BY SPEED POST

F. No. J-14011/1/2009-IA.II(N)
Government of India
Ministry of Environment & Forests

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

Dated: 26th November, 2010

To

M/s Nuclear Power Corporation of India Limited
Entrance-2, Nabhikiya Urja Bhawan
Anushaktinagar
Mumbai- 400 094

Sub : Jaitapur Nuclear Power Park (6 X 1650 MWe) at village Madban, Taluka Rajapur, District Ratnagiri, Maharashtra by M/s Nuclear Power Corporation of India Ltd - Environmental clearance regarding.

The undersigned is directed to refer to your communication no. NPCIL/ PD (JNPP)/2010/M/235 dated 23.9.2010 regarding the subject mentioned above. Subsequent information furnished vide letter no. NPCIL/PD(JNPP)/2010/M/285 dated 1st November, 2010; dated 10.11.2010 and dated 16.11.2010 has also been considered.

2. It is noted that the proposal is for grant of environmental clearance for setting up of a Nuclear Power Park (6x1650 MWe), to be implemented in phases at Madban village, Taluka Rajapur, District Ratnagiri, Maharashtra along with township for the project. The first phase will comprise of two units of 1650 MWe each. Total land requirement will be 938.06 ha. Out of this, 692.311 ha is for the plant and 245.715 ha for the township at a distance of 5.5 km from the plant site. Plant site comprises 41.9 % Arable land and 58.1% Pot Kharaba (Barren) land while township land comprises of 16.58 % Arable and 83.42% Pot Kharaba (Barren) land. No forest land is involved in the project area. No National Park / Wildlife Sanctuary/Biosphere Reserve is reported within 10 km of the proposed power plant. There are two creeks namely; Jaitapur Creek and Vijaydurg Creek which are in the study area and about 5 km away from the plant area. The mangroves are found in the creek area; however, the project area is totally devoid of any mangrove plantation. The Madban beach is also outside the exclusion zone and outside the boundary of the plant area. No river / nallah / backwater / stream is passing through the project site; however, certain localized depressions are there. The average ground elevation of the site is reported to be RL+24.5 m. The site is abutting the sea and fall in CRZ-III. A light house is adjoining the project site. The condenser cooling water requirement will be met from seawater. The sweet water requirement will be met by desalination plant to be setup at the plant site which will

also supply water for the township. The capacity of the desalination plant will be 45,900 m3/day of fresh water. No ground water will be extracted for construction and/or operation purpose in the project. There will be no homestead oustees due to the project. PAPs will be compensated as per State R&R plan as per agreement signed between State Govt of Maharashtra and NPCIL. Total cost of the project is under finalization, However, EMP capital cost is Rs. 922.5 crores, while recurring cost is 16.5 crores.

3. The Additional Terms of Reference for the project were issued on 8th May, 2009 for preparation of EIA and EMP. The public hearing was held on 16th May, 2010 at village Madban, the project site, by the Maharashtra Pollution Control Board and the final EIA/EMP was submitted by the NPCIL vide its letter of 23rd September, 2010. The Expert Appraisal Committee also visited the site on 28th October, 2010.

4. The proposal has been considered by the Expert Appraisal Committee for Nuclear power projects based on the project documents, additional clarifications furnished in response to its various observations and various representations received on the project and has recommended for the grant of environmental clearance for the project. Accordingly, the Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to strict compliance of the terms and conditions as follows :-

Specific Conditions :

(i) The environmental clearance granted shall be reviewed in terms of its impact on environmental components as envisaged in the EIA report and to determine the adequacy of the conditions imposed after first two units are made operational.

(ii) The following additional details shall be submitted within 12 months:

- A comprehensive biodiversity conservation plan shall be prepared for the Jaitapur within twelve months in consultation with the BNHS and the state forests and wildlife department. This plan will also deal with measures needed to maintain the health of the mangroves in the creek area outside the plant site. The total mangrove area according to the BNHS may be around 150 hectares.
- A monitoring committee comprising of outside experts and institutions (including the BNHS, College of Fisheries, Ratnagiri and the Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli) would be constituted by the NPCIL to oversee the implementation of environmental management

measures stipulated as part of environmental clearance. The deliberations of the monitoring committee would be put on the website of the NPCIL on a regular basis.

- A special plan will be made to put in place appropriate safeguard measures to ensure that the fisheries in the sea adjoining Ambolgad are not affected adversely due to the project. BNHS and other agencies should be involved in this exercise. Kasheli is another critical area that needs to be safeguarded. A special plan for mitigating adverse impacts on fishing livelihoods in the region will also be implemented. Musakazi is an important fishing village and jetty which is less than a kilometre away from the project site. Access to fishing communities should be ensured at all times.
- Design of cooling water discharge system will be finalised with demonstrably adequate provision for its extension into the marine area beyond 2.2 kms, if needed to minimise the adverse impact on biodiversity/coral reefs/aquatic fauna in the larger Jaitapur area.
- NPCIL's on-going environmental stewardship programme should be substantially strengthened with a focus on the Western Ghats since three of its power generating complexes—Tarapur, Kaiga and now Jaitapur—are located in this ecologically sensitive region. This programme must build a network of independent scholars and sentinels for nature conservation

(iii) Prior clearance under the Coastal Regulation Zone (CRZ), 1991 and its amendment shall be obtained before initiating any activity in the CRZ area.

(iv) The requisite prior clearance from AERB for the plant design and their safety including fire and seismic risk shall be obtained and a copy thereof sent to MoEF for placing before the EAC (Nuclear) for its information.

