



BY SPEED POST

**J 13012/34/2008-IA.II (T)
Government of India
Ministry of Environment & Forests**

Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi-110 003
E-mail: plahujarai@yahoo.com
Tele/fax: 011-2436 3973
Dated: May 31, 2010

To

M/s IL&FS Tamil Nadu Power Company Ltd.
B-Block, Navin's Presidium, 4th Floor
103, Nelsom Manickam Road, Aminjikarai
Chennai – 600 029.

Sub: 2x600 MW and 3x800 MW Coal Based TPP at villages Kottatai, Ariyagosthi, Villianallur & Silambimangalam, in Chidambaram Taluk, in Cuddalore, District, in Tamil Nadu - reg. Environmental Clearance.

Sir,

The undersigned is directed to refer to letter dated 19.03.2010 alongwith copies of EIA/EMP, public hearing and Marine Impact Assessment Study reports 16.04.2010 on the subject mentioned above and subsequent communication dated 29.04.2010 seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment & Forests has examined the application. It has been noted that the proposal is for setting up of 2x600 MW and 3x800 MW Imported Coal Based TPP at villages Kottatai, Ariyagoshti, Villianallur & Silambimangalam, in Chidambaram Taluk, Cuddalore District, Tamil Nadu. The land requirement will be 1181 acres. Cooling water requirement will be obtained from the Bay of Bengal by gravity through pipe line and further pumped through a seawater intake pumping system. Proposed cooling towers would operate with 1.3 Cycles of Concentration (COC). The blow down would be discharged deeper into the sea through a 1.5 km long marine diffuser. A 30 MLD desalination plant is proposed to meet fresh water demand. Reverse Osmosis (RO) rejects will be disposed through the same marine diffuser. The site elevation will be leveled to +2.2 m above the Mean Sea Level. The sulphur and ash content will be 0.2% Maximum and 6% respectively. Imported Coal from Indonesia will be used. River Vellar is located at a distance of 1.5 km from the southern boundary of the proposed site. CRZ demarcation has been done by NIO, Visakhapatnam. Pichvaram mangroves are located at 8.0 km from the southern boundary of the proposed site. Public hearing was held out for 3600 MW on 05.02.2010.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you, as at Para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

A. Specific Conditions:

- (i) Environmental clearance is subject to obtaining CRZ clearance for permissible activities to be located in CRZ areas.
- (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.
- (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).
- (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 when ever required. Sulphur content in the imported coal shall not exceed 0.20%.
- (v) A detailed coal analysis from a reputed lab for all contracted coal sources for the project shall be submitted **within three months**.
- (vi) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³. Two stack of 275 m each and having exit velocity not less than 22 m/s shall be installed.
- (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.
- (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} & PM₁₀), SO₂, NO_x (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.

- (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.
- (xi) The project proponent shall develop a 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 marine biological quality monitoring programme and mitigation measures shall be prepared and submitted **within six months** to the Ministry.
- (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.
- (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 surface 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.
- (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 Casuariana 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.

- (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.
- (xix) Utilisation of 100% Fly Ash generated for Phase-III shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.
- (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.
- (xxi) Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such 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.
- (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.
- (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 %.
- (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.
- (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.
- (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.

- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (xxxiii) While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment 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 marginalised population in the study area out of CSR programme shall be formulated and submitted to the Ministry **within six months** along with firm commitment of implementation. The scheme shall have an in-built monitoring mechanism.
- (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

B. General Conditions:

- (i) A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- (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.
- (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.
- (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.
- (vi) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (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.
- (viii) Regular monitoring of ground level concentration of SO₂, NO_x, PM_{2.5} & PM₁₀ 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.

- (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.
- (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 <http://envfor.nic.in>.
- (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.
- (xii) A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (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.
- (xiv) The environment statement for each financial year ending 31st 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.
- (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.

- (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 NO_x (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.
- (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.
- (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.

4. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented 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 of 5 years to start operations by the power plant.

