

**MINUTES OF THE 29<sup>th</sup> MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE (EAC) ON ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF THERMAL POWER PROJECTS HELD DURING 26<sup>th</sup> JUNE, 2019.**

The 29<sup>th</sup> Meeting of the re-constituted EAC (Thermal Power) was held on 26<sup>th</sup> June, 2019 in the Ministry of Environment, Forest & Climate Change at Teesta Meeting Hall, Vayu Wing, First Floor, Indira Paryavaran Bhawan, JorBagh Road, New Delhi under the Chairmanship of Dr. Navin Chandra. The following members were present:

- |    |                        |   |                                  |
|----|------------------------|---|----------------------------------|
| 1. | Dr. Navin Chandra      | - | Chairman                         |
| 2. | Shri Suramya D. Vora   | - | Member                           |
| 3. | Dr. N.P. Shukla        | - | Member                           |
| 4. | Shri G.P. Kundargi     | - | Member                           |
| 5. | Dr. Jai Krishna Pandey | - | Member                           |
| 6. | Shri N.S. Mondal       | - | Member (Rep. of CEA)             |
| 7. | Dr. S.K. Gupta         | - | Member (Rep. of ISM/IIT Dhanbad) |
| 8. | Dr. S.K. Paliwal       | - | Member (Rep. of CPCB)            |
| 9. | Dr. S. Kerketta        | - | Member Secretary                 |

Shri N. Mohan Karnat, Dr. Sharachchandra Lele, Dr. Manjari Srivastava and Dr. R.K. Giri (Representative of IMD) could not be present.

**Item No.29.0: CONFIRMATION OF THE MINUTES OF THE 28<sup>th</sup> EAC MEETING.**

The Minutes of the 28<sup>th</sup> EAC (Thermal Power) meeting held on 28.5.2019 were confirmed in presence of members present in the meeting.

**Item No. 29.0: CONSIDERATION OF PROJECTS**

**(29.1) 2x520 MW Coal based Thermal Power Plant at Village Palavalasa, Taluk Pedagantyada, District Vishakhapatnam, Andhra Pradesh by M/s Hinduja National Power Corporation Ltd.-reg. amendment in EC for transportation of Coal by road.**

**(F.No. J-13012/92/2008-IA.II (T) & Online no. IA/AP/THE/10774/2008)**

(29.1.1) The Project Proponent submitted online application on 14.03.2019 for amendment in EC for transportation of Coal by road. The temporary permission for transportation of coal by road for a period of two years (i.e. till 2.4.2019) from NTPC Simhadri Sick Line (8.5 km) for domestic coal, Bayyavaram Railway siding (45 km) and Kantakapalli Railway siding (63 km) for imported coal has been issued vide Ministry's letter dated 3.4.2017.

(29.1.2) The proposal has been earlier considered by the EAC in its meeting held on 27.3.2019 and sought the following information:

- i. Status of credible action to be initiated by State Pollution Control Board for transporting coal by road without Ministry's permission and transporting coal with more than 34% ash content beyond 500 km.
- ii. Concrete plan for connecting railway line to the plant premises along with the progress made till date on all aspects.
- iii. Details of MoU with NTPC allowing to share the railway line for common portion. NTPC may also be requested give in writing that whether the existing railway line can be shared or not.

- iv. A comprehensive Traffic Impact Assessment study which includes type, width, make and custodian of the road, road sufficiency, load bearing strength, road condition, baseline air quality along the roads, impact on air quality, noise, forests, village/habitation, whether narrow crossings are involved or the roads are crossing through dense populations, etc. to be covered.
- (29.1.3) Committee noted that the credible action under E(P) Act, 1986 is yet to be taken by the State Pollution Control Board. Even though a copy of credible action has been marked to Project Proponent, it was informed that they are not aware of the any such communication. In absence of credible action not completed for the past non-compliances, **Committee deferred the project till it is completed.**

