J-13012/12/2008-IA.II (T) Government of India Ministry of Environment, Forests and Climate Change

3rd Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-110003

Dated: 14th October, 2014.

To

M/s Indiabulls Power Ltd. M-62, 63, First Floor, Connaught Place, New Delhi-110 001

Tel. No. 011-30252900; Fax: 011-30252901

Sub: 5x270 MW Thermal Power Project at Additional Amravati Indl. Area, Nandgaonpeth, Distt Amravati, Maharashtra by M/s Indiabulls Power Limited – reg. Extension of validity of EC.

Sir,

This has reference to your letter dated 18.02.2014 on the above subject. It is noted that EC was accorded by MoEF for 2x660 MW on 27.02.2009 and subsequent amendment dated 15.07.2010 for change in project configuration to 5x270 MW.

- 2. The matter was placed before the EAC (Thermal Power) in its 13th Meeting held during March 25-26, 2014. In acceptance of the recommendation of the EAC and in view of the information/clarification furnished by you with respect to the implementation of the above mentioned power project, the validity of the EC issued by this Ministry's letter of even no. dated 27.02.2009 and amendment dated 15.07.2010 is extended for a period of five years i.e. till 26.02.2019 to start the production operations by the power plant. Further, permission is also accorded for temporary road transportation of coal till 31.03.2015.
- 3. Further, the following conditions are stipulated in addition to the conditions of the EC dated 27.02.2009 and its amendment dated 15.07.2010.
- (i) The coal transportation by road through mechanically covered trucks shall be explored and till such time the transportation may be carried out through tarpaulin covered trucks. Periodic maintenance of the road may be carried out by the project proponent at its cost and smooth traffic flow on the road may also be facilitated by the project proponent in consultation with the State Government Authorities. In any case, no transportation of coal shall be made by road after 31.03.2015.
- (ii) Avenue plantation of 2/3 rows all along the road shall be carried out by the project proponent at its own cost in consultation with the State Government Authorities.
- (iii) Harnessing solar power within the premises of the plant particularly at available roof tops shall be undertaken and status of implementation shall be submitted periodically to the Regional Office of the Ministry.

- (iv) A long term study on radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.
- (v) Mercury emissions from stack shall also be monitored on periodic basis.
- (vi) Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.
- (vii) No ground water shall be extracted for use in operation of the power plant even in lean season. 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.
- (viii) Monitoring of surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.
- (ix) 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.
- (x) Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close coordination with the State Pollution Control Board.
- (xi) Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.
- (xii) For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.
- (xiii) An Environmental Cell comprising of at least one expert in environmental science/ engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
- (xiv) The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the

conditions stipulated in this clearance letter and other applicable environmental laws and regulations.

- 4. All other conditions mentioned in this Ministry's letter of even no. dated 27.02.2009 and its amendment dated 15.07.2010 shall remain the same.
- This issues with the approval of the Competent Authority.

Yours faithfully,

Dr. Saroj Scientist F'

Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
- 2. The Secretary, Department of Environment, Govt. of Maharashtra.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- 4. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd & 4th Floors, Sion Matunga Scheme Road No. 6, Opp. cine Planet, Sion Circle, Sion (E), Mumbai 400 022.
- 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 6. The Chief Conservator of Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Amravati District, Maharashtra.
- 8. The Director (EI), MOEF.
- 9. Guard file.
- 10. Monitoring file.

(Dr. Saroj) Scientist 'F'



J-13011/49/2008-IA.II (T) Government of India Ministry of Environment & Forests

Paryavaran Bhawan CGO Complex, Lodi Road New Delhi-110 003 Dated: July 15, 2010.

To

M/s Indiabulls Power Limited
(Formerly known as M/s Sophia Power Company Ltd.)
Indiabulls House, 448-451, Udyog Vihar,
Phase-V, Gurgaon- 122001

Sub: 1320 (2x660) MW Stage-I Coal Based TPP of M/s Indiabulls Power Ltd. at additional Amravati Industrial Area, Nangaonpeth, in Amravati District in Maharashtra. Reg. request for change in configuration from 2x660 MW to 5x270 MW TPP.

