

State Level Environment Impact Assessment Authority, Rajasthan

4, Institutional Area, Jhalana Doongri, Jaipur-302004

Phone: 0141-2705633, 2711329 Ext. 361

No: F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat. 1dB1/(175)/09-10

Jaipur, Dated: **19 SEP 2012**

To,

Barmer Thermal Power Company Ltd.
Room No. 130, Vidhut Bhawan,
JanPath, Jaipur

Sub: E.C. for conducting EIA studies for 2x125 MW Giral Lignite Thermal Power Stage-III. (Unit-3&4) Giral, Barmer.

Sir,

This has reference to your application dated 4.3.09 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification 2006 on the basis of the mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Committee Rajasthan, in its meetings held on 23/24.6.11 & 21/22.8.12

2. Brief details of the Project:

1.	Item No. in the list of Schedule / Category:	1(d) B-1			
2.	Location of Project	a) Main plant located at village Thumli, Tehsil-Shiv, District Barmer. b) Ash Pond area located at village Jaleela, Tehsil Shiv, District Barmer.			
3.	Total Area	(a) Plant area	48.635 ha.	(120.18 acres)	
		(b) Ash Pond Area	56.48 ha	(139.56 acres)	
		Total area	105.115 ha	(259.74 acres)	
		Note:- (Govt. land for Ash pond area transferred by Collector Barmer and already in possession of proponent company)			
4.	Product & Capacity	Power Generation	2x 125 MW (New Project) (Unit -3 & 4)		
5.	Expected Cost	(a) As per EIA Report (Title page)			
		(b) As per Questionnaire (page -12, S.no. XXXVI- A) Approx -1,400 crores. Note:- This variation in the cost should be rectified by the PP.			
6.	Water Requirement & Source:	Total Water Requirement =	825 cubic meters per hour i.e. 19,800 KLD. Source: IGNP		
7.	Fuel & Energy	(a) Power required for construction Quantity not mentioned. Source: - to be drawn from existing GSS at Giral.			
		(b) Lignite required = 2.1 MTPA i.e. 5,753 TPD (at plant load factor of 85%) Source :- RSMML lignite mines located near the Plant.			
8.	Environment Management Plan:-	Amount Rs. in Crores			
		S. No.	Description	Capital Cost	Recurring Cost per Annum
		1	Air Pollution Control		
		(i)	Electrostatic Precipitators	40.00	10.00
		(ii)	Ash Handling Unit	10.00	0.30
		(iii)	Ash Dyke Development	30.00	0.50
		(iv)	Dust Suppression System	5.00	0.10
		Sub. Total -1 (i to iv)		85.00	10.90
		2	Water Pollution Control		
		(i)	Effluent Treatment Plant	10.00	0.30
		(ii)	DM Plant Waste Treatment Systems	10.00	0.20
		(iii)	Sewage Collection, Treatment & Disposal	10.00	0.20
		Sub. Total -2 (i to iii)		30.00	0.70
3	Environment Monitoring and Management	20.00	0.30		
4	Others-Control of Fire & Explosion Hazards	10.00	0.10		
5	Green Belt Development	0.97	0.55		
Grand Total (1 to 5)		145.97	12.55		

9.	Green Belt Plantation	(a) About Rs. 3.5 Crores have been earmarked for the Green belt development and about 1,500 trees will be planted per hectare. Plantation would be also done around the lignite stock pile area and ash disposal area to minimize the dust pollution. (b) Out of total 259.7 acres project area, only 24 (acres i.e. less than 9%) is proposed to be afforested.
10.	CSR Activities:	(a) The project is based on the Case II bidding process. & the CSR plan will be finalized by the successful bidder. The PP, however, envisages to put in a condition in the agreement with the bidder to invest 0.4% of the project cost for CSR activities over a period of 5 years reportedly as per directive of MoEF. (b) The broad areas of intervention include infrastructure creation (drinking water, irrigation, sanitation, street lighting), education, health, livelihood, anganwadi etc.