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**(29.2) 2x10 MW Coal Based Captive Thermal Power Plant at Village Tatisilwai, Ranchi District, Jharkhand by M/s Usha Martin Ltd. reg. amendment in EC for transportation of Coal by road.**

**(F.No. J-13012/122/08-IA. II(T) & Proposal No. IA/JH/THE/10337/2011)**

- (29.2.1) Project Proponent submitted online application on 16.01.2019 for amendment in EC for transportation of Coal by road.
- (29.2.2) The Environmental Clearance (EC) for establishing 2x10 MW Coal Based Captive Thermal Power Plant at Village Tatisilwai, District Ranchi in Jharkhand has been accorded in favour of M/s. Usha Martin Ltd. vide Ministry's letter dated 07.04.2011. The Specific Condition No. (i) of the EC dated 07.04.2011 stipulates as below:
- “Road transportation of coal shall be permitted for a limited period of 36 months only. The project proponent shall shift to railway transportation thereafter. The project proponent shall be vicariously responsible for liabilities incurred for road transportation such as accidental damages to public, coal fines emission from transporting trucks etc. The project proponent shall immediately start its action plant for rail transportation with consultation with the Railways and shall submit half yearly action taken report to the Ministry on the matter.”
- (29.2.3) The EAC in its meeting held during 19th-20th May, 2015, recommended for sourcing of coal through e-auction and extension of permission for temporary road transportation of coal for three years i.e. till 31.03.2018. However, a formal approval was not issued by the Ministry in this regard pending the additional information from Project Proponent. As the road transportation has been continuing without Ministry's approval, Jharkhand State Pollution Control Board has been requested to take credible action under E (P) Act, 1986.
- (29.2.4) The proposal has been earlier considered by the EAC in its meeting held on 27.3.2019 and committee sought the following information:
- i. The credible action taken by the Jharkhand Pollution Control Board against the proponent for having transported coal by road without Ministry's approval.
  - ii. Justification for not connecting railway line from Tatisilwai Railway station or take off from the nearest railway line.
  - iii. A technical feasibility study by M/s RITES Ltd. or any reputable organisation for drawing railway line from Tatisilwai or nearest take off point to the plant premises shall be conducted to see the possibility of railway line.
- (29.2.5) Project Proponent made the presentation inter-alia submitted the following information:

- i. Jharkhand State Pollution Control Board has filed the complaint vide No.2472/10 in the Court of Chief Judicial Magistrate.
- ii. It is not feasible to establish a railway siding within the plant area and requires additional land acquisition. The area of captive power plant is 22.437 acres out of which main plant occupies 12.278 acres and rest of the area is occupied by the utilities such as coal yard, rain water harvesting system, plantation, ash dyke, weigh bridge and reservoir, etc. Further, there is no private land available adjacent to the plant area.
- iii. Coal rake from Tori/Brkakana end on existing up line cannot enter in to the plant which is located on down side.
- iv. Lohari coal block which was linked to the plant for coal supply has been de-allocated by the Supreme Court. Hence, there is no definite source available now and company is procuring coal through e-auction. The e-auction coal is supplied only by road mode based on low priority given for Captive Power Plant as non-core consumer.
- v. The quantity of coal required is only 4 rakes per month (500 Tons/day). Considering the low quantities, establishing private railway siding will be unviable and the asset will end up in the category of NPA and also make the Wire Rope plant sick.
- vi. M/s Mecon Ltd., Ranchi has carried out feasibility study for laying railway siding and line from the nearest take off point and submitted the report on 13.5.2019. The report has mentioned that to accommodate full rake coal unloading facilities at plant, 870 m length x 25 m width is required. Whereas Plant area of 22.437 acres measures 345 m from West to East and restricted to 325 m from South to North. It has concluded that the plant cannot accommodate full or half rakes unloading railway yard as well as 8 wagons unloading yard on present land profile of the plant. Further, there is no vacant private land available for siding beyond railway boundary.
- vii. There are three routes proposed for road transportation, viz. Route-1: Sikni mines-124.4, Route-2: Magadh Mine- 145.5 km and Route-3: Amrapali Mine- 141.9 km.
- viii. The maximum part of the route considered is a highway passing through rural areas. These highways are NH-75, NH-99, NH-33 and SH-7, which are considered as an all-purpose road, with no control of access and with heterogeneous mix of fast and slow-moving vehicles.
- ix. The maximum required 500 Tonne of coal per day will be transported from any of the 3 mines and through corresponding road route depending upon the availability of coal through e-auction. Probability may also be there to meet the coal demand from all the three mine with variable quantity.
- x. For the roads passing through urban areas, the present road width near the plant is sufficient for supporting the present as well as the additional traffic in future. The existing traffic at CP-9 i.e. at Tati Village exceeds limits prescribed under Level of Service-C during peak hour from 8 am to 9 pm. Keeping this in mind movement of trucks carrying coal have already been restricted to their movement during 9 pm to 8 am only – when the traffic is within DSV limits. The projected traffic volume after five year plus, with its natural growth, shall be vary between 14.3% to 165.3% of DSV on roads passing through Urban areas.
- xi. In case of the roads passing through the rural areas, at all the census point locations, the road width will have sufficient capacity to support the existing and the additional proposed traffic at LoS-C (good condition for traffic stream).

