

GMR KAMALANGA ENERGY LIMITED
3X350 MW, Thermal power plant, Kamalanga Village
Dhenkanal District , Orissa

Sixth Half yearly Compliance Report

S. No	Condition	compliance status as on 08 Dec 10
1	The total land requirement shall not exceed 1050 acres for all the activities / facilities of the power project.	So far acquired 861.225 Acres of Pvt. Land and has been reconveyed by IDCO to the Company by way of lease deed for 90 years. Out of the above 65 Acres of land will be surrendered to the Govt. in exchange of Goucher land. PGCIL proposes to divert 400 kV D/C Talcher-Meramundly line passing through the project site and therefore as area of 28 Acres under the tower lines need to be acquired by the project company in addition to the area as has been mentioned.
2	It shall be ensured that the project boundary is at least 500 m away from HFL of the river in conformity with the guideline in this regards.	The main plant boundary is in excess of 500 m from the HFL away of river Brahmini.
3	The plant heat rate of around 2300 kCal/kWh shall be achieved and the coal consumption shall not exceed 660 tph	The plant heat rate of 2276 kCal/kWh is guaranteed by the EPC Contractor. M/s. Mahanadi Coal Fields Limited (MCL) has issued Letter of Assurance Of Coal linkage for 1050 MW and the Consumption will be limited to 660 TPH.
4	Ash and Sulphur contents in the coal to be used in the project shall not exceed 34% and 0.5 % respectively.	A letter has been sent to MoEF in this regard vide our letter ref: GEL/KTPP/BLR/MoEF/08-09/099 dated 29/04/2008. Copy already submitted to ministry vide 1st -half yearly compliance report and our letter Dt.16 th Nov '09
5	A multi-flue stack of 275 m height with exit velocity of not less than 21 m/s shall be provided with continuous online monitoring system.	Will be complied. Same is provided in the project contract specification.

6	High efficiency Electrostatic precipitators (ESPs) with efficiency not less than 99.9% shall be installed so as to ensure that particulate emissions do not exceed 50 mg /Nm ³	Will be complied ESP + Fabric filter with outlet particulate emission of 50mg/Nm ³ and with an efficiency of 99.9% has been considered and the same is provided in the contract specification.
7	Appropriate mitigation measures shall be adopted to reduce the emissions of SO ₂ . It shall be ensured that at no point of time the ground level concentration of SO ₂ in the impact zone exceeds the prescribed limit. The proponent shall now itself also provide space for installation of FGD or other suitable measures, if required at a later stage.	Will be complied and further space for FGD already provided.
8	Water requirement shall not exceed 37 cusecs. No ground water shall be extracted for the project at any stage including during construction.	As per the quantities worked out in the pre engineering design the consumption of Water will not exceed more than 37 cusecs. The ground water, if used shall be for the drinking purpose only. Company signed agreement with Water resource department for drawl of 2.06 Cu., water for construction purpose.
9	COC of not less than 5 shall be adopted.	Will be complied
10	Closed circuit cooling system with induced draft cooling towers shall be provided.	Will be complied Same is provided in the project contract specification.
11	Waste water generated shall be recycled and reused in the plant premises. There shall be no discharge of waste water outside the plant boundary except during monsoon.	Waste water will be recycled and reused within the plant premises. Same is provided in the project contract specifications. The design of the plant ensures zero discharge system.
12	For controlling fugitive dust, regular sprinkling of water in the coal handling area and other vulnerable areas of the plant shall be ensured.	Being implemented.
13	The project authorities should adhere to the provisions stipulated in the fly ash notification of September, 1999 and as amended in august, 2003 in regard to fly ash utilization. Fly ash shall be	The design of the plant meets all the requirements.