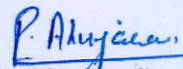
6. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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 condition(s) 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.


9. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

Yours faithfully,


(Dr. P.L. Ahujarai)
Scientist 'F'

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Tamil Nadu.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Tamil Nadu State Pollution Control Board, No. 76, Mount Road, Mount Salai, Guindy, Chennai - 600 032
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
6. The Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F Wings 17th Main Road, 1 Block, Koranmangala, Bangalore -560 034.
7. The District Collector, Cuddalore District, Govt. of Tamil Nadu.
8. Guard file.
9. Monitoring file.


(Dr. P.L. Ahujarai)
Scientist 'F'

J-13012/34/2008 - IA. II (T)
Government of India
Ministry of Environment & Forests



Paryavaran Bhavan, C.G.O. Complex,
Lodi Road, New Delhi -110003.
Dated: 14.08.2012

CORRIGENDUM

Sub: 2x600 MW and 3x800 MW Coal Based TPP at villages Kottatai, Ariyagosthi, Villianallur & Silambimangalam, in Chidambaram Taluk, in Cuddalore District, in Tamil Nadu - amendment of environmental clearance reg.

The Ministry of Environment & Forests had accorded environmental clearance to the above project on 31.05.2010 as per the procedure laid in the EIA Notification, 2006.

2. Subsequently, the environmental clearance granted was challenged before the National Green Tribunal (NGT) in the Appeal No. 17 of 2011(T).

3. The Hon'ble National Green Tribunal in its judgement dated 23.05.2012 had directed the Ministry to "review the Environmental Clearance based on Cumulative Impact Assessment Study and stipulate any additional environmental conditions, if required. Updated EIA report may be shared with the Appellants and they may be invited in the Expert Appraisal Committee (EAC) Meeting and may be heard before a decision is taken by EAC/MoEF, till then the EC shall remain suspended".

4. In pursuance to the directions of the Hon'ble NGT dated 23.05.2012 and 30.05.2012, Rapid Cumulative Environmental Impact Assessment (RCEIA) Study carried out M/s ITPCL was placed before the Expert Appraisal Committee in its meeting held on 25.06.2012 and 16.07.2012. The RCEIA Study covered the industrial activities/projects within a radius of 25 Km from the thermal power site of M/s ITPCL including Cuddalore Minor Port, SIPCOT Industrial Complex, Chemplast Sanmar Ltd., Cuddalore Power Co. Ltd., Nagarjuna Oil Corpn. Ltd., SRM Energy Ltd., Textile Park and Good Earth Ltd.

5. It is noted that RCEIA Study was based on data collected from the State Pollution Control Board, EIA Reports submitted to MoEF and Marine Environmental Data collected from Annamalai University. Mathematical models like MIKE 21 model for marine cumulative impact assessment, and CPCB approved OCD5 and ISCST3 models were used to assess the cumulative impacts on air quality.

6. After review of the RCEIA study, submissions made by the Appellants, oral submissions made by the project proponent and detailed deliberations during its meetings held on 25.06.2012 and 16.07.2012, the Expert Appraisal Committee has recommended to ammend/stipulation of additional conditions to the environmental clearance accorded to the project on 31.05.2010 and continuation of the project.

7. The Ministry accepts the recommendation of the EAC (Thermal Power) for amendment / stipulation of additional conditions to the environmental clearance accorded to the project on 31.05.2010 and stipulates following additional conditions for compliance by the project proponent.

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 SO₂. 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 %'.

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'.

4. Under para no.4, after specific condition no. (xxxiv) the following conditions shall be now added:

(xxxv) 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.


- (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.
- (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.
- (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.
- (xxxix) In order to stabilize the shoreline and control the erosion, sand bypassing shall be carried out on the northern side of the project.
- (xl) The project proponent shall upload environmental quality monitored data on a regular basis on its website.
- (xli) Marginalized section of society particularly traditional fishermen communities shall be identified based on 2011 population census data and socio-economic study of the various strata of families such as those carrying out subsistence fishing, commercial fishing etc. shall be carried out and impact on their livelihoods shall be assessed separately. Accordingly, sustainable welfare scheme/measures shall be undertaken and status of implementation shall be submitted to the Regional Office of the Ministry within six months.
- (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.
- (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.
- (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.

