

BY SPEED POST

F. No. J-13011/15/2006-IA.II(T)
Government of India
Ministry of Environment & Forests

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

Dated 23rd November, 2006

To

Shri G. Dastidar
Chief Executive
SASAN POWER LTD
(a wholly owned subsidiary of
Power Finance Corporation Ltd.)
Urjanidhi, 1, Barakhamba Lane,
New Delhi- 110 001

**Sub: 4000 MW Sasan Ultra Mega Thermal Power Project at Sasan,
District Sidhi, Madhya Pradesh by M/s Sasan Power Ltd-
Environmental Clearance reg.**

Sir,

The undersigned is directed to refer to your communication no. 03:07:Sasan:UMPP dated 8th August, 2006 regarding the subject mentioned above. Subsequent information furnished vide letters no. 03:07 UMPP:sasan:09 dt. 12.09.2006, 07.10.2006 and 06.11.2006 have also been considered.

2. It is noted that the proposal is for grant of environmental clearance under the provisions of EIA Notification, 1994 to set up an Ultra Mega Power Project of 4000 MW capacity at Sasan Village, District Sidhi, M.P. The power plant will have a configuration of 5 x 800 MW Units. The proposal was accorded site clearance by the Ministry on 15th May, 2006. The total area required will be 3723 acres which includes 900 acres for ash disposal area, 460 acres for colony and 450 acres for MGR corridor, railway siding, approach road and intake water pipeline. Forest land to the extent of 312 ha (about 770 acres) is involved in the project. The coordinates of the Main Plant Area are 23° 59' 28" N, 82° 37' 21" E; 23° 58' 11" N, 82° 38' 16" E; 23° 56' 53" N, 82° 37' 15" E; 23° 57' 15" N, 82° 36' 52" E. The proposed colony is located near Village Tiyara at a distance of about 4 Km from the plant site and the coordinates of the colony are 23° 57' 17" N, 82° 35' 47" E; 23° 56' 47" N, 82° 35' 44" E; 23° 56' 26" N, 82° 35' 36" E; 23° 56' 54" N, 82° 34' 50" E. The ash pond is near Village Harrhawa at a distance of about 1.5 km from plant site and the coordinates of the ash pond are 23° 57' 53" N, 82° 38' 10"

E; 23° 56' 54" N, 82° 39' 04" E; 23° 56' 53" N, 82° 38' 33" E; 23° 57' 02" N, 82° 38' 05" E. The coal requirement for the project is 19.4 Million TPA and will be sourced from Singrauli Coalfields through MGR system. Ash and sulphur contents in the coal will not exceed 34% and 0.5 % respectively. Water requirement is 15,000 m³/hr and will be sourced from Govind Ballabh Pant Sagar reservoir through a 12.5 km long pipeline. The proponent has obtained withdrawal permission for 150 Cusec of water from the GBP Reservoir from the Govt of M.P. No ground water will be extracted. Closed Cycle Cooling system with natural draft cooling towers will be provided. The liquid effluents after treatment will be re-circulated and reused within the plant. There will be zero discharge outside the plant. Mahanban Reserve forest is near to the plant site. No national park and wildlife sanctuary is reported within 15 km radius. R&R of 6310 PAPs is involved. Public hearing for the project was held on 17.06.2006 and NOC was issued by Madhya Pradesh Pollution Control Board on 06.07.2006. The project cost is Rs 15,000.00 crores including Rs 865.00 crores for environmental protection measures.

3. The proposal has been considered in accordance with para 12 of the EIA Notification dated 14th September, 2006 read with sub clause (i) of clause 2.1.1 of sub para 2.1 of para 2.0 of the Circular no. J-11013/41/2006 – IA.II (I) dated 13th October, 2006 and environmental clearance is hereby accorded under the provisions there of subject to implementation of the following terms and conditions:

- (i) All the conditions stipulated by Madhya Pradesh Pollution Control Board vide their letter no. S 688/TS/MPPCB/2006 dated 06.07.2006 shall be strictly implemented.
- (ii) The proposed configuration of the project (5x800 MW) could be changed provided that the total capacity of the power plant shall not exceed 4000 MW and that no individual unit shall be less than 500 MW.
- (iii) The total land requirement shall not exceed 3723 acres for all the activities/facilities of the power project put together.
- (v) The land requirement, which has been reduced from that proposed originally, shall be reconciled at the stage of issue of Notification for land acquisition under Section 6.
- (vi) R&R in sufficient detail shall be finalized before award of the project and a copy of the detailed R&R shall be submitted to MoEF within three months of the issue of this letter or before the award of the project.
- (vii) The PAPs losing their homesteads or a major portion of the land shall not be ousted from the land till they are settled in the alternate sites.
- (viii) A Committee under the auspices of the District Administration with representatives of the PAPs, local Panchayats and representatives of NGOs and the Project Proponent shall be constituted to monitor the implementation of the R&R plan.

- (ix) Ancient Shiva Temple shall be outside the plant boundary and access to the temple shall be provided by the project authorities.
- (ix) Ash and sulphur content in the coal to be used in the project shall not exceed 34% and 0.5% respectively.
- (x) Two bi-flue and one single flue stacks of 275 m height each shall be provided with continuous online monitoring equipments. Exit velocity of 25 m/sec shall be maintained.
- (xi) High efficiency Electrostatic Precipitator (ESP) with efficiency not less than 99.9 % shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.
- (xii) Space provision shall be made for Flue Gas De-sulphurisation (FGD) unit, if required at a later stage.
- (xiii) Low NO_x burners shall be provided.
- (xiv) Adequate dust extraction system such as bag filters and water spray system in dusty areas such as coal and ash handling areas, transfer areas and other vulnerable areas shall be provided.
- (xv) Fly ash shall be collected in dry form only and ash generated shall be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 and its amendment. By the end of 9th year full fly ash utilization should be ensured. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry.
- (xvi) Ash pond shall be lined with LDPE lining. Adequate safety measures shall also be implemented to protect the ash pond bund from getting breached.
- (xvii) Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority/State Ground Water Board and a copy of the same shall be submitted within three months to the Ministry.
- (xviii) The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary.
- (xix) Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained and periodic reports shall be furnished to the Regional Office of this Ministry, Central Ground Water Authority and State Ground Water Board.

- (xx) A 200 m wide greenbelt will be developed on the western side of the plant area, total area under greenbelt in the plant site will be 474.14 acres which does not include greenbelt area in ash pond and town ship. In addition, a green belt of 50 m width will be developed all around the ash pond.
- (xxi) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xxii) Leq of Noise level should be limited to 75 dBA and regular maintenance of equipment be undertaken. For people working in the high noise areas, personal protection devices should be provided.
- (xxiii) Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. 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.
- (xxiv) 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, 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>.
- (xv) A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
- (xxvi) 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.
- (xxvii) Regional Office of the Ministry of Environment & Forests located at **Bhopal** will monitor the implementation of the stipulated conditions. Complete set of 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.
- (xxviii) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This 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.

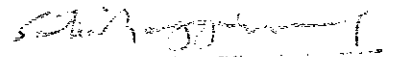
(xxix) Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at **Bhopal** /the CPCB/the SPCB who would be monitoring the compliance of environmental status.

4. The Ministry 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 to the start of production operations by the power plant.

6. In case of any deviation or alteration in the proposed project from that submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

7. The above stipulations shall be enforced along with others as 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, The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, Hazardous Wastes (Management and Handling) Rules, 1989, the Public Liability Insurance Act, 1991 and rules there under.



(Dr. S.K. Aggarwal)
DIRECTOR