

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. 1(d)B1/(424)/11-12

Jaipur, Dated: 8 NOV 2012

To,

Rajasthan Rajya Vidyut Utpadan Nigam Ltd.
Room no. 130, Vidyut Bhawan,
Janpath, Jyoti Nagar,
RRVUNL,
Jaipur

Sub: E. C. for conducting EIA study for 160 MW gas based combined cycle expansion power project Stage-IV at village-Ramgarh, Tehsil & District-Jaisalmer, Rajasthan.

Sir,

This has reference to your application dated 28.11.11 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 meeting held on 25/26.10.12

2. Brief details of the Project:

1.	Category / Item No. (in Schedule):	1(d) B1		
2.	Location of Project	(i) Village-Ramgarh, Tehsil & District-Jaisalmer (ii) Project site is located about 6 km away from Ramgarh Town on Ramgarh-Jaisalmer Road.		
3.	Plot Area	(i) Land required for this expansion project - 27 acres (ii) This required land is within the existing power plant measuring total 796 bigha, 17 biswa land allotted by Colonization Department vide letter dt. 05.02.1991 and possession taken on 10.05.1991.		
4.	Product & Capacity	(1) Power Generation (2) Details of Existing and Proposed Capacity		
		Existing Capacity	Proposed Expansion	Total Capacity After Expansion
		(i) Stage I & II (under operation)	Stage- IV (Now Proposed)	433.50 MW
		1 x 3 MW GT 1 x 35.5 MW GT 1 x 37.5 MW GT 1 x 37.5 MW ST 113.5 MW	1 no. GT : 110 MW 1 no. HRSG 1 no. ST : 50 MW	
		(ii) Ongoing Stage-III (under execution)		
		1 x 110 MW GT 1 x 50 MW ST 160 MW		
		Total- 273.50 MW	160 MW	433.50 MW
5.	Project Cost:	Cost of Extension Power Project Rs. 640 Crores (@ Rs. 4.00 Crores per MW)		
6.	Water Requirement & Source	Water Requirement for Stage-IV For Condenser Cooling of Steam Turbine, Evaporative Cooling of Gas Turbine, for Make up (DM) Water to HRSG and other uses		320 m ³ /hour i.e. 7.86 MLD
		Source:- WRD (GoR) has vide order no. 1652 dt. 02.09.2009 allocated / reserved 10 cusec (315 mcf) water from IGP for Ramgarh Gas TPP, Stage-IV.		
7.	Fuel & Energy:-	Requirement for Stage-IV (i) Natural Gas Required 0.80 MMSCMD (ii) Source : GAIL through M/s Fucus Energy. (iii) HSD Required for start-up : 210 KL(approx.)		

8.	Environment Management Plan:-	This application is for ToRs. EMP is to be prepared after completion of EIA studies.				
		S. No.	Existing plan	Proposed Expansion	Total	Increase by %
		1	45 Lacs per year	25 Lacs per year	70 Lacs per year	55.5%
9.	Green Belt Development in Ha.	S. No.	Existing plan	Proposed Expansion	Total	Increase by %
		1	6.64 ha	3.64 ha	10.28 ha	54.8%
10.	Green Plantation in no.	S. No.	Existing plan	Proposed Expansion	Total	Increase by %
		1	10500	1500 trees per ha 3.65 x 1500 = 5500	16000	52.4%
11.	Corporate Social Responsibility Activities:-	<p>1. The CSR policy shall be applicable to the Project Affected Persons (PAPs) and for Project Affected Areas (PAAs) in respect of the existing Power Projects / Stations of RVUN/its subsidiary companies which are in operation and the power Projects under execution and to be developed in future by RVUN or its subsidiaries.</p> <p>2. The aims & objectives of the Policy are as under:-</p> <ol style="list-style-type: none"> Improving socio-economic status of Project Affected Persons (PAPS). Providing opportunities for sustainable improvement in the fields of income generation, health, education, water & electricity, sanitation communication and such other fields. To adopt a holistic approach to community development of Project Affected Areas and ensuring that the people of such areas improve in a transparent and participative manner. Carrying out community development activities in a transparent and participative manner. Ensuring participation and consultation with the local public representatives and setting up of institutional mechanisms for carrying out CSR activities in Project Affected Areas. <p>3. CSR Activity:- The list of the activities covered under CSR policy is purely suggestive in nature and any other activities may also be taken up as per the needs of the Project Affected Persons/Areas to be assessed at the Project level. The list of CSR activities will be as under:-</p> <ol style="list-style-type: none"> Education with emphasis on Primary education, Gril Education and Adult education. Drinking water supply with emphasis on safe drinking water to villagers and other water related facilities. Electrification of villages/electrification of public places. Health care, such as Mobile clinics and community health related services. Environment. Social Empowerment. Infrastructure development such as construction of anicuts, roads, community halls, school buildings, health centers, sanitation facilities etc. Sports and cultural activities. Generation of employment/capacity building such as vocational training to local people. Grant / donation / financial assistance / sponsorship to the reputed NGOs / societies local agencies involved in social development works. Works related for preservation of "heritage sites" in the Project Affected Areas. Empowerment of women for education, health & self-employment. Providing relief to victims of natural Calamities like Earth Quake, Cyclone, Drought & Flood situation etc. Distribution of efficient Chulas to the villagers Adoption of villages for overall development. Any other development works suggested by local Gram Panchayats / Panchyat Samities District Administration / CSRI Committee. All works for creating community assets. 				