(v) During finalization of the project design and its approval by AERB, if the project undergoes design / technology changes as compared to the one proposed at the stage of obtaining environmental clearance, which has significant impact on environmental components, the project will be brought back for its reconsideration by MoEF for adequacy of the stipulated conditions and environmental safeguards, in this environmental clearance.

(vi) The project proponent shall obtain prior Consent to Establish and Consent to Operate from the Maharashtra State Pollution Control Board and effectively implement all the conditions stipulated therein.

(vii) No additional land shall be acquired for any activity / facility of project beyond the land requirement mentioned in the EIA to the tune of 938.06 ha.

(viii) No groundwater shall be used in the project either during construction phase or during operation phase. Sweet water requirement shall be met from the Desalination plant and condenser cooling water requirement from sea water only.

(ix) Rainwater harvesting shall be adopted and the water so conserved shall be utilized in the project and township area and accordingly the sweet water requirement from the desalination plant will be reduced. For adopting rainwater harvesting within the plant site, views of AERB may also be taken.

(x) To the extent possible the existing Alphanso mango trees shall be protected. In case they need to be removed, efforts will be made to re-plant the same within the project site.

(xi) Effective monitoring programme shall be evolved to monitor the impact of the project on the health of the mangroves in the creek area though outside the plant site and necessary measures for their conservation shall be taken.

(xii) During construction of the township and other buildings, it shall be ensured that the buildings conform to the energy efficiency, water utilization efficiency as also to the GREHA Norms.

(xiii) On-line continuous monitoring of the temperature of the discharged cooling water shall be carried out at the discharge point. It shall be ensured that the temperature differential of the discharged water w.r.t. the receiving water does not exceed **5^0 C** at any given point of time.

(xiv) Appropriate safeguard measures shall be taken to ensure that the biodiversities - in the sea adjoining Ambolgad are not affected adversely due to the project.

(xv) It shall be ensured that no solid waste is dumped into the sea and the areas identified on land for waste disposal along with the scientific designing shall be submitted to the Ministry.

(xvi) Adequate precautions should be taken to ensure that the undersea discharge pipelines do not adversely impact on local fishing activities.

(xvii) The storage, disposal and management of radioactive including liquid waste emanating from the plant will be strictly treated and managed as per the guidelines and procedures prescribed by AERB/ICRP in this regard. The solid radioactive waste shall be stored above the ground elevation as per the standard EPR design after it is duly reviewed by AERB and in compliance with their requirements.

(xviii) The radioactive dose apportionment from each unit shall be as per the limits prescribed by AERB.

(xix) The radioactive levels in the different components of environment including food chain, air quality, water and soil shall be monitored regularly for radioactive levels in the surrounding areas as per AERB standards and records maintained. The conventional pollutants shall also be monitored and records maintained.

(xx) The non radioactive waste water generated from the plant premises will be suitably treated in STP and the treated effluents shall be recycled and reused within the plant premises for greenbelt etc.

(xxi) Greenbelt and plantation shall be developed in and around the project boundary with the native species of adequate density and width.

(xxii) Noise levels shall be limited to 75 dBA in the work zone both during construction and operation phase. For people working in high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided.

(xxiii) A Disaster Management Plan and Emergency Preparedness Plan shall be prepared and put up in place as per the norms of AERB. Regular mock drills shall be undertaken and based on the same, any modification required, if any, shall also be incorporated.

General Conditions

(i) The sand for the construction purpose shall be obtained only from the approved quarries.

(ii) Provision shall be made for the housing of construction labour 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.

(iii) Half yearly report on the status of implemetation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/ Regional Office/CPCB/SPCB. These reports also shall be put on the website of the proponent. In addition, the relevant parameters shall also be monitored regularly and uploaded on the proponent's website for information of all stakeholders.

(iv) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

(v) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(vi) Soil and groundwater samples shall be tested to ascertain that there is no deterioration of groundwater quality by leaching heavy metals, radio nuclides and other toxic contaminants.

(vii) Installation and operation of DG sets shall comply with notified guidelines.

(viii) 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 issue 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 and a copy of the

same should be forwarded to the Regional Office of this Ministry located at Bhopal and the Konkan Bachao Samiti who have submitted representation against this project.

(ix) 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.

(x) Regional Office of the Ministry of Environment & Forests located at Bhopal 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.

(xi) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bhopal /the CPCB/the SPCB who would be monitoring the compliance of environmental status.

(xii) 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 Regional Office of the Ministry at Bhopal.

5. 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. MOEF may impose additional environmental conditions or modify the existing ones, if necessary.

6. The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.

7. In case of any deviation or alteration in the project proposed 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. 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.

26/11/2010

(OM PRAKASH)
DEPUTY DIRECTOR

Copy to:-

1. The Secretary, Department of Atomic Energy, Anushakti Bhavan, C.S.M. Marg, Mumbai - 400 001.
2. The Chairman, Atomic Energy Regulatory Board, Niyamak Bhavan Anushaktinagar, Mumbai - 400094
3. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
4. The Secretary, Department of Environment, Environment Department, New Administrative Building, Mantralaya, Mumbai-400032
5. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
6. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd & 4th Floors, Sion Matunga Scheme Road No. 6, Opp. cine Planet, Sion Circle, Sion (E), Mumbai-400 022 - 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.
7. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
8. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal - 462016.
9. The Director (EI), MOEF.
10. Guard file/Monitoring file.

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