Chapter-2
Compliance Status Report

HINDUJA NATIONAL POWER CORPORATION LIMITED

COMPLIANCE STATUS REPORT – APRIL 2015 TO SEPTEMBER 2015

Ref: Environment Clearance & Amendments to Environment Clearance Letter as mentioned below:

1. Letter No: J-13011/11/90-IA-II(T) dated 3rd September, 1996
2. Letter No: J-13011/11/90-IA-II(T) dated 10th September, 1996
3. Letter No: J-13011/11/90-IA.II dated 15th November, 1996
4. Letter No: J-13011/11/90-IA.II(T) dated 20th April, 1999
5. Letter No: J-13012/92/2008.IA.II(T) dated 4th March, 2009
6. Letter No: J-13012/92/2008-IA.II(T) dated 10th June, 2010
7. F. No: 11-58/2011-IA-III dated 3rd January, 2014
8. F. No: 11-58/2011-IA-III dated 17/19th March, 2015

Sr. No.	Condition (*Letter No: J-13011/11/90-IA-II(T) dated 3rd September, 1996*)	Status
Specific Conditions		
i)	All the conditions stipulated by Andhra Pradesh Pollution Control board vide their letter No.19/PCB/ C.Estt./RO/VSP/AEE/V111/95-4433 dated 13th November, 1995 should be strictly implemented	Noted and are being complied as applicable. A monthly environmental monitoring report is being submitted to APPCB every month.
ii)	A bi-flue stack of 275 m with continuous stack monitoring system should be installed.	A bi-flue stack of 275 m has been constructed.
iii)	Electrostatic precipitator having efficiency of not less than 99.8% should be installed and it should be ensured that particulate emissions would not exceed the prescribed limit of 150 mg/Nm3.	An ESP with 99.8% efficiency has been installed to control the dust emissions below 150 mg/Nm3. Condition pertains to the operation phase and the compliance status is yet to come.
iv)	Once through cooling system should be provided and the rise in temperature should be maintained within 5 degrees centigrade of the ambient water. The proposed pipeline for sea water intake and outlet should conform to the regulations of the coastal zone notification of February, 1991. Desalination plant should be provided for meeting the water requirement of the power project and other auxiliary activities.	Water balance of the power plant enclosed as **Annexure-III** (Please check with HNPCL Engineering for Latest WBD). We have obtained the CRZ clearance from MoEF has been obtained for sea water intake//outfall system. Once through cooling system has been designed to maintain temperature differential within 7 deg celicus over and above the ambient temperature of receiving water body and being maintained the same during operation of the Unit # 1. Desalination plant with a capacity of 12.5 MLD has been installed to meet the sweet water requirement. Presently the water requirement is 5.0 MLD which is being met through the desalination plant.
v)	Adequate space should be provided for installation of flue gas desulphurization plant in future for control of sulphur dioxide.	Space provision for installing FGD if required, has been provided in the plant layout.
vi)	Acquisition of land should be restricted to	The land requirement for the power project is 923

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	2682 acres including 890 acres for ash disposal.	acres. The break up is as given in part- 1.
vii)	Only beneficiated coal to the tune of 16080 MT/day should be used with ash content not exceeding 34%. Fly ash generated should be collected in dry form in silos and fully utilized in a phased manner. As indicated in the Environmental Management plan, increase in the dyke height above 8 m should be undertaken through use of fly ash. For avoiding contamination of ground water, ash pond area should be suitably lined and dyked. As provided in the layout, adequate space should be earmarked for getting up of ash user plants to avoid long distance transportation to fly ash.	MoEF vide its letter mentioned in Ref:3 has modified this condition to be read as *"Only beneficiated coal to the tune of 16080 metric tonnes/day should be used with average annual ash content supplied by Mahanadi Coalfields Limited not exceeding 34+1-2%. Fly ash generated should be collected in dry form in silos and fully utilized in a phased manner. As indicated in the Environmental Management plan, increase in the dyke height above 8 m should be undertaken through use of fly ash. For avoiding contamination of ground water, ash pond area should be suitably lined and dyked. As provided in the layout, adequate space should be earmarked for getting up of ash user plants to avoid long distance transportation to fly ash."* Further vide letter mentioned in Ref:4 MoEF has accorded *"no objection to the use of fuel from alternative sources which will have the same coal quality as beneficiated coal".* • With respect to the above we confirm that: Total coal expected to be used in a day will be well within the quantity recommended. Fly ash will be fully utilized in a phased manner as mentioned in the condition. • Ash pond is being lined with HDPE to prevent contamination of ground water. Further the Ground water monitoring is being undertaken by a third party on Monthly basis as per the monitored data the levels are within permissible limits. • Discussions are in progress with the ash users to install ash utilization plants in the vicinity of power plant. The above conditions pertain to the operation phase and actual compliance status is yet to come.
viii)	Noise level should be limited to 85 dBA and regular maintenance of equipments be undertaken. For people working in the area of generator halls and other high noise areas, ear plugs should be provided.	Noise levels are being monitored by third part at locations within the plant area and the results are within prescribed limits. Requisite personnel protective equipment has already been provided to people working in high noise areas.
ix)	For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured.	Dust Suppression system installed and regular sprinkling of water on coal in stock yard and conveyors is being ensured.
x)	Afforestation plan should be formulated in consultation with the local DFO and implemented by creating a greenbelt of 500 m along the sea side from High Tide Line. A	Out of 923 acres, the construction activities for the power project including ash pond is restricted to 533 acres. Presently green belt is being developed in and around the power project area covering 133