(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.

5. All other conditions mentioned in this Ministry's letters of even no. 31.05.2010 shall remain the same.

This issues with the approval of the Competent Authority.

Yours faithfully,


(Dr Saroj)
Scientists 'F'

M/s IL&FS Tamil Nadu Power Company Ltd.
B-Block, Navin's Presidium, 4th Floor
103, Nelson Manickam Road, Aminjikarai
Chennai - 600 029.

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Tamil Nadu.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Tamil Nadu State Pollution Control Board, No. 76, Mount Road, Mount Salai, Guindy, Chennai - 600 032
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
6. The Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F Wings 17th Main Road, 1 Block , Koranmangala, Bangalore -560 034.
7. The District Collector, Cuddalore District, Govt. of Tamil Nadu.
8. Guard file.


(Dr Saroj)
Scientists 'F'



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Government of India
Ministry of Environment & Forests

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Paryavaran Bhavan, C.G.O. Complex,
Lodi Road, New Delhi -110003.
Dated: 4th February, 2014

To

M/s. IL&FS Tamil Nadu Power Company Ltd.
B-Block, Navin's Presidium, 4th Floor,
103, Nelson Manickam Road, Aminjikarai
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Sub: 2x600 MW and 3x800 MW Coal Based TPP at villages Kottatai, Ariyagosthi, Villianallur & Silambimangalam, in Chidambaram Taluk, in Cuddalore District, in Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Limited - reg. Amendment in EC.

Sir,

This has reference to your letters dated 07.10.2013, 09.11.2013, 26.11.2013 and 04.01.2014 requesting the Ministry for amendment in EC accorded for the above mentioned project. The amendment sought were regarding change of capacity from 2x600 MW and 3x800 MW to 2x600 MW and 3x660 MW, sulphur content from 0.2 % to 0.8 % and relocation of ash pond area.

2. 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.

- (i) 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 SO₂. 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:

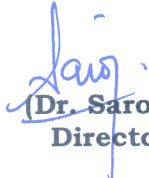
'The project proponent shall install Flue Gas De-Sulphurisation (FGD) system to reduce the overall stack emissions of SO₂. It shall be ensured that waste (brine) from FGD System is disposed off in an environmentally sound manner. Sulphur content in the imported coal shall not exceed 0.80 %'.

- (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.

3. 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.
 - (xlv) 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.
 - (xlvii) Mercury emissions from stack shall also be monitored on periodic basis.
 - (xlviii) Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.
 - (xlix) Hydro geological 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.
 - (i) Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.
 - (ii) Three tier green belt shall be developed all around Ash Pond over and above the Green Belt around the plant boundary.
 - (iii) 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.
 - (iv) 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.
4. All other conditions mentioned in this Ministry's letters of even no. dated 31.05.2010 and its amendment dated 14.08.2012 shall remain the same.
5. This issues with the approval of the Competent Authority.

Yours faithfully,


(Dr. Saroj)
Director

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Tamil Nadu.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Tamil Nadu State Pollution Control Board, No. 76, Mount Road, Mount Salai, Guindy, Chennai - 600 032
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
6. The Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F Wings 17th Main Road, 1 Block , Koranmangala, Bangalore -560 034.
7. The District Collector, Cuddalore District, Govt. of Tamil Nadu.
8. Guard file.


(Dr. Saroj)
Director

E-mail: sanchita@nic.in
sansom_2859@yahoo.co.in
Telefax: 011-24695402



भारत सरकार
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
इंदिरा पर्यावरण भवन, जोर बाग रोड,
अलीगंज, नई दिल्ली-110 003
INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD,
ALIGANJ, NEW DELHI-110 003
Website : moef.nic.in

F. No. J-13012/34/2008-IA.II (T)

2nd Level, JAL Block
Date: 27th March, 2015

To

M/s. IL&FS Tamil Nadu Power Company Ltd.

