



BY SPEED POST

J-13012/64/2008-IA.II (T)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi-110 003
Dated: October 5th, 2010.

To

M/s SKS Power Generation (Chhattisgarh) Ltd.
501 B, Elegant Business Park
Andheri Kurla Road, J.B. Nagar
Andheri (E), **Mumbai - 400 059.**

Sub: Proposed 1200 MW (4x300 MW) Coal Based Thermal Power Plant at villages Binjkot & Darramura, in Kharsia Taluk, in Raigarh District in Chhattisgarh by M/s SKS Power Generation (Chhattisgarh) Ltd. - reg. Environmental Clearance.

Sir,

The undersigned is directed to refer to your letter dated 12.07.2010 along with copies of EIA / EMP and public hearing reports on the subject mentioned above seeking environmental clearance under the provisions of the EIA Notification, 2006.

2. The Ministry of Environment & Forests has examined the application. It has been noted that the proposal is for setting up of 4x300 MW Coal Based TPP at Binjkot & Darramura, in Kharsia Taluk, in Raigarh District, in Chhattisgarh. Land requirement will be 874 acres, which comprises of 664 acres agricultural land; 24.67 double crop agricultural lands; and 149 acres wasteland. No diversion of forest land is involved. The co-ordinates of the site will be at Latitude 22°01'57" N to 22°00'01" N and Longitude 83° 12'55" E to 83° 12'03" E. Coal requirement will be 60.2 MTPA, for which coal linkage and Fatehpur Coal Block allocation has been obtained. Ash and sulphur contents in coal will be 41 % and 0.4 % respectively. Quantity of fly ash to be generated will be 1.98 MTPA. Induced draft cooling system will be adopted. Water requirement of about 34.20 MCM/annum will be obtained from Mahanadi River, for which allocation of water requirement has been obtained. The source of intake will be at 30 km from the site and water will be conveyed through pipeline. There are no national parks, wildlife sanctuaries, heritage sites, tiger/biosphere reserves etc. within 10 km of the site. However, there are several reserve forests in the study area viz. Rabo R.F at 0.2 Km in the NE; Burha Pahar R.F at 4.6 Km in SW; Bargah R.F at 5.5 Km in NW and P.F near Bendajhariya village at 3.8 Km SW etc. Mand River flows at a distance of 0.5 Km SW of the site. River Kurket flows at 3.6 Km in the north. Public hearing was conducted on 17.05.2010. Cost of the project will be Rs 5100.0 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006 and its amendment.

4. Based on the information submitted by you and presentation made by you and the consultant M/s Vimta Labs, Hyderabad, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

A. Specific Conditions:

- (i) Prospective plan for the site showing the future expansion shall be formulated and submitted to the Ministry **within six months**.
- (ii) Sulphur and ash contents in the fuel to be used in the project shall not exceed 0.6 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to MOEF for suitable amendments to environmental clearance condition wherever necessary.
- (iii) A stack of 275 m height shall be provided with continuous online monitoring equipments for SO_x, NO_x and Particulate Matter (PM_{2.5} & PM₁₀). Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.
- (iv) Provision for installation of FGD shall be provided for future use.
- (v) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³. Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.
- (vi) Regional Office of the Ministry of Environment & Forests shall monitor the implementation of the stipulated conditions. A complete set of documents including 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. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NO_x (from stack & ambient air) shall be displayed at the main gate of the power plant.

- (vii) Source sustainability study of water requirement shall be carried out by an institute of repute. The study shall also specify the source of water for meeting the requirement during lean season. The report shall be submitted to the Regional Office of the Ministry **within six months**.
- (viii) No ground water shall be extracted for use in operation of the power plant even in lean season. Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry.
- (ix) No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.
- (x) COC of 6.0 shall be adopted. The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not do not get mixed. A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- (xi) Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a **period of three months** from the date of clearance and details shall be furnished.
- (xii) Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel/ Rivers (as applicable) even in lean season.
- (xiii) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (xiv) Ash pond shall be moved away from side facing river and a thick three tier green belt shall be developed on the western side of the ash pond. Area of reservoir shall be restricted to 75 acres.
- (xv) Utilisation of 100% Fly Ash generated shall be made from **4th** year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.
- (xvi) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents

- emanating from the existing ash pond. No ash shall be disposed off in low lying area.
- (xvii) Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
 - (xviii) For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.
 - (xix) Green Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible adequate justification shall be submitted to the Ministry and Green belt shall be raised all around the plant comprising of atleast 33% of total area. Tree density shall not less than 2500 per ha with survival rate not less than 75 %.
 - (xx) Two nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school etc shall be developed in co-ordination with the district administration.
 - (xxi) The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.
 - (xxii) An action plan for R&R (as applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy **within three months** form the date of issue of this letter.
 - (xxiii) An amount of Rs 5.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 1.0 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be **submitted within one month** along with road map for implementation.
 - (xxiv) While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing