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:

A. SPECIFIC CONDITIONS


- All the condition stipulated by Rajasthan State pollution Control Board shall be strictly implemented.
- The height of stack shall be restricted to 70 m vis-à-vis the NOC dated 17.03.2010 issued by Ministry of defense, GoI. The PP shall also ensure that, the height of the Stack is limited to an elevation of 235.50 M (site elevation 165.5 M +height of stack 70.00 M) above mean sea level as per the NOC (no.

AA/NOC/2009/416/449-451 dated 08.03.2010) of the Airport Authority of India. The PP shall ensure compliance of all other conditions if both said NOCs. The stack exit velocity of at least 20.00 m/sec shall be provided with continuous on-line monitoring system. Data collected shall be analyzed and submitted regularly to the Regional office of the MOEF at Lucknow and, RPCB

- iii. 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.
- iv. Total water requirement, including the existing demand shall not exceed 320 M³ per hour for Condenser Cooling of Steam Turbine, Evaporative Cooling of Gas Turbine, for Make up (DM) Water to HRSG and other uses. Any discharge of effluents, directly, or indirectly, shall not be carried out beyond the plant boundary.
- v. Closed circuit cooling with cooling towers shall be provided.
- vi. The PP shall ensure that, excess treated waste water may be used for horticulture.
- vii. The PP shall obtain CGWA clearance for abstraction of groundwater, if any.
- viii. The PP shall provide a disinfection system on domestic waste water treatment line.
- ix. The PP shall explore the feasibility for dry condensers in place wet condensers to cut down fresh water demand.
- x. The PP shall take urgent steps to reduce water consumption.
- xi. The PP shall ensure providing the ETP / STP as envisaged in REIA report.
- xii. 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.
- xiii. 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 on the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.
- xiv. Treated effluent shall be used to meet daily needs and the balance volume shall be used for dust suppressing, sprinkling in ash handling and green belt development.
- xv. 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.
- xvi. The hazardous waste generated shall be disposed in accordance with provisions under the "Hazardous wastes (Management, Handling and Transboundary Movement) Rules 2008 (amended till date).
- xvii. Plantation shall be carried out on an area of 6.64 ha. @ 150 trees/ha. say 5,500 trees. The peripheral plantation shall be carried out on minimum two rows (in staggered manner) to minimize the effects of air pollution. Every year due care shall be taken to replace the casualties. This shall be executed over and above existing 5000 trees to ensure surviving number of trees to be 16,000.
- xviii. The PP shall provide an effective rainwater harvesting system and optimize the cost of conservation. Central Groundwater Authority/Bard shall be consulted for finalization of appropriate water harvesting scheme/ statutes within a period three months from the date of clearance.
- xix. 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.
- xx. 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.
- xxi. Regular monitoring of air quality shall be carried out in and around the power plant (mostly in the downwind 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/k Wh of power generated).
- xxii. 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.
- xxiii. As proposed, effective fire fighting system shall be provided and mock drills be carried out as per fire & safety rules.
- xxiv. 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 environment clearance and copies of clearance letters are available With the SEIAA, Rajasthan and RPCB.
- xxv. A separate environment monitoring cell with suitable qualified staff shall be set up for implementation of the stipulated environmental safeguards.

- xxvi. Educational and skill mapping shall be carried out by the PP on the secondary data and submitted to RPCB and MoEF, Regional Office at Lucknow.
- xxvii. Post project monitoring shall be carried out as proposed and half yearly report on the status of implementation of the stipulated conditions and environment safeguards shall be submitted to the RPCB/CPCB and the MoEF, Regional Office at Lucknow.
- xxviii. Regional Office of the MoEF, located at Lucknow and RPCB shall monitor the implement of the stipulated conditions. A complete set of document including Environment Impact assessment Report and Management plan shall be forwarded to these organization for use during monitoring.
- xxix. 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.
- xxx. The environmental clearance is subject to any litigation pending before any courts of law/tribunal/legal body in the State/Country, if any.
- xxxi. 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.
- xxxii. 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.
- xxxiii. In case of any deviation or alteration in the proposed project from the 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.
- xxxiv. The above stipulations shall be enforced along with others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control 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.
- xxxv. The SEIAA, Rajasthan reserve the right to add new conditions, modify/ annual any condition and/or to revoke the clearance if implementation of any of the aforesaid condition/other stipulations imposed by competent authorities is not satisfactory. Six monthly compliance status reports on project along with implementation of environmental measures shall be submitted to MoEF, Regional Office, Lucknow. SEIAA Rajasthan & RPCB.
- xxxvi. Documents reflecting commitment/plans of the P.P. to ensure implementation of the following shall be provided at the time of applying to RPCB for Consent to Establish/Operate:
- a. Used water shall be treated and recycled @ 60% by single stage R. O.
 - b. Tree plantation to be carried out on an area of 3.64 ha @ 1500 trees/ha, say 5,500 trees. The peripheral plantation shall be carried out in minimum two rows (in staggered manner) to minimize the effects of air pollution. Every year due care shall be taken to replace the casualties. This shall be executed over and above existing 5000 trees to ensure surviving number of tree to be 16,000.
 - c. Authenticated list of flora and fauna with scientific names (botanical names; Genus and Species), with schedule, particularly with due attention to the Endemic [h.o.kk lkj] Godavan.
 - d. Plants for upgrading the existing dispensary to take medical care of the people living in the study area will be prepared and submitted.
 - e. School shall be provided. This school will be open to all.
 - f. Electrical energy to be supplied to nearby villages.
 - g. Free Medicines (Homeopathic, Allopathic) will be provided to the residents of the nearby villages.
 - h. A voluntary commitment of the Social responsibility activities to be undertaken by the project proponent and the budgeted amount proposed for such activity.
 - i. RVUNL should ensure that the agencies supplying natural gas to the P.P. must have E.C. for extraction and transportation of natural gas.

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)