3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC Rajasthan hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:


PART A: SPECIFIC CONDITIONS

- i. This EC is granted for the proposed extension project of 2 x 125 MW Thermal Power Plant. The P. P. should strictly comply with the contents of MoEF circular no. J-11013/41/2006-IA.II(I) dt. 01.11.2010 prior to carry out any activity at the site.
- ii. All the condition stipulated by Rajasthan State Pollution Control Board shall be strictly implemented.
- iii. The height of stack shall be restricted as per NOC / Permission of Ministry of defense, GoI. The PP shall also ensure that, the height of the Stack is limited to an elevation as per NOC / Permission of Airports Authority of India; the PP shall ensure compliance of all other conditions of both the above defense organizations. The stack should be provided with continuous on-line monitoring system with required exit velocity. Data collected shall be analyzed and submitted regularly to the Regional office of the MoEF at Lucknow and, RPCB.
- iv. Total water requirement, including the existing demand, shall not exceed 825 cubic meters per hour i.e. 19,800 KLD. Any discharge of effluents, directly or indirectly, shall not be carried out beyond the plant boundary.
- v. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry / unit / project proponent.
- vi. Closed circuit cooling with cooling towers shall be provided.
- vii. After circulation of pipe lines as submitted during presentation the water would be treated in reverse osmosis plant. The R. O. rejects should be properly and scientifically disposed off.
- viii. The PP shall ensure that, excess treated waste water may be used for horticulture.
- ix. The PP has proposed an amount of Rs. 0.4% of the project cost for (Rs. 60 Crores) CSR activities over a period of 5 years reportedly as per directive of MoEF.
- x. The broad areas of intervention include infrastructure creation (drinking water, irrigation, sanitation, street lighting, education, health, live hood, aganwadi etc.
- xi. The PP shall obtain CGWA clearance for abstraction of groundwater, if any.
- xii. The PP shall provide a disinfection system on domestic waste water treatment line.
- xiii. The PP shall explore the feasibility for dry condensers in place of wet condensers to cut down fresh water demand.
- xiv. The PP shall take urgent steps to reduce water consumption.
- xv. The PP shall ensure providing the ETP/STP as envisaged in REIA report.
- xvi. The Proponent shall obtain prior Consent to Establish and Consent to Operate from Rajasthan State Pollution Control Board under Water (Prevention and Control of Pollution) Act' 74 and Air (Prevention and Control of Pollution) Act, 1981.
- xvii. Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided to control emissions within limits by installing adequate air pollution control system like bag filters, dust collectors, ESP etc. Interlocking facility shall be provided in the pollution control

- equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.
- xxviii. Treated effluents shall be used to meet daily needs and the balance volume shall be used for dust suppression, sprinkling in ash handling and green belt development.
 - xix. The PP shall provide proposed no. of DG sets with stated capacity in the documents (with stack height as per the standards put in force by RPCB) which shall be installed to take care of start up operations, power failure and other emergencies.
 - xx. Fugitive dust emissions shall be controlled as per CPCB guidelines on Fugitive Dust Emissions. The PP shall make elaborate fugitive dust emission control plan at all areas including closed storage areas, closed transportation systems, mechanical material handling systems, and wherever possible conversion of non-point source emissions to point source emissions through creation of vacuum or suction.
 - xxi. The hazardous waste generated shall be disposed in accordance with provisions under the "Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules 2008 (amended till date).
 - xxii. The disposal of ash should be strictly as per the MoEF Notification with amendments there in. the proper record of ash disposal / Utilization should be mention and monthly figure of generation and disposal/ utilization should be regularly submitted to RPCB.
 - xxiii. The transfer of various materials should be carried out by trucks covered with tarpaulins.
 - xxiv. Rs. 3.5 Crores have been earmarked for the Green Belt Development and Plantation shall be carried out on an area of 259.7 acres 1500 trees/ ha. The peripheral plantation shall be carried out in minimum two rows (in staggered manner) to minimize the affects of air pollution. Every year due care shall be taken to replace the causalities.
 - xxv. As envisaged, the PP shall earmark an amount of Rs. 145.97 Crores as initial capital cost and Rs. 12.55 Crores as annual recurring cost for implementing various environmental protection measures under the Environmental Management Plan.
 - xxvi. The PP shall provide an effective rainwater harvesting system and optimize the cost of conservation. Central Groundwater Authority/Board shall be consulted for finalization of appropriate water harvesting scheme/structures within a period of three months from the date of clearance.
 - xxvii. Infrastructure facilities including sewage treatment and its sanitary disposal, first aid etc. shall be made for the project personnel/contract labour and drivers during construction phase.
 - xxviii. Regular monitoring of the air quality shall be carried out in and around the power plant and records be maintained. All air, water and other monitoring shall be carried out through a MOEF/NABL/CPCB/ Government approved laboratories. Six monthly reports shall be submitted to the RPCB and the Regional Office of the MoEF at Lucknow.
 - xxix. Regular monitoring of the air quality shall be carried out in and around the power plant (mostly in the down wind directions) and records be maintained. Six monthly reports shall be submitted to the RPCB and the MoEF, Regional Office at Lucknow. The PP shall make concrete efforts to reduce CO₂ emission to the atmosphere (calculated at the rate of 997 gms of CO₂/kWh of power generated).
 - xxx. Regular monitoring of ground water in and around the ash disposal area shall be carried out, records maintained.
 - xxxi. Leq of noise level shall be limited to 75 dB (A) and regular maintenance of equipment will be undertaken. For people working in the high noise area, earplug shall be provided.
 - xxxii. As proposed, effective fire fighting system shall be provided and mock drills be carried out as per fire & safety rules.
 - xxxiii. The project proponent shall advertise at least in 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 SEIAA, Rajasthan and RPCB.
 - xxxiv. A separate environment monitoring cell with suitable qualified staff shall be set up for implementation of the stipulated environmental safeguards.
 - xxxv. Educational and Skill mapping shall be carried out by the PP on the basis of secondary data and submitted to RPCB and the MoEF, Regional Office at Lucknow.
 - xxxvi. Post project monitoring shall be carried out as proposed and half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to the RPCB/CPCB and the MoEF, Regional Office at Lucknow.
 - xxxvii. Regional Office of the MoEF located at Lucknow and RPCB shall monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact assessment Report and Management Plan shall be forwarded to these organizations for use during monitoring.
 - xxxviii. Full cooperation shall be extended to the Officers of RPCB/CPCB/MoEF Regional Office at Lucknow, who would be monitoring the compliance of environmental status.
 - xxxix. The environmental clearance is subject to any litigation pending before any courts of law/tribunal/legal body in the State/Country, if any.

