

No.11-24/2009-IA.III
Government of India
Ministry of Environment & Forests
(IA Division)

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

Dated: 3rd December, 2010

To
M/s. Nuclear Power Corporation of India Limited,
(A Government of India Enterprise),
Jaitapur Nuclear Power Project,
Entrance-2, Nabhikiya Urja Bhavan,
Anushakti Nagar,
Mumbai - 400 094.

[Signature]
17.12.10

Subject: CRZ clearance for Nuclear Power Park (6 x 1650 MWe NPP units)
at Jaitapur, Maharashtra by M/s. Nuclear Power Corporation of
India Limited - Reg.

This has reference to the letter No: NPCIL/AD(JNPP)/M/2009/32, dated 18.02.2009 seeking prior CRZ Clearance for the above project under the CRZ Notification, 1991. The proposal has been appraised as per prescribed procedure in the light of provisions under the CRZ Notification 1991 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, 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 23rd - 24th April, 2009.

2. It is interalia, noted that the proposal involves the proposal involves establishment of Nuclear Power Park (6 x 1650 MWe NPP units) at Jaitapur, Maharashtra on an area of 693 ha. A MOU has been signed between NPCIL and AREVA, France for setting-up six units of 1650 MWe each (EPR reactors) with overall capacity of 10,000 MWe Nuclear Power Park at Jaitapur site. It will be one of the future nuclear power hub in India. The site is situated in the area between Rajapur Creek and Vijayadurg Creek on Western Coast Latitude: 16° 34' 38" N - 16° 36' 29" N, Longitude : 73° 19' 02" E - 73° 20' 48" E. The reason to locate the plant close to Sea is the huge requirement of cooling water and non availability of road facility for transportation of heavy plant machineries. The project involves the development of RoRo Jetty in the sheltered area of the breakwater and is proposed to be designed suitably so that it would offer least resistance to flow in the intake channel. An outfall structure for discharge of Condenser Cooling Water (CCW) is proposed through suitably designed tunnels to be run under sea bed, about 50 m below the chart datum with proper diffusers at discharge points.

3. It is estimated that about 11 million m³ of excavated material from main plant, intake structure and outfall tunnels will be generated. It is proposed to use in construction of break water, plant and other buildings.

The fish catch is low near the shore, which increases towards seaside with increase in depth. The sensitive species in the study area like mangroves, present in the Jaitapur along the creak are quite far away (approx. 5 km) from the influencing area of the thermal plume from the project.

4. The HTL/ LTL & CRZ area demarcation was carried out by NIOT Chennai and they have also prepared the layout of the Plant structures and buildings of JNPP superimposing on the demarcated CRZ map. Marine Ecological Assessment of sea coast at the proposed JNPP site was made by College of Fisheries, Ratnagiri. A 2-D Mathematical model studies for dispersion of condenser cooling water discharges was carried out by CWPRS, Pune and Biodiversity study was conducted by College of Forestry, Dapoli.

5. The project site is categorized as CRZ-III as per CRZ Notification 1991. There is no sensitive eco-system in the inter-tidal area and 500 m coastal zone beyond HTL and no National park or sanctuary is located around the site. Maharashtra Coastal Zone Management Authority has considered the proposal in its meeting held on 24.02.2009 and has recommended the proposal for CRZ Clearance vide letter No. MCZMA 2008/CR 85/TC3, dated 17.03.2009.

6. The project has also been appraised by the EAC for Nuclear Power Projects on 2nd April, 2009, wherein the detailed Environmental Impact, Risk Assessment and Emergency Management Plan have been examined. It has also been directed to proceed with Public Hearing as per EIA Notification, 2006.

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 during the presentation, have recommended for the issue of CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary CRZ Clearance for the above project as per the provisions of CRZ Notification, 1991 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

8. Specific Conditions:

- (i) There shall be no disposal of any waste in the Sea.
- (ii) Necessary modifications shall be carried out in the EIA to include the issues raised during the public hearing along with the response as well as the decision of the EAC for Nuclear Power projects of the Ministry.
- (iii) A physical modelling study shall be carried out through CWPRS, Pune, if necessary.
- (iv) The Environmental Management Plan, Environmental Monitoring Plan and Risk Mitigation measures suggested by the EAC for Nuclear Power projects shall be strictly implemented along with those proposed in the EIA and Risk Assessment reports.

- (v) Beside radiological hazards which can occur in Nuclear Power Plant, other types of hazards during operations, storage and transportation may also be identified (qualitatively and quantitatively), analysed and assessed for the risk and proper measures should be taken to minimise the risk.
- (vi) Small and medium hazards should also be identified along with worst case scenario. Event tree or fault tree analysis shall be carried out. Based on worst case scenario, modify Emergency Management Plan.

9. General Conditions:

- (i) The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.2.1991 and the approved Coastal Zone Management Plan of Maharashtra.
- (ii) 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.
- (iii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (iv) Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:
 - (a) No excavation or dumping on private property is carried out without written consent of the owner.
 - (b) No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.
 - (c) Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area, and
 - (d) Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water.
- (v) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.

- (vi) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (vii) 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.
- (viii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bangalore regarding the implementation of the stipulated conditions.
- (ix) 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.
- (x) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) Maharashtra 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 Municipal Solid Wastes (Management and Handling) Rules, 2000 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 should 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 Clearance and copies of clearance letters are available with the Maharashtra 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 Bhopal.

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. Any appeal against this Environmental 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.

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



(E. Thirunavukkarasu)
Deputy Director (IA-III)

Copy to:

1. The Secretary, Department of Environment, Govt. of Maharashtra, Mantralaya, Mumbai - 400 032.
2. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
3. The Chairman, Maharashtra Coastal Zone Management Authority, Room No.217 (Annexe), Mantralaya, Mumbai - 400 032.
4. The Chairman, Maharashtra Pollution Control Board, Mumbai.
5. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal - 462016 (M.P.)
6. Guard File.
7. Monitoring Cell.



(E. Thirunavukkarasu)
Deputy Director (IA-III)