	collected in dry form. Balance fly ash shall be dispose off in the ash pond through HCS mode and bottom ash through medium slurry mode.	
14	The ash pond shall be lined with impervious lining to avoid any leaching into ground water. The ash dyke shall be so designed and strengthened to ensure guard against breaching. Adequate safety measures shall also be taken so that pond ash does not become air borne to cause air pollution in the surrounding areas.	Will be complied.
15	R & R plan for land oustees and homestead oustees shall be prepared in consultation with the state Revenue Authorities prepared before starting work on the project and implemented simultaneously with the start of development / construction work on the project. A copy of the R&R plan shall also be submitted to this ministry within three months of the issue of this letter.	There are neither land oustees nor homestead oustees from the project area. The first RPDAC meeting was held on 7 June 2010 under the chairmanship of Revenue divisional commissioner.
16	The District collector / Revenue Divisional commissioner shall be inform regarding R&R and all other benefit to be provided by the project proponent and their effective implementation shall be overseen by the District authorities.	
17	Rain water harvesting should be adopted central Ground water Authority/Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three month from the date of clearance.	GKEL has submitted to CGWA in this regard and awaiting advice. Copy of the letter is already submitted with the 1 st half yearly compliance report.
18	Regular monitoring of ground water quality including heavy metals shall be undertaken around ash dyke the project area to ascertain the change, if any water quality due to leaching of contaminants from ash disposal area.	At present the construction work is going on at site. The regular sampling and analysis of ground water shall be carried out during the operation phase. Further the ash pond will be lined suitably with appropriate lining material as per the latest technology

		to avoid seepage of ash water into the ground.
19	A greenbelt shall be developed all along the plant and ash pond boundary covering total area of atleast 320 acres.	Green belt along the plant boundary had already started and is under implementation. Further as per the requirement of District Administration avenue plantation and green belt in Dhenkanal and Kapila developed.
20	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Being implemented.
21	An alternate Goucher land shall be developed in the identified 65 acres of land for use of the villagers for grazing of their cattle. The District Authorities and the villagers shall be informed of the same for its effectives utilization.	The land after reconveyance, the grazing facilities will be developed.
22	Leq of noise level should be limited to 75dbA and regular maintenance of equipment be undertaken for people working in the high noise areas, Personal Protection devices should be provided.	Leq will be maintained as per prescribed limit. Safety and noise protection devices will be provided to people working in high noise areas as per the statutory requirements.
23	Regular monitoring of the ambient air quality shall be carried out in the impact zone and records maintained .The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB .Quarterly reports shall be submitted to Regional office of this Ministry.	AAQ monitoring started in March 2010. Suspended during monsoon and restated on 1.10.2010. The quarterly report will be submitted on first week on January 2011.
24	The project proponent should advertise in at least two local newspapers widely circulated in the region around the project ,one of which should be in the vernacular language of the locality concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the SPCB /Committee and may also be seen website of the MoEF in the http://envfor.nic.in	GEL has advertised about the receipt of Environmental clearance for the project in Indian Express (English) and Dharitri (Oriya) on 11 th February 2008 The extracts from the Newspapers have been submitted along with first Half yearly compliance report.

25	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	Environmental monitoring team is in place.
26	Half yearly report on the status of implementation of the conditions and environmental safeguards should be submitted to this ministry, the Regional officer, CPCB & SPCB.	Being Complied.
27	Regional officer of Ministry of environment and forests located at Bhubaneswar will monitor the implementation of the stipulated conditions. A complete set of documents including ENVIRONMENT Management plan and the additional information/clarifications submitted subsequently should be forwarded to Regional office for their use during monitoring.	Set of documents have been submitted to the MOEF Regional office in Bhubaneswar vide our letter ref: GEL/KTPP/BLR/MOEF/08/104 Dated 23 rd may 2008.
28	Separate fund should be allocated be allocated for implementation of environmental protection measures along with item – wise break .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 ministry.	Being followed.
29	Full cooperation should be extended to the scientists/officers from the Ministry and its Regional office at Bhubaneswar/the CPCB/the SPCB during monitoring of the project.	Company shall cooperate and shall extend full support to the concerned authorities.