

# **SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE**



## **2X660 MW JAWAHARPUR THERMAL POWER PROJECT MALAWAN, DISTRICT-ETAH**

### ***Submitted to:-***

MoEF&CC, New Delhi  
Regional office of MoEF&CC, Lucknow  
Central Pollution Control Board (CPCB), New Delhi  
Regional office of the CPCB, Lucknow.  
UP Pollution Control Board, Lucknow.

### ***Submitted by:-***

**Chief Engineer (Civil-New Projects)**  
**Jawaharpur Vidyut Utpadan Nigam Ltd.**  
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Lucknow-226001

(Period: - 01-JUNE-2019 To 30-NOVEMBER-2019)

NAME OF THE PROJECT: - 2X660MW COAL BASED SUPER CRITICAL, JAWAHARPUR THERMAL POWER PROJECT AT MALAWAN, DIST – ETAH. UTTAR PRADESH BY JAWAHARPUR VIDYUT UTPADAN NIGAM LTD.

Reference: Environmental Clearance vide no. J- 13012/17/2015-IA.I(T) Date:-20.10.16

Period of compliance Report: 01-June-2019 to 30-November- 2019

A) Specific conditions:

i)	The PP shall take up the matter regarding compensation to the remaining landowners with the District Administration and ensure that the Etah town & its nearby areas for the proposed TPP.	Complied most of the compensation has been paid
ii)	The PP shall carry out detailed/feasibility study to treat and utilize sewage water from the Etah town & its nearby areas for the proposed TPP.	Shall be Complied in consultation with UP Jal Nigam.
iii)	The PP shall optimize the use of consumptive water by utilizing appropriate technology, as per CEA/MoEF&CC Norms, approximately 38 cusecs and surrender remaining 15 cusecs to UP Irrigation department.	For 38 cusecs water PP with UP Irrigation already signed and work is under progress.
iv)	Provision shall be made for storage of rain water and storm water for use in the plant to reduce further drawn from irrigation department	Provision has already been made in with EPC Contact
v)	As committed FGD and CSR shall be installed in the proposed Thermal Power Plant.	Provision has already been made in with EPC Contact. Work under progress.
vi)	Washed coal of <32% ash, 0.4% S shall be used. Coal transport will be through railways.	shall be Complied
vii)	Ponds for collection of rain water in the surrounding area shall be developed for rain water conservation/ harvesting for ground water recharge and usage by villages.	shall be Complied
viii)	The pond ash shall also be utilize for PMGSY Road, National Highways, state Highways, conservation/ harvesting for ground water recharge and usage by villages.	shall be Complied
ix)	The PP shall explore feasibility of Air cooled condensers based on the guidelines of CFA.	Presently water cooled condensers will be installed as per contract.
x)	As committed, during construction phase of the TPP, CSR work worth Rs. 25.00 Crores shall be spent exclusively in five (05) gram Panchayats whose land has been acquired for the power plant. Balance Rs. 8.0 crores shall be spent in selected remaining villages within 10 Km radius in consultation with district authorities. The CSR budget during operational phase shall be earmarked as per the CSR policy of Gol.	Shall be Complied. Discussion with Distt. Administration is in progress..
xi)	Vision document specifying prospective plant for the site shall be formulated and submitted to the Regional office of the Ministry with six Months.	shall be Complied

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xii)	Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.	Installation of solar power plant is included in the contract and shall be complied.
xiii)	A long term study of radio activity and heavy metals contents on coal to be analyzed every two year and reported along with monitoring reports. 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.	shall be Complied
xiv)	Online continuous monitoring system for stack emission, ambient air and effluent shall be installed.	shall be Complied
xv)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed $30 \text{ mg/nm}^3$ or as would be notified by the Ministry 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 with an environment friendly sludge disposal system.	Shall be Complied. Provision has already been made in the contract for installation high efficiency ESPs.
xvi)	The $\text{SO}_2$ $\text{NO}_x$ and Hg emissions shall not exceed $2.5 \text{ m}^3/\text{MWh}$ and zero waste water discharge shall be achieved.	shall be Complied
xvii)	Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal handling and ash handling point, transfer areas and other vulnerable dusty areas shall be provided.	Sprinkling in construction area is done regularly.
xix)	COC of at least 5.0 shall be adopted.	shall be Complied
xx)	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 drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report.	shall be Complied
xxi)	A well designed rain water harvesting system shall be put in place within six months, which shall comprise of rain water premises and detailed record kept of the quantity of water harvested every year and its use.	shall be Complied
xxii)	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.	shall be Complied
xxiii)	Additional soil for leveling of the proposed site shall be generated with the sites (to the extent possible) so the natural drainage system of the area is protected and improved.	shall be Complied

