

**By Speed Post**

No.J-13011/33/2006-IA.II(T)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodi Road,  
New Delhi-11003.

Dated 18<sup>th</sup> April, 2007

To

Shri M.H. Rao  
General Manager (Env. Engg.),  
National Thermal Power Corporation Ltd.,  
Plot No. 8 A, Sector-24,  
Post Box No. 13,  
Noida-201 301, Uttar Pradesh.

**Sub: 2x500 MW Thermal Power Project at Thiruvallur, Tamil Nadu by M/s NTPC-Tamil Nadu Energy Company Ltd. – Environmental Clearance regarding.**

Sir,

The undersigned is directed to refer to your communication no. CC:ESE:0260:2006:GEN:05C dated 2<sup>nd</sup> November, 2006 regarding the subject mentioned above. Subsequent information furnished vide letters dated 29.11.2006 and 01.02.2007 have also been considered.

2. It is noted that the proposal is for grant of environmental clearance under the provisions of EIA Notification, 1994 to set up a thermal power plant of 1000 MW (2x500 MW) near village Kuruvimedu in Ponneri Taluk of Thiruvallur District, Tamil Nadu. The site is located near Ennore Port having a dedicated berth for receiving coal. The land requirement is estimated as 1184 acres. Proposed site is a salt pan land. An area of 114 acres fall within CRZ and this will be left undisturbed. The entire project activity will be outside CRZ. The coordinates of the proposed site are latitude 13<sup>o</sup> 12' 45" N to 13<sup>o</sup> 14' 30" N and longitude 80<sup>o</sup> 18' 0" E to 80<sup>o</sup> 19' 50" E. Washed coal requirement is estimated as 4.4 million TPA at 80% PLF and will be sourced from Talchar or Ib Valley Coalfields. Coal will be transported by sea route up to the Ennore Port. From North Chennai, it will be transported by pipe conveyor. Sea water after desalination will be used for the power plant and will be obtained from the intake channel of North Chennai Thermal Power Plant. No fresh water will be drawn for the project. Re-circulating type cooling water system with natural draft cooling towers shall be provided. No forestland is involved. No ecologically sensitive area is reported within 7 km radius of the project

boundary. No displacement of people is involved. Public hearing was held on 14<sup>th</sup> September, 2006. Total cost of the project is Rs 5321.08 crores which includes Rs 270.42 crores for environmental protection measures.

3. The proposal has been considered in accordance with para 12 of the EIA Notification dated 14<sup>th</sup> September, 2006 read with para 2.2.1 (i) (a) of the circular no. J-11013/41/2006-IA.II(I) dated 13<sup>th</sup> October, 2006 and environmental clearance is hereby accorded under the provisions there of subject to implementation of the following terms and conditions:

- (i) The total land requirement shall not exceed 1184 acres for all the activities / facilities of the power project put together.
- (ii) The requisite CRZ clearance for the greenbelt area, which partially fall within CRZ, shall be obtained before starting development of greenbelt work in that area.
- (iii) The requisite CRZ clearance for the conveyor belt for transportation of coal passing through CRZ and any other activity in CRZ area shall be obtained before starting work on these activities.
- (iv) Adequate maintenance of the drainage network shall be carried out for ensuring the storm water drainage efficiency in accordance with the study carried out by CWPRS.
- (v) The fill material require for leveling of the area shall be met from the pond ash of the Ennore Thermal Power Station and North Chennai Thermal Power Station to the extent possible.
- (vi) The intake water point shall be selected based on CWPRS study.
- (vii) A copy of the complete report on area drainage study reported to be undertaken by CWPRS shall be submitted to the Ministry within one month of the issue of this letter.
- (viii) Ash and sulphur content in the coal to be used in the project shall not exceed 34% and 0.34% respectively.
- (ix) A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipments. Exit velocity of at least 22.2 m/sec shall be maintained.
- (x) High efficiency Electrostatic Precipitators (ESPs) with an efficiency of not less than 99.9% shall be installed to ensure that particulate emission does not exceed 100 mg/Nm<sup>3</sup>.

- (xi) Space provision shall be made for Flue Gas De-sulphurisation (FGD) unit, if required at a later stage.
- (xii) Adequate dust extraction system such as bag filters and water spray system in dusty areas such as coal and ash handling areas, transfer areas and other vulnerable areas shall be provided.
- (xiii) Fly ash shall be collected in dry form and shall be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 and its amendment. By the end of 9<sup>th</sup> year full fly ash utilization should be ensured. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry.
- (xiv) Adequate safety measures shall be implemented to protect the ash pond bund from getting breached.
- (xv) Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority / State Ground Water Board and a copy of the same shall be submitted within three months to the Ministry.
- (xvi) The treated effluents conforming to the prescribed standards shall be discharged in the lagoon along with circulating water of existing North Chennai TPS. The temperature of the discharged effluents shall not exceed 5<sup>o</sup> C over and above the ambient water temperature of lagoon / sea.
- (xvii) Regular monitoring of groundwater in and around the ash pond areas shall be carried out, records maintained and periodic reports shall be furnished to the Regional Office of this Ministry.
- (xviii) Greenbelt shall be developed all around the plant area, other utilities and ash pond covering at least 25% of the area.
- (xix) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xx) Leq of Noise level should be limited to 75 dBA and regular maintenance of equipment be undertaken. For people working in high noise areas, personal protection devices should be provided.
- (xxi) Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. 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.

- (xxii) The project proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letter is available with the State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>.
  - (xxiii) A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
  - (xxiv) A half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry, its Regional Office at Bangalore, CPCB and SPCB.
  - (xxv) Regional Office of the Ministry of Environment & Forests located at Bangalore 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.
  - (xxvi) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
  - (xxvii) Full cooperation should be extended to the Scientists / Officers from the Ministry / Regional Office of the Ministry at Bangalore / the CPCB / the SPCB who would be monitoring the compliance of environmental status.
4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.
  5. The environmental clearance accorded shall be valid for a period of 5 years to the start of production operations by the power plant.
  6. In case of any deviation or alteration in the proposed project from that 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 incorporate additional environmental protection measures required, if any.

7. The above stipulations shall 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, The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, the Public Liability Insurance Act, 1991 and rules there under and the EIA Notification, 2006 and the amendments made therein from time to time.



(Dr. S.K. Aggarwal)  
Director

**Copy to:**

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
2. The Secretary (Environment & Forests), Government of Tamil Nadu, St. George Fort, Chennai - 600 009, Tamil Nadu.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110 066.
4. The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai- 600 032, Tamil Nadu - **with a request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office for 30 days.**
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
6. The Chief Conservator of Forests, Southern Regional Office, Ministry of Environment & Forests, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Block, Koramangla, Bangalore- 560 034, Karnataka.
7. Director (EI), MOEF.
8. Guard file.
9. Monitoring file.



(Dr. S.K. Aggarwal)  
Director