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	strip of greenbelt of 150-200 m should also be created along the ash pond area and about 100 m in available spaces within the colony along the road etc. A norm of 1500-2000 trees per ha should be followed and aftercare and monitoring should also be ensured.	acres and already 2,50,000 Nos saplings have been planted. Green belt is being developed in consultation with conservator of forest and DFO. Green belt in the further area will be taken up in a phased manner.
xi)	Continuous monitoring of ground water should be undertaken by establishing good network of observation wells in consultation with the Central ground water board. Results and data collected should be analysed to ascertain the status of water quality and findings should be submitted for evaluation.	Continuous ground water monitoring is being carried out at six locations on Monthly basis and the monthly data is being submitted to APPCB. As per the results the limits are within the prescribed norms. The same has been compiled and is enclosed in **Chapter-3, Section-3.5.**
xii)	All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant and treated to ensure adherence to specified standards of discharge. The concept of zero discharge should be adopted to a maximum possible extent.	Condition pertains to operation phase and compliance status is yet to come.
xiii)	Keeping in view the fact that 2x500 MW thermal power plant by M/s. National Thermal Power Corporation limited proposed in the vicinity of 1040 MW thermal power project, common facilities for coal transportation, laying of rail lines etc. should be worked out with mutual consultation to avoid duplication of facilities and acquisition of additional land.	The Company is in discussion with NTPC for optimizing Right of Ways with respect to railway line corridor.
xiv)	A financial provision of Rs. 250 crores should be provided for implementation of environmental mitigative measures with adequate scope for its enhancement in future. These funds should not be diverted for any other activities and separate account should be maintained.	Found Noted
xv)	Regular monitoring for SPM, SO_2 and NOx around the power plant may be carried out and records maintained. The data also collected should be properly analysed and submitted to the Ministry every six months.	Monitoring is being carried out at eight ambient air quality monitoring stations within the 10 km radius study area from the Proposed power plant complex, with four in the predominantly downward wind direction. Data on ambient air quality is being submitted to APPCB on monthly basis and also to the regional office of MOEF. As per the AAQ data, the results are within limits. The same has been compiled and is enclosed in **Chapter-3, Section-3.2.**
xvi)	Full cooperation should be extended to the Scientists/officers from the Regional Office of the Ministry at Bangalore and also to the State Pollution Control Board who would be monitoring the compliance of environmental status. Complete set of impact assessment	Noted.

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	report and the Management Plans should be forwarded to the Regional Office for their use during monitoring.	
xvii)	Monitoring committee should be constituted for reviewing the compliance to various safeguard measures by involving recognized local NGOs, Pollution Control Board experts etc.	It was informed that monitoring committee will be constituted shortly and the meeting will be convened by August, 2015.
3	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry	Noted
4	For 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 conditions imposed and to add additional environmental protection measures required, if any.	Noted
5	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, the public liability Insurance Act, 1991, the Impact Assessment Notification of January, 1994 and its amendments.	Noted

Ref Letter No J-13012/ 92/2008. IA.II (T) dated 4th March, 2009		
S.No.	**Conditions**	**Compliance status**
6	Map indicating CRZ area duly certified by the approved agency and authenticated by the state coastal zone management authority may be submitted on Top priority.	Map has already been submitted to MOEF,
7	Compliance status w.r.to stipulated EC conditions should be uploaded in the company web site and updated twice in a year and the same will also be sent by e-mail to the MOEF regional office located at Bangalore.	Six monthly compliance reports are being regularly uploaded on the company web site. The link is as below. http://www.hindujanationalpower.com/images/compliance-status-April-September 2015-website-version.pdf
8	The ambient levels of criteria pollutants (SO2, NOX & SPM) should be uploaded and displaced on your website and also at a convenient place in the plant premises.	Display is kept at the entrance of power project.