Sir,

This is in continuation of this Ministry's earlier letter of even no. dated 27.02.2009 and your communication no. IPL/Thermal/Amravati/09-10/724 dated 24.12.2009 on the above mentioned subject requesting the Ministry to change in configuration of coal based Thermal Power Plant at Nandgaonpeth, District Amravati in Maharashtra from 2x660 MW to 5x2.70 MW.

- 2. The proposal for amendment of environmental clearance was placed before the Expert Appraisal Committee (Thermal) in its 65th meeting held during 12th 13th February, 2010. The Committee recommended for change in configuration from 1320 (2x660) MW Stage-I Coal Based TPP to 5x270 MW TPP and amendment in environmental clearance accorded vide this Ministry's letter of even no. dated 27.02.2009.
- 3. The Ministry accepts recommendations of the Expert Appraisal Committee and amends the environmental clearance of even no. dated subject to compliance of following additional specific conditions:
- i. The project proponent shall facilitate the State Government in creation of a Committee under the charge of the District Collector and comprising of a representative of the Maharashtra State Pollution Control Board and civil society. The Committee shall monitor the performance of the power plant with respect to impact on the environment and submit its report to the Regional Office of the Ministry of Environment & Forests. The Committee shall meet atleast once a year.
- ii. An additional ESP field (for design coal parameters) shall be provided.

- iii. For dispersion of particulate emission, two numbers of tri-flue and twin flue stack of 275m height instead of a bi-flue stack of 275m height shall be provided with continuous online monitoring equipment of SOx, NOx, particulate matter and Hg. The exit velocity of flue gases shall not be less than 22m/sec.
- iv. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM_{2.5} & PM₁₀), SO₂, NO_x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.
- v. The project proponent shall revise its CSR components incorporation. The one time capital invest for CSR shall be Rs 27.0 Crores and Rs 5.40 Crores as recurring expenses every year till the operation of the plant.
- vi. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- Vii. The environment statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.
- viii. The M/s Indiabulls Power Limited shall comply with all the conditions stipulated vide Ministry's letter of even no. dated 27.02.2009.

This issues with the approval of Competent Authority.

Yours faithfully, <u>Alleyanas</u> (Dr. P.L. Ahujarai) Scientist 'F'

Copy to:-

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
- 2. The Secretary (Environment), Forests and Environment Department Government of Maharashtra.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- 4. The Chairman, Maharashtra Pradesh State Pollution Control Board, Kalpataru Point, 3rd & 4th Floors, Sion Matunga Scheme Road No. 6, Opp. cine Planet, Sion Circle, Sion (E), Mumbai 400 022
- 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
- 6. The Chief Conservator of Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Ravishankar Nagar, Bhopal 462016.
- 7. The District Collector, Chandrapur District, Govt. of Maharashtra.
- 8. The Director (EI), MOEF.
- 9. Guard file.
- 10. Monitoring file.

(Dr. P.L. Ahujarai) Scientist 'F'

F. No. J-13011/49/2008-IA.II(T) Government of India Ministry of Environment & Forests

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

Dated: 27 Feb, 2009

To

M/s Sophia Power Company Limited "indiabulls House" 448-451, Udyog Vihar Ph-V, Gurgaon – 122 001

Subject: 1320 MW (2x660MW) Thermal Power Project at Additional Amravati Indl. Area, Nandgaonpeth, District Amravati, Maharashtra by M/s Sophia Power Ltd-Environmental Clearance regarding.

Sir,

The undersigned is directed to refer to your communication no. IBPSL/thermal/Amravati/0809/816 dt. 4.9.2008 regarding the subject mentioned above. Subsequent information furnished vide letters dt. 13.1.2009 have also been considered.

2. It is noted that the proposal is for grant of environmental clearance for setting up of 1320 MW Stage-I thermal power project based on super critical technology at Nandgaonpeth in Amaravati District, Maharashtra. The site is located in additional Amravati Industrial Area. The land requirement for the project will be 1045 acres, which includes 300 acres for ash pond and 260 acres for greenbelt. No R&R is involved. The site is reported to conform to the siting guidelines in terms of distance of 500 m from the highway, railway line and HFL of the river. Coal requirement will be 6.5 million tonnes per annum. Water requirement is estimated at 4890 m3/hr, which will be met from Wardha dam. It was also stated by the proponent that an amount of Rs 1.0 crore per year will be spent on CSR activities. The project was exempted from public hearing vide letter dated 2nd September, 2008, in view of its location in notified industrial area in accordance with the provisions of the EIA Notification, 2006. No National Park and Wildlife Sanctuary is located within 10 Km from project area. Total cost of the project is Rs. 6887.97 crores which includes Rs. 569.87 crores for environmental protection measures.

