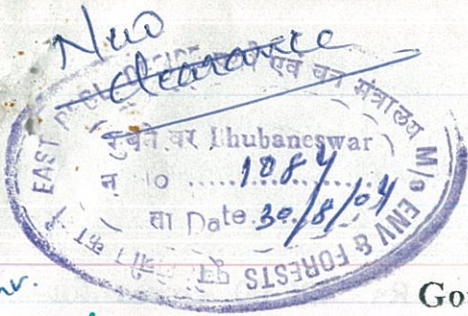




BY SPEED POST

No. J- 13012/ 16/2003.IA-II(T)
Government of India/ Bharat sarkar
Ministry of Environment & Forests
(Paryavaran Aur Van Mantralaya)

Paryavaran Bhawan.
CGO Complex, Lodi road,
New Delhi-110003
Dated: 3rd August, 2004

To,

Shri M.H.Rao,
DGM(Env.Engg.),
National Thermal Power Corporation Ltd.,
Engineering Office Complex,
Plot No. A-8A, Sector,
Post No. 13,
NOIDA-201 301, Uttar Pradesh.

Sub: 4x250 MW Nabinagar Captive Thermal Power Project near village
Dhundwa, district Aurangabad, Bihar of M/s National Thermal Power
Corporation Limited (NTPC). - Environmental clearance reg.

Sir,

The undersigned is directed to refer to your communications no.
CC:ESE:0270:2003;GEN:02T dated 22.10.03, 23.1.04, 24.03.04, 21.04.04 &
24.05.04 on the above mentioned subject.

2. M/s NTPC proposed to set up a 4x250 MW coal based new power project under joint venture with Indian Railways near Village Dhundwa in Aurangabad, Bihar. This power project is a captive power plant and will provide power to Indian Railways. Total land required is 1700 acres. No forest land is involved. Kaimur Sanctuary is at 6 km away towards western side from the plant site. Coal requirement is 5 MTPA and will be supplied from North Karanpura of Central Coalfields Mine. Ash and sulphur will be 40-47% & 0.36 - 0.50% respectively. Calorific value will be 2900-3800 Kcal/kg. Ash generation will be 5500 TPD of both fly and bottom ash. Water requirement will be 4295 m³/hr and will be met from River Sone. 320 Families will get affected. 100 m wide greenbelt all around the main plant will be developed covering an area of 110 acres. Total cost of the

project is Rs 4977.00 Crores which includes Rs. 428.00 crores for environmental protection measures.

3. The environmental clearance for the above project is hereby accorded subject to implementation of following terms and conditions:

- i) All the conditions stipulated by Bihar Pollution Control Board vide their letter no. T-2130 dated 8.4.04 should be strictly implemented.
- ii) Land requirement should not exceed 1700 acres. Copy of the R&R plan and package of compensation for 320 families should be submitted to the Ministry before starting the work on the project.
- iii) Coal requirement is estimated at 5.00 MTPA having 40-47% ash content and 0.36-0.50% Sulphur content. Copy of confirmed coal linkage should be submitted to the Ministry within three months from the date of issue of this clearance letter
- iv) Two twin flue stacks of 220 m height each shall be provided with continuous online monitoring equipment. Exist velocity of 20-25 m/sec should be maintained.
- v) High efficiency Electrostatic Precipitator(ESP) having efficiency of 99.9% should be installed to limit outlet SPM emission of 100 mg/Nm³.
- vi). Ash generation will be 5500 TPD of both fly and bottom ash . Ash generated should be utilised as per provisions of the notification on Fly Ash Utilisation issued by the Ministry in September,1999 and its amendments. By the end of 9th year full fly ash utilisation should be ensured.
- vii). Water requirement should not exceed 4295 m³/hr. Waste water should be recycled and used in the plant. Copy of confirmed water withdrawal should be submitted to the Ministry within three months from the date of issue of this clearance letter.
- viii). Care has to be taken that the runoff may so guided so that the local rain fed shallow reservoir, shallow rice terraces are not deprived of the surface runoff and a very careful Geo-hydrological mapping and designing has to be taken up to ensure that the local cultivation in the neighborhood of the power plant is not adversely affected due to altered hydrological regime. The Project authorities should get this done by a professionally competent authority before commencing construction work and submit a copy of the same to MoEF within three months from the date of issue of this letter.