B Block, Navin's Presidium

4th Floor, 103, Nelson Manickam Road

Aminjikai, Chennai-600 029

Tel. No. 044-23745564/23745565; Fax: 044-23745544

Subject: Amendment of EC for transportation of coal by rail route for 2x600 MW and 3x660 MW Coal based Thermal Power Plant at Villages Kottatai, Ariyagosthi, Vilianallur & Silambimangalam in Chidambaran Taluk of Cuddalore District in Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Limited.

Sir,

This has reference to your letter dated 10.07.2014 on the above subject. It is noted that the above project (2x600 MW and 3x800 MW) was accorded Environment Clearance (EC) and CRZ Clearance on 31.05.2010 and 29.10.2010 respectively. The EC was challenged in the Hon'ble NGT which had directed for carrying out a Rapid Cumulative Environmental Impact Assessment (RCEIA) study over a 25 Km radius. Based on the RCEIA study carried out by ITPCL, a Corrigendum to the original EC was issued with additional conditions on 14.08.2012. Further, an amendment to EC was accorded on 04.02.2014 regarding revision of unit configuration (2x600 MW and 3x660 MW), sulphur content of coal and location of ash pond.

2. Hon'ble NGT vide Judgment dated 10.11.2014 in Appeal No. 50/2012 has inter-alia quashed the Corrigendum dated 14.08.2012 to the EC. However, the Hon'ble Supreme Court vide Order dated 10.02.2015 has stayed the impugned Order dated 10.11.2014 until further Orders.

3. The matter regarding amendment of EC for transportation of coal by rail route was placed before the Expert Appraisal Committee (Thermal Power) in its 18th Meeting held during 31st July and 1st 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.

(i) The above amendment is subject to the outcome of the Appeal pending before Hon'ble Supreme Court.

(ii) The PP shall advertise in the newspaper and place on the website, the amendment issued by the Ministry for public information.

3. All other conditions mentioned in this Ministry's letters of even no. dated 31.05.2010, 14.08.2012 and 04.02.2014 shall remain the same.

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

Yours faithfully,



(Sanchita Jindal)

Scientist 'F' & Director (T)

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Tamil Nadu.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Road, Mount Salai, Guindy, Chennai - 600 032
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
6. The Additional PCCF (Central), Regional Office, Ministry of Environment, Forests and Climate Change, 1st & 2nd Floors, HEPC Building, 34, Cathedral Garden Road, Nungambakkam, Chennai- 600034.
7. The District Collector, Cuddalore District, Govt. of Tamil Nadu.
8. Guard file.

(Sanchita Jindal)

Scientist 'F' & Director (T)



No. J-13012/34/2008-IA.II(T)
Government of India
Ministry of Environment, Forest and Climate Change

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj,
New Delhi-110003

Dated: 26.02.2018

To

The Chairman
IL&FS Tamil Nadu Power Company Ltd.,
4th floor, KPR Tower, Old no.21, New n.2, 1st Street,
Subba Rao Avenue, College Road, Chennai-600006.

Sub: 2x600 MW and 3x660 MW Coal based TPP at Villages Kottai, Ariyagosthi, Villianallur & Silambimangalam, Taluk Chidambaram, Distt. Cuddalore, Tamil Nadu by M/s IL&FS Tamil Nadu Power Company Ltd.- reg. extension of validity Environmental Clearance.

Sir,

This has reference to your online application no. IA/TN/THE/11883/2008 dated 30.5.2017, Ministry's letters dated 14.12.2017 & 3.1.2018 and documents submitted vide letters dated 18.12.2017 & 12.1.2018 on the above mentioned subject.