- 3. The proposal has been considered by the Expert Appraisal Committee for Thermal Power and Coal Mine projects and Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:-
- (i) The total land requirement for all the activities of the project shall not exceed 1045 acres.
- (ii) Efforts shall be made to leave the natural channel passing through the site undisturbed. In case, it is not possible, then it shall be realigned in such a way that the natural drainage is not affected.
- (iii) Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 40% respectively at any given time. In case of variation of coal quality at the time of issue of LOA, a fresh reference shall be made to MOEF for suitable amendments to environmental clearance conditions wherever necessary.
- (iv) A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipments for Sox, NOx, Particulate matter and Hg. Exit velocity of flue gases shall not be less than 22 m/sec.
- (v) High efficiency Electrostatic Precipitator (ESP) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm3.
- (vi) As part of the post project air quality monitoring, a station shall also be located in the South-East direction at a distance of about 4 km. The records of the monitoring data so obtained should be maintained and analyzed.
- (vii) Space provision shall be kept for retrofitting of FGD, if required at a later date.
- (viii) 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.
- (ix) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be achieved within 5 years Unutilized fly ash and bottom ash shall be disposed off in the ash pond. Mercury and other heavy metals (As,Pb,Cr etc) shall be monitored in bottom ash and in the effluents emanating from the ash pond.
- (x) Ash pond shall be lined with impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

- (xi) Closed cycle cooling system with cooling towers shall be provided. COC of at least 5 shall be adopted and the effluents shall be treated as per the prescribed norms.
- (xii) 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 except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.
- (xiii) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.
- (xiv) Rain water harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.
- (xv) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of the these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry at Bhopal.
- (xvi) Storage facilities for auxillary liquid fuel such as LDO and/ HFO/ LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modifications required, if any shall be incorporated in the DMP. Sulphur content in the liquid fuel will not exceed 0.5%.
- (xvii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.
- (xviii) Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the groundwater quality is not adversely affected due to the project.
- (xix) A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of total area preferably with local species.
- (xx) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xxi) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite

personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.

- (xxii) Regular monitoring of ground level concentration of SO₂, NOx, Hg,SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. 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. The data so monitored shall also be put on the website of the company.
- (xxiii) 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, / office of Municipal Corporation/Gram Panchayat concerned and on the company's web site within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter 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.
- (xxiv) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxv) Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/Regional Office/CPCB/SPCB.
- (xxvi) Regional Office of the Ministry of Environment & Forests located at Bhopal will 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 (Stack & ambient levels of NOx) will be displayed at the main gate of the power plant.
- (xxvii) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.

(xxviii) The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

(xxix) Full cooperation shall 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 of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. MOEF may impose additional environmental conditions or modify the existing ones, if necessary.
- 5. The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.
- 6. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.
- 7. The above stipulations would be enforced among 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, Hazardous Wastes (Management and Handling) Rules,1989 and its amendments, the Public Liability Insurance Act,1991 and its amendments.
- 8. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

DIRECTOR

Copy to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.

- 2. The Secretary, Department of Energy and Environment, Govt. of Maharashtra, Mantralaya, Mumbai-400032, Maharashtra.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puram, New Delhi-110066.
- 4. The Chairman, Maharashtra Pollution Control Board, Kalptaru point 3rd & 4th Floor Sion Matunga Scheme Road No. 8,opp. Cine Planet Cinema, near Sion Circle, Sion(East), Mumbai-400022 with request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office for 30 days.
- The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 6. The Chief Conservator of Forests, Western Regional Office, Ministry of Environment & Forests, E-3/240, Arera Colony, Bhopal-462016.
- 7. Director (EI), MOEF
- 8. Guard file.
- 9. Monitoring file.

(LALIT KAPUR)

DIRECTOR