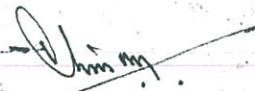
- ix). The distance from the HFL to boundary of ash pond must be minimum 600 m and out of the 600 m, a 100 m wide green belt around the ash pond should be developed.
- x). A systematic management of ash pond is required. The ash pond should be partitioned into compartments. The filling of the ash pond should first start from the site close to the river end. Plantation should be taken up along the set back area whenever dyke height is increased.
- xi). Garland drain of sufficient capacity should be provided around ash pond to prevent any over flow of water to the river. Seepage water from the garland drain should be pumped back and recycled.
- xii). Special arrangements should be made for the river bank protection to prevent bank erosion of the river all along the project area. Protection measures should be taken for a length of 2.5 Km upstream of the project. The length of the bank downstream which needs similar protection has not been determined. The Project authorities should undertake expeditiously all the bank protection measures and to maintain the protective structure in good condition throughout the life of the project.
- xiii). The riverbank embankment should be taken early along with the site development.
- xiv). A systematic water harvesting plan should be prepared for surface storage of water within the plant area so as to minimise the anticipated withdrawal of river water.
- xv). A ground water monitoring station be set up between the ash pond and the river front. Regular monitoring of water quality including heavy metals should be undertaken around ash dyke and the project area to ascertain the change in the water quality, if any, due to leaching of contaminants from ash disposal area.
- xvi). While planning the layout of the plant, care should be taken that the neighboring villages are not subjected to undue noise, coal dust or any adverse environmental disturbances.
- xvii). A proper planning and site evaluation should be based on satellite imageries rather than the old Survey of India Toposheets for a better idea of the current status.
- xviii). Noise level should be limited to 75 Leq and regular maintenance of equipment be undertaken. For people working in the area of generator and other high noise area, earplug should be provided.

- xix). A 100 m greenbelt should be developed all around the power plant covering an area of 110ha.
- xx). Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six monthly report should be submitted to this Ministry.
- xxi). For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.
- xxii). All other mitigative measures shall be taken as enumerated in Chapter 5 of the EIA report.
- xxiii). The project proponent should advertise at least in 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 letters 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>.
- xxiv). A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
- xxv). Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry/ Regional Office/CPCB/SPCB.
- xxvi). Regional Office of the Ministry of Environment & Forests located at Bhubaneswar will monitor the implementation of the stipulated conditions. Complete set of Environmental Impact assessment Report and Management Plan should be forwarded to the Regional Office for their use during monitoring.
- xxvii). Separate funds should be allocated for implementation of environmental protection measures alongwith item-wise break-up. These 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.
- xxviii). Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bhubaneswar/the CPCB/ the SPCB who would be monitoring the compliance of environmental status.

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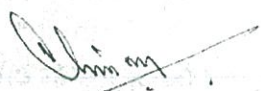
4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.
5. The environmental clearance accorded shall be valid for a period of 5 years for construction/operation of the power plant. In case, if the project authorities fails to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.
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, Hazardous Wastes (Management and Handling) Rules,1989 and its amendments, the Public Liability Insurance Act,1991 and its amendments, the Environment Impact assessment Notification of January,1994 and its amendments.


(A. DURAISAMY)
DIRECTOR

Copy to:

1. Secretary,Ministry of Power,Shram Shakti Bhawan,Rafi Marg,New Delhi-110001.
2. Secretary(Environment & Forests),Government of Bihar,Patna-800 023.
3. Chairman, Central Electricity Authority, Sewa Bhawan,R.K.Puram,New Delhi-110066.
4. Chairman, Bihar Pollution Control Board, Beltron House ,2nd floor, Lal Bahadur Shastri Nagar,Patna-800 023 with respect to display a copy of the clearance letter at the Regional Office,District Industries Centre and Collector's office for 30 days.

5. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- ✓ 6. Chief Conservator of Forests, Eastern Regional Office, Ministry of Environment & Forests, 194, Kharvela Nagar, Bhubaneswar-751001.
7. Director(EI), MOEF.
8. Guard file.
9. Monitoring file.


(A.DURAISAMY)
DIRECTOR