2. It has been noted that the Environmental Clearance for setting up of 2x600 MW and 3x660 MW has been issued vide Ministry's letters dated 31.5.2010 & 4.2.2014. The validity of the said EC was valid for seven years i.e. till 30.5.2017 as per the new EIA amendment notification dated 14.9.2016. Ministry vide its letter dated 14.8.2012 issued a corrigendum to EC for setting up Flue Gas De-Sulphurisation and monitoring of Sea water quality. Further amendment to EC for change in configuration of TPP from 3600 MW (2x600 MW+3x800 MW) to 3180 MW (2x600 MW+3x660 MW) and transportation of coal by rail was issued vide Ministry's letter dated 4.2.2014 and 27.3.2015 respectively. CRZ clearance for Captive port and desalination plant has also been obtained vide Ministry' letter dated 29.10.2010.

3. It has been note that you have requested for extension of validity of EC dated 31.5.2010. As submitted by you, Unit-1: 1x600 MW and Unit-2: 1x600 MW have been commissioned on 29.9.2015 and 30.4.2016 respectively. However, remaining three units (3x660 MW) could not be established within the validity period of seven years. It has been informed by you that the project was suspended for 8 months due to an NGT order which required carrying out an RCEIA and also required retroactive addition of an FGD in the design of the TPP (a requirement hitherto not imposed on almost all TPPs in operation). The construction was further suspended for 4 months due to damage caused by an unprecedented cyclone and floods.

4. All the facilities that are common to the first and second phase, and as mentioned in their latest application, are complete and will suffice for the second phase as well viz. land acquisition, coal handling system and storage facility, ash pond, pipelines and intake structures for seawater intake, marine outfall systems, service and administration buildings. BTG erection, other activities such as construction of cooling tower, desalination plant, stack, ash water recirculation

system and other Balance of Plant (BOP) activities can be initiated simultaneously and achieved within 27 months. ITPCL has been waiting for an MOU to be signed with TN Government followed by a Power Purchase Agreement (PPA) that will make their plant economically viable. They have signed the MOU in October, 2015, and are hopeful of signing the PPA in the next few months.

5. The proposal has been considered by the EAC (Thermal) in its 7th, 9th and 13th meetings held on 28.6.2017, 30.8.2017 and 28.11.2017 respectively. Subcommittee conducted the site visit on 11.8.2017 and submitted the recommendations to extend the validity of the EC for further period of three years.

6. In acceptance of the recommendations of the EAC (Thermal) in its 13th meeting held on 28.11.2017 and in view of the information/clarifications submitted by you, **the Ministry hereby extends the validity of the EC dated 31.5.2010 for further period of three years, i.e. till 30.5.2020 subject to the following additional condition.**

- i. Action plan submitted vide letter dated 12.1.2018 for compliance of EC conditions shall be implemented.

Subject	Action Plan
i. Concrete action plan as to when the dredging activity is likely to start and sediment analysis may be started.	Construction of captive port and dredging is proposed to be completed by January, 2020 and the sedimentation study will commence in April, 2019 onwards.
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.	Long term study will be carried out in September, 2018 after identifying reputed institute.
iii. Capacity and details of the solar power in addition to the 151 kW which is being installed.	Considering the safety of plant, area has been identified to install 151 kW in the first phase. Additional solar panels will be installed in FY 2020 after completing the study on safety of plant and performance after installing 151 kW in the year 2017-18.

7. All other conditions specified in the Ministry's letters of even no. dated 31.5.2010, 4.2.2014, 14.8.2012, 4.2.2014 and 27.3.2015 shall remain the same, as applicable

This issues with the approval of the Competent Authority.

Yours faithfully,


(Dr. S. Kerketta)
Director, IA-I

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. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai- 600034.
5. The Principal Secretary, Environment and Forest Department, Government of Tamil Nadu, Fort St. George, Secretariat, Chennai-600009.
6. The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Road, Mount Salai, Guindy, Chennai - 600 032.
7. The District Collector, Cuddalore District, Tamil Nadu-607001.
8. Guard file/Monitoring file.
9. Website of MoEF&CC.



(Dr. S. Kerketta)
Director, IA-I