Sr. No	Condition (Letter No: 11/58/2011 IA.III dated 3rd January, 2014)	Compliance Status
SPECIFIC CONDITIONS		
(i)	"Consent for Establishments" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.	"Consent for Establishment" was issued by state pollution control board vide their order no 19/PCB/C.ESTI/RO/VSPI AEE- VIII/95 -4433 signed dated 13/11/1995 and complied with.
(ii)	Shall maintain the existing vegetation cover in the area between HTL and 500m line which is approximately 180 acres, belonging to government, located adjacent to the project area, in consultation with the State Government and there shall be no industrial development with in this area as committed.	Noted. There is already plantation exist in part of this area. Additional plantation in this area and in the land owned by HNPCL is in progress.
(iii)	The railway line has been shifted from mud flat area and as per the modified line only 160m is with in mud flat area as against the original plan on 1500m. Railway line in CRZ area shall be on stilt.	Noted. Correction in the designing has been done for implementation and as per revised proposal length of Railway line in CRZ3 area is 0.375 Route Km and Railway line does not pass through CRZ1 area or Inter tidal waters of mud flat. The application has been submitted to the authorities for amendment.
(iv)	There shall be no construction in mudflat except part of railway line on stilt as committed.	Noted. Shall be complied with.
(v)	Adequate spare diffuser arms for operation and maintenance of the marine outfall systems shall be Provided.	Spare diffusers arm shall be kept for O&M.
(vi)	Pipelines shall be laid with more care to minimize the impact to sand dunes	Noted.
(vii)	The double story switchgear, electro chlorination building and two numbers of storage tanks Proposed between 200 and 500 m from HTL shall be located beyond 500 m from HTL as committed.	Complied. The electro chlorination building and the storage tanks have been constructed beyond 500 m from the HTL with in the plant premises.
(viii)	Periodic monitoring of water quality in terms of temperature chlorine content if applicable, salinity etc at the outfall locations shall be carried out. If the impact of temperature and salinity is found significant in future, necessary remediation measures shall be taken by extending the outfall as well as the intake lines and/or providing augmentation in inland cooling facilities.	Agreed.
(ix)	Installation of trash bar/screens shall be put in place at the intake well to avoid fish entrapment	Complied. Trash rack has been installed.

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(x)	All the conditions laid by the SCZMA shall be strictly adhered to.	Agreed
(xi)	Construction activity shall be carried out strictly as per the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.	Agreed
(xii)	The project shall be executed in such a manner that there shall not be any Disturbance to the fishing activity.	Agreed
	It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project	Shall be ensured
(xiii)	The project proponents shall set up separate Environment management cell for effective implementation of the stipulated environmental Safeguard under the supervision of a Senior executive.	Already one officer has been appointed to monitor the implementation details.
	The funds earmarked for environment management shall be included in the budget and this shall not be diverted for any other purposes.	Noted.
General Conditions		
Sr.No	**Condition (Letter F.No: 11-58/2011-IA-III dated 3rd January, 2014)**	**Compliance Status**
(i)	Appropriate measures must be take while undertaking digging activities to avoid any likely degradation of water quality.	Noted.
(ii)	Full supports shall be extended to the officer of this Ministry/Regional office at Bengaluru by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environment protection activities.	Noted.
(iii)	A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bengaluru regarding the implementation of the stipulated Conditions.	Noted and being complied with.
(iv)	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	Agreed.
(v)	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	Noted
(vi)	In the event of a change in project profile or change in the implementation agency, a fresh references shall be made to the Ministry of Environment and Forests.	Noted
(vii)	The project proponent shall inform the Regional office as well as the Ministry, the date-of financial closure and final approval of the project by the concerned Authorities and the date of start of land Development work.	Complied.
(viii)	A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion /representation has been Made received	Agreed.

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	while processing the Proposal.	
(ix)	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/ Tehsildar's office for 30 days.	NA

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(i)	Railway line, in the CRZ, shall be on embankment with clear openings or on stilt so as to ensure free flow of water.	Noted. Being complied with.
(ii)	PP shall get an expert opinion on the design of alignment on CRZ area on embankment with clear openings or on stilt so as to ensure free flow of water and submit to Ministry prior to commencement of Railway line work in CRZ area.	Noted.
(iii)	The water bodies present adjacent to the proposed to the Railway alignment shall not be disturbed.	Noted. Shall be adhered to.