive EIA study shall be taken up in future at each and every stage of expansion considering new development in the close proximity of the ILFS project and the project proponent shall initiate action in this regard at appropriate time.	Complied and agreed to comply to conduct the similar study for future expansion projects also. In addition to the original EIA study conducted for the project, the company had conducted a Rapid Cumulative EIA study during 2011-12 covering 25 km radius around power plant and the study report was submitted to MoEF&CC during June 2012.
viii.	Proponent shall explore the possibility of sharing common facilities such as breakwater with immediate neighbour so as to optimize the resources and minimize cost on development and also impact on marine environment. Report shall be submitted within 3 months.	Agreed but not applicable currently. This will be considered in future while restarting the Captive Port construction.
ix.	The project proponent confirmed that there would be no further developments apart from what has been shown in the layout (an approach trestle and two coal berths to 600 m long on the seaward side within the enclosed basin formed by two breakwaters) and as such no development will be allowed without the prior environmental clearance.	Agreed to comply.
х.	Wherever coastal front is available adjacent to the project site, Tsunami bund with natural beach sand / dredged sand shall be constructed to avoid flooding due to storm surge and similar natural causes.	Agreed to comply.
xi.	A detailed monthly field monitoring programme by a reputed organization shall be carried out on the coastal process and marine environment for 10 km radius including Vellar river during construction and operational stages.	Complied. NIOT/Annamalai University has been engaged for marine monitoring on monthly basis since January 2014 and monitoring results are regularly submitted to MoEF and TNPCB in six monthly

Sl. No.	Conditions	Compliance Status
		report.
xii.	All the socio-economic factors such as medical facilities, employment opportunities, educational facilities etc. for the local people shall be implemented in full and reported to the Ministry in its regular reports on six- monthly basis.	Complied. A copy of CSR Implementation report such as educational initiatives, health care and other initiative, development of infrastructure and fisherman welfare (community hall, grave yard, library, road, toilet, fishing creek, fishing net, maintenance shed, livelihood & vocational training center, etc. Submitted to Regional Office, MoEF&CC, Chennai, dated 16.10.2017. Current details are submitted along with Six monthly reports regularly to MoEF&CC
xiii.	There shall be no intermediate coal storage facilities and the conveyor from the coal berths to the plant site shall be enclosed conveyor system to ensure minimum pollution due to coal dust and other suspended matter.	Agreed and will be complied in future while restarting the Captive Port construction and commissioning of the Port.
xiv.	All the recommendations of the EIA, EMP, Risk Assessment and Disaster Management Plan shall be strictly complied with.	Being Complied.
xv.	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Environment Management Cell is Established and under the control of General Manager - EHS, Assisted by EHS Manager and Senior Officer.
xvi.	Sand by pass and nourishment of the coast on the northern side shall be carried out periodically and monitoring shall be conducted on the shore line changes.	Agreed and will be complied The captive port construction activities are stopped since FY 2018-19 and this will be complied in future while restarting the Captive Port construction activities
xvii.	The project proponent shall take up mangrove plantation / green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.	Complied. The Project Authority earmarked Rs.6 crore for regeneration and preservation of Pichavaram Mangroves in a phased manner. So far 30,000 mangrove saplings and propagules have been planted to conserve this area.
xviii.	The funds earmarked for environment	Noted and Being complied.

Sl. No.	Conditions	Compliance Status
	management plan shall be included in the budget and this shall not be diverted for any other purposes.	
6.	GENERAL CONDITIONS	
i.	Adequate provision for infrastructure facilities including water supply fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.	Complied. Provision for infrastructure facilities including water supply, fuel and sanitation are provided.
ii.	Full support shall be extended to the officers of this Ministry / Regional Office at Bangalore by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Noted and being Complied.
iii.	A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of the Ministry at Bangalore regarding the implementation of the stipulated conditions.	Complied. Six monthly monitoring reports are regularly being submitted and last submitted date on 25.11.2022
iv.	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	Agreed and being complied regularly.
۷.	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	Noted
vi.	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made on the Ministry of Environment and Forests.	Noted and complied
vii.	The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	Complied We have informed the final approval of the project by the concerned authorities and the date of start of land development work.
viii.	A copy of the clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom any suggestion / representation has been made received while processing the	Complied No suggestions and representation received from the said authorities and hence a physical copy was not

Sl. No.	Conditions	Compliance Status
	proposal.	sent to them. Notwithstanding to that, Environment Clearance was published in local newspapers. Copy of clearance letter was uploaded in Company's website. However, a copy of EC was submitted to the concerned local body office on 23.12.2022. Copy of the letter is attached as Annexure A.
ix.	Tamil Nadu Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office / Tehsildar's Officer for 30 days.	Pertains to TNPCB
7.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 2006, including the amendments and rules made thereafter.	Noted
8.	All other statutory clearances such as approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Complied. License is obtained for HSD/LDO storage from Chief Controller of Explosive department, Fire License obtained from Tamil Nadu Fire and Rescue Services. No Objection Certificate has also been obtained from Airports Authority of India. Forest Department has accepted that there is no wild life in the nearby reserved forest through letter ref. no WL5/44294/2008 dated 05/03/2010.
9.	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Tamil Nadu Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <u>http://www.envfor.nic.in</u> . The advertisement should be made within 10 days from the date	Complied. The EC& CRZ Clearances were published on EC: 17/06/10 in Dinamalar (Tamil Daily in Pondicherry) and Times of India (English Daily in Chennai, published in TN edition). CRZ: 04/11/10 in Dinamalar (Tamil Daily in Pondicherry) and Times of India (English Daily in

Sl. No.	Conditions	Compliance Status
	of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bangalore.	Chennai, published in TN edition). Uploaded at <u>www.itpclindia.com</u>
10.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Noted.
11.	Any appeal against the Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted
12.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad /Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied No suggestions and representation received from the said authorities and hence a physical copy was not sent to them. Notwithstanding to that, Environment Clearance was published in local newspapers. Copy of clearance letter was uploaded in Company's website. However, a copy of EC was submitted to the concerned local body office on 23.12.2023. Copy of the letter is attached as Annexure A.
13.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Being Complied and uploaded.
14.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Report is being submitted every six months to MoEF&CC, Regional Office, CPCB and the TNPCB and the last report submitted on 25.11.2022.
15.	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also	Being Complied and uploaded.

SI. No.	Conditions	Compliance Status
	be sent to the respective Regional Offices of MoEF by e-mail.	

Extension of Validity of Environmental and CRZ Clearance, Dated 05.03.2018

4	The extension of validity is being granted for the original proposals for which Environmental and CRZ Clearance was granted earlier. The project proponents will not make any changes in the project nature, structure or configuration and limit themselves to activities for which the Environmental and CRZ Clearance has been given earlier.	Noted complied.	and	conditions
5	All other conditions stipulated in the Environmental and CRZ Clearance granted vide letter No. 11-43/2010-IA.III dated 29 th October, 2010, shall remain unchanged.	Noted		