

F. No. 11-5/2011-IA.III
Government of India
Ministry of Environment & Forests
(IA Division)

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 8th July, 2011.

To
M/s. PPN Power Generating C. (P) Ltd.
Jhaver Plaza, III Floor,
1-A, Nungambakkam High Road,
Chennai - 600034.

Subject: CRZ clearance for construction of marine facilities for the drawal seawater from the Manhole 7 of the existing cooling water intake system and for marine at Pillaiperumanallur, Tharangamapadi Taluk, Nagapattinam District, Tamil Nadu by M/s PPN Power Generation Company Pvt. Ltd. -Reg.

This has reference to letter No: 24414/EC3/2010-2 dated 12.01.2011 from Secretary (Environment), Government of Tamil Nadu seeking prior CRZ Clearance for the above project under the Coastal Regulation Zone (CRZ) Notification, 1991. The proposal has been appraised as per prescribed procedure in the light of provisions under the Coastal Regulation Zone Notification, 1991/2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire recommendation of the State Coastal Zone Management Authority, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 5th -6th April, 2011.

2. It is interalia, noted that the proposal involves construction of marine facilities for the drawal seawater from the Manhole 7 of the existing cooling water intake system and for marine at Pillaiperumanallur, Tharangamapadi Taluk, Nagapattinam District, Tamil Nadu. PPN Power Generating Company Private Limited (PPGC) is presently operating on Natural Gas and Naphtha based power plant of capacity 330 MW at Pillaiperumalnallur and Manickkappangu Villages, Tharangambadi Taluk, Nagapattinam District, Tamil Nadu. The plant was commissioned on 26.04.2001.

3. The Ministry of Environment and Forests, Government of India has issued Environmental Clearance for the existing project vide their letter no.J-13011/3/91-1A-III dated 11th March 1996. The existing marine facilities for the present power plant consist of Single Point Mooring (SPM) for unloading Naphtha, 600mm dia. naphtha pipeline from SPM to the shoreline, 2750 mm dia. concrete intake pipeline, seawater intake at 940 m offshore in 10.1 m water depth, 2500mm dia. concrete outfall pipeline and outfall diffuser at 415m offshore in 5.1m water depth. The outfall is having a multiple port



diffuser system. PPGC propose to expand the capacity from 330 MW to 1410 MW by installing the 3 units of 360 MW of similar technology in the existing power plant premises for which the land is under possession of the company. Natural Gas will be used as fuel.

4. The existing plant uses once through seawater cooling system. The differential temperature that has been prescribed for the existing plant is 5°C. The volume of seawater drawn presently is 32299 m³/hour and it is proposed to draw another 6000 m³/hour for the expansion and hence the total quantity of seawater drawn will be 38299 m³/hour. The additional water will be drawn through the same existing intake pipeline and it will be drawn through pipeline from Manhole - 7 (MH-7) located at 340m onshore. There will not be any changes like modification to the intake pipeline or the intake head in the sea portion. CRZ clearance is sought for the additional drawal and discharge of seawater for the proposed expansion. For the proposed expansion Induced Draft Cooling Towers will be adopted. The CRZ mapping report has been prepared by NIO, Goa.

5. The existing volume of warm water discharged into the sea is 32191 m³/hour. The volume of additional seawater to be discharged will be 4600 m³/hour and the total quantity of seawater discharged into the sea will be 36791 m³/hour. The additional discharge will be collected in the existing seal pit and will be carried to sea. There will not be any modification to the outfall pipeline in the sea portion. The plant and colony potable water requirement will be met by seawater R.O. System similar to the existing one. A comprehensive Marine EIA involving all three seasons (fair weather, SW Monsoon & NE Monsoon) has been prepared. The temperature of the return water released into the sea will be the same as that of ambient seawater. The salinity of the return water will be negligibly higher of the order of 2.3 ppt more than the ambient salinity of 35.0 ppt. The total project cost is Rs.4,073 crores and Rs.2 crores is the estimated cost in CRZ area.

6. The site is falling in CRZ-I (ii), inter-tidal zone and also in CRZ-II. Tamil Nadu State Coastal Zone Management Authority at the meeting held on 01.11.2010 considered the project has recommended the proposal to MoEF, vide letter no. 24414/EC3/2010-2 dated 12.01.2011 for the issue of CRZ clearance.

7. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary CRZ Clearance for the above project as per the provisions of Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:



8. SPECIFIC CONDITIONS :

- (i) "Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) Appropriate screens and trash bars shall be put in place at the intake to avoid fish entering into the pipe due to heavy quantity of water drawal by once through water intake system.
- (iii) Temperature and salinity level shall be monitored regularly by providing on-line monitoring system at the appropriate location on the outfall system.
- (iv) Possibility of adopting cooling water towers for the whole plant system shall be explored at the appropriate stage-at the time of replacement of the present unit of 330 MW and shall submit to the MoEF with copy to SPCB.
- (v) The proponent shall commit himself to be one of the partners/ proponents (who have undertaken/ will be undertaking similar power projects in the close proximity of site) as and when instructed by the MoEF/State government authorities in preparing an overall EIA report comprising both terrestrial/ marine EIA components for the region and share the cost of the study and proposed mitigation measures for the coastal stretch as decided by the authorities in the interest of protecting the environment.
- (vi) The proponent shall carry out periodical monitoring of the marine water quality including the temperature and salinity around outfall point.
- (vii) The regular studies on the shore line changes shall be conducted and mitigation taken if required. The details shall be submitted along with the Six-Monthly monitoring report.
- (viii) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (ix) 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.
- (x) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

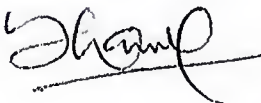


9. **GENERAL CONDITIONS :**

- (i) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (ii) Full support shall be extended to the officers of this Ministry/Regional Office at Bangaluru 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.
- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bangaluru regarding the implementation of the stipulated conditions.
- (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.
- (v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.
- (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.
- (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 proposal.
- (ix) Tamil Nadu Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

10. 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) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

11. All other statutory clearances such as the 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.

12. 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 State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangaluru.

13. 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.

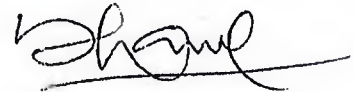
14. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

15. 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.

16. 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.

17. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

18. The environmental 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 MoEF by e-mail.



(Bharat Bhushan)
Director (IA-III)

08.07.2011

Copy to:-

- 1 The Principal Secretary, Department of Environment and Forests, First Floor, Panagal Building, Saidapet, Chennai – 600 015, Tamil Nadu
- 2 The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
- 3 The Director, Department of Environment, Government of Tamilnadu, Panagal Building, Ground Floor, Saidapet, Chennai-15.
- 4 The Chairman, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Gundy, Chennai.
- 5 The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bangalore – 462016.
- 6 Guard File.
- 7 Monitoring Cell.

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(Bharat Bhushan)
Director (IA-III)