BY SPEED POST

F. No. J-13011/16/2008-IA.II(T)
Government of India
Ministry of Environment & Forests

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

Dated : 17th July, 2009

To

M/s Essar Power Gujarat Ltd
Essar House, P.O.Box No. 7945
Mahalaxmi
Mumbai- 400 034

Subject: 1200 MW(2x600 MW) Coal based Power Project at Nana Mandha, District Jamnagar, Gujarat by M/s ESSAR Power Gujarat Ltd.- Environmental clearance regarding.

Sir,

The undersigned is directed to refer to your communication no. EPGL/ENV/EC/02-08 dt. 14th Fe, 2008 regarding the subject mentioned above. Subsequent information furnished vide letters dt. 7.11.2008 and 24.3.2009 have been considered. Forests and Environment Department, Govt. of Gujarat letter no.ENV-10-2008-489-P dated 31.3.2008, dt. 13.3.2009 and 17.3.2009 have also been considered.

2. It is noted that the proposal is for grant of environmental clearance for setting up of a 1200 MW power project at Nana Mandha, District Jamnagar, Gujarat. The land requirement is 253 ha. Sea water will be used. Imported coal requirement will be 4 MTPA and will be sourced from Indonesia. Transportation of coal from jetty to plant site will be through closed conveyer. An amount of Rs 5 crores as capital and Rs 1 crores / annum as the recurring expenditure will be provided under CSR activities. The Public hearing was held on 1st Feb, 2008. Marine National Park and Marine Sanctuary are stated to be at 8 km away from the project site. Project cost will be Rs. 4822.00 Crores which includes Rs. 193.00 crores for environmental protection measures.

3. The proposal has been considered by the Expert Appraisal Committee for Thermal Power and Coal Mine projects and Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:-

(i) Prior CRZ clearance for the activities/ facilities to be located in the CRZ area shall be obtained from the Competent Authority before start of the work on the project.

(ii) Prior clearance for diversion of 4.60 ha of forest land under Forest (Conservation) Act, 1980 from the Competent Authority shall be obtained before start of the work on the project.

(iii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Competent Authority.

(iv) 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.

(v) The total land requirement for all the activities of the project shall not exceed 253 ha.

(vi) A conservation plan for protection / conservation of endangered flora and fauna, if any, shall be prepared in consultation with Director Marine National Park/Sanctuary and Wildlife Department of the State before start of construction of work on the project. A copy of the same shall be submitted to this Ministry

(vii) Since the project site is very near to the Marine National Park/ Sanctuary, it is necessary to setup a conservation cell with an Ecologist, a Marine Biologist and Wildlife Expert. The cell will be headed by the Ecologist. The function of this cell will be to assess and monitor the status of the ecology of Marine Park/Sanctuary and mangroves in the area and also to create/strengthen the corridors for the Wildlife so that the Wildlife is conserved. Further an Advisory committee consisting of an Expert from NIO, representative of University of Baroda and the Ecologist of Conservation cell should also be constituted. The Ecologist of Conservation Cell will be the Member Secretary and the Expert from NIO will be the Chairman of the committee. The committee should meet at least twice a year. The committee should be reconstituted once in three years. The function of the committee is to advise the conservation cell. The fund for the same would be met with by the power proponents.

(viii) Sulphur and Ash contents in the imported coal to be used in the project shall not exceed 1.00% and 10%, respectively. In case of variation of coal quality, a fresh reference shall be made to MOEF for suitable amendments to environmental clearance conditions wherever necessary.

(ix) Bi-flue stacks of 275 m height each shall be provided with continuous online monitoring equipments for SOx, NOx and Particulate matter. Exit velocity of flue gases shall not be less than 25 m/sec.

(x) High efficiency Electrostatic Precipitator (ESP) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm3.

(xi) Space provision shall be kept for retrofitting of FGD with Mercurry removal system , if required at a later date.

(xii) 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.

(xiii) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be achieved from day one. In emergency unutilized fly ash and bottom ash shall be disposed off in the ash pond. Mercury and other heavy metals (As,Pb,Cr etc) shall be monitored in fly ash and bottom ash and in the effluents emanating from the ash pond.

(xiv) Ash pond shall be lined with impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

(xv) Closed cycle cooling system with Induced Cooling Towers shall be provided. COC of 1.3 shall be adopted. The effluents shall be treated as per the prescribed norms.

(xvi) The treated effluents conforming to the prescribed standards only shall be discharged from cold water side in the sea. The temperature of the discharged effluents shall not exceed 5^0 C over and above the ambient water temperature of sea. The temperature of the discharged water shall be monitored continuously and records maintained.

(xvii) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.

(xviii) Rain water harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.

(xix) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of the 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 at Bhopal.

(xx) Storage facilities for auxillary liquid fuel such as LDO and/ HFO/ LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modifications required, if any shall be incorporated in the DMP. Sulphur content in the liquid fuel will not exceed 0.5%.

(xxi) 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 structure to be removed after the completion of the project.

(xxii) Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry. The data so obtained should be compared with

the baseline data so as to ensure that the groundwater quality is not adversely affected due to the project.

(xxiii) A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of the project area preferably with local species.

(xxiv) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

(xxv) 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.

(xxvi) Regular monitoring of ambient ground level concentration of SO_2, NOx, Hg,SPM and RSPM 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 so monitored shall also be put on the website of the company.

(xxvii) 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, / office of Municipal Corporation/Gram Panchayat concerned and on the company's web site 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.

(xxviii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, urban lacal Body and the Local NGO, is 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.

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

(xxx) 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 by e- mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.

(xxxi) 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. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels (Stack & ambient levels of SPM,Sox & NOx) will be displayed at the main gate of the power plant or at any other convenient location for information of public and employees.

(xxxii) 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, SO2, NOx (ambient levels as well as stack emissions) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(xxxiii) 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.

(xxxiv) 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.

(xxxv) 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.

(xxxvi) 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.

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. MOEF may 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 of production operations by the power plant.

6. 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.

7. 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 .

8. 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.

(LALIT KAPUR)
DIRECTOR

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
2. The Secretary, Environment & Forests Deptt., Government of Gujarat, Sachivalaya, 8th floor , Gandhi Nagar-382010
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10-A, Gandhi Nagar-382010 -with a request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collectors office for 30 days.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
6. The Chief Conservator of Forests, Western Regional Office, Ministry of Environment & Forests, E- 5,Arera Colony, Link Road -3, Ravishankar Nagar, Bhopal-462016.
7. Director (EI), MOEF.
8. Guard file.
9. Monitoring file.

(LALIT KAPUR)
DIRECTOR