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xxiv)	Fly ash shall be collected in dry form and storage facility (soils) shall be provided. Mercury and other heavy metals (As. Hg. Cr. Pb etc.) shall be monitored in the bottom ash. No ash shall be disposed of in low lying area.	shall be Complied
xxv)	No mine void filling will be undertaken and an option for ash utilization without adequate lining of mines 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 co-ordination with the state pollution Con troll Board.	shall be Complied
xxvi)	Fugitive emission of flay ash (dry of wet) shall be controlled such that no agricultural or non-agricultural land is affected. Damage to any land shall be mitigated and suitable compensation provided in consultation with the local Panchayat.	shall be Complied
xxvii)	Green belt shall also he developed around the Ash Pond over and above the Green Belt around the plant boundary.	Provision already made
xxix)	The project proponent shall formulate a well laid Corporate Environment Policy and indentify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the condition stipulated in this clearance letter and other applicable environmental laws and regulations.	shall be Complied
xxx)	CSR schemes indentified based on need based assessment shall be implemented in consultation with the village Panchayat and the District Administration starting from the development of project itself. As part of CSR project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating program.	Opening of Skill developments center is proposed under CSR.
xxxi)	For proper and periodic monitoring of CSR activities, a CSR committee of 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.	shall be Complied

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B) General Conditions:

S.No.	Subject of compliance	
i)	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	shall be Complied
ii)	A sewage treatment plant shall be provided (as applicable and the treated sewage shall be used for raising greenbelt/plantation.	Provision has already been made in the EPC contract
iii)	Adequate safety measures shall be provide in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season, copy of 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.	shall be Complied
iv)	Storage facilities for auxiliary liquid fuel such as LDO/HFO/LSHS shall be made in the plant area in consultation with department of explosives, Nagpur, Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management plant shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	shall be Complied
v)	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Has already been made
vi)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. 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 compressor etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.	shall be Complied
vii)	Regular monitoring of ambient air ground level concentration of SO <sub>2</sub> NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> and Hg 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 shall also be put on the website of the company.	shall be Complied
viii)	Utilization of 100% Fly ash generation shall be made from 4 <sup>th</sup> year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	shall be Complied
ix)	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile	Has already been made by EPC contractor

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	toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the for of temporary structures to be removed after the completion of the project.	
x)	The project proponent shall advertise in at least two local newspaper widely circulation in the region around the project, one of which shall be in the vernacular language of the locality concerned 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 Boar/committee and may also be seen at the website of MoEF & CC at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Complied
xi)	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 Body and the Local NGO, if any from whom suggestions/representation, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by proponent.	Complied
xii)	The proponent shall upload the status of compliance of the stipulated environmental clearance 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 pollution levels namely: SPM, RSPM (PM <sub>2.5</sub> & PM <sub>10</sub> ), SO <sub>2</sub> NO <sub>x</sub> (ambient level as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	shall be Complied
xiii)	The environment statement of each financial year ending 31 <sup>st</sup> 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 Officers of the Ministry by e-mail.	shall be Complied
xiv)	The Project proponent shall submit six monthly reports on the status of the <del>the</del> implementation of the stipulated environmental safeguards to MoEF&CC, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The Project proponent shall uploaded the status of compliance of the environmental clearance conditions on their website and update the same periodically and simultaneously sent the same by e-mail to the Regional Office. MoEF&CC.	shall be Complied
xv)	The progress of the project shall be submitted to CEA on six monthly basis.	shall be Complied
xvi)	Regional office of the MoEF & CC will monitor the	shall be Complied

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	implementation of the stipulated conditions. A complete set of documents including Environmental impact Assessment Report and Environment Management 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 bases. Criteria Pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the Power plant.	
xvii)	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 purpose and year-wise expenditure should be reported to the Ministry.	shall be Complied
xviii)	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 date of start of land development work and commissioning of plant.	shall be Complied
xix)	Full cooperation shall be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry/CPCB/SPCB who would be monitoring the compliance of environmental status.	Full co-operation shall be extended
c)	An as built or as completed report on EMP to be submitted stating the scope/extent of work envisaged in the EIA along with estimated cost vis-à-vis the actual completed works and cost incurred. A certificate/completion certificate accordingly, shall have to be submitted before commissioning of the TPP.	shall be Complied

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*R. K. Singh*

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2X660 MW, JTPP, Malawan, Etah