- xl. The SEIAA, Rajasthan reserves the right to add new, annul/modify existing stipulated conditions, and/or revoke the clearance if these conditions are not implemented to its satisfaction, in the interest of environment protection.
- xli. The environmental clearance accorded shall be valid for a period of 5 years with effect from the date of start of operation by the power plant.
- xlii. In case of any deviation or alteration in the proposed project from that submitted for clearance, a fresh reference shall be made to the SEIAA, Rajasthan to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- xliii. The above stipulations shall be enforced along with 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, The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, Hazardous Wastes (Management and Handling) Rules, 2008, the Public Liability Insurance Act, 1991 and rules there under.
- xliv. Documents reflecting commitment/plans of the PP to ensure implementation of the following shall be provided at the time of applying to RPCB for Consent to Establish/Operate:
- Tree plantation to be carried out on an area of 259.7 acres 1500 trees/ ha. The peripheral plantation shall be carried out in minimum two rows (in staggered manner) to minimize the affects of air pollution. Every year due care shall be taken to replace the casualties of trees.
 - Authenticated list of flora and fauna with scientific names (Botanical names; Genus and Species), with schedule, particularly with due attention to the Endemic श्रीवृक्ष , Godavan.
 - Plans for upgrading the existing dispensary to take medical care of the people living in the study area will be prepared and submitted.
 - School shall be provided. This school will be open to all.
 - Electrical power to be supplied to nearby villages
 - Free Medicines (Homeopathic, Allopathic) will be provided to the residents of the nearby villages.
 - A voluntary commitment of the Social responsibility activities to be undertaken by the project proponent and the budgeted amount proposed for such activity.

Yours faithfully,


(Sankatha Prasad)
Member Secretary
SEIAA Rajasthan

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment and Forest, Govt. of India, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi.
2. Addl. Chief Secretary, Environment Department, Rajasthan, Jaipur.
3. Smt. Alka Kala, Chairman, SEIAA, Rajasthan, 69-A, Bajaj Nagar Enclave, Jaipur
4. Shri Moti Lal Daima, Member, SEIAA, Rajasthan, 48/9, Moti Path, Mansarovar, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan State Pollution Control Board, Jaipur.
6. Secretary, SEAC Rajasthan.
7. The CCF, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow-226 020.
8. Environment Management Plan- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Nodal Officer (Departmental Website), Department of Environment, Government of Rajasthan, Jaipur with the request to upload the copy of this environmental clearance on the website.


M.S. SEIAA (Rajasthan)