- Amongst these, it can be seen that the road width at 9 Census locations is sufficient for supporting the existing and the additional proposed traffic at Level of Service B (LoS-B) also which represents very good condition of traffic stream.
- xii. The daily coal requirement is 500 MT/day which involve 25 trucks (50 to and fro) with the capacity of 20 Tons. The percentage utilisation of the roads including the project traffic is in the range of 48.5-96.8%. Thus the roads at all points have sufficient capacity to accommodate present and proposed traffic for next three years.
  - xiii. All the three routes considered for the study are capable to support existing as well as projected traffic loads at LoS C in rural as well as urban areas. Only at one census point, Tati village, movement is and shall be restricted to night hours only.
  - xiv. There will be no increase in traffic density in future due to coal transportation for CPP since the present transportation is already at full load.
  - xv. The maximum ground level concentrations due to proposed traffic have been computed by using a dispersion modelling software and the details are as below:

Parameter	Highest AAQ baseline ( $\mu\text{g}/\text{m}^3$ )	Incremental Values ( $\mu\text{g}/\text{m}^3$ )	Resultant concentrations ( $\mu\text{g}/\text{m}^3$ )	National Standard ( $\mu\text{g}/\text{m}^3$ )
PM <sub>10</sub>	82.2	4.41	86.61	100
PM <sub>2.5</sub>	47.8	1.07	48.87	60
SO <sub>2</sub>	13	0.27	13.27	80
NO <sub>2</sub>	22.2	1.92	24.12	80

- xvi. The vehicles will be covered with tarpaulin sheet, have PUC and have spill-proof transportation. Vehicles having fitness certificate shall be allowed to ply.

(29.2.6) Committee noted that the JSPCB had already filed a complaint before Judicial Magistrate for transportation without permission. Further, as far as private railway siding and rail line is concerned, M/s Mecon Ltd. has submitted that there is no technical feasibility to construct a private siding. Further, Project Proponent has also submitted that it is economically unviable considering the 4 rakes a month. Further, there is no long term coal linkage to the plant and the source through e-auction keeps changing from time to time which will involve multiple loading and unloading activities even though rail line in place. Further, considering the 500 Tons/day with 25 trucks (50 to and fro), the additional impact on road in terms of traffic and environmental foot print is not significant. Committee noted that the EAC in its meeting held in May, 2015 had already recommended for road transportation till 31.3.2018 along corrections in the EC i.e. land requirement shall be 22.437 Acres instead of 12.278 acres and restriction of ash content in coal shall be 41.7% instead of 34%. The EAC in May, 2015

(29.2.7) **Committee after detailed deliberations and in view of the justification made by Project Proponent, recommends for transportation of coal by road by using mechanically covered trucks to the extent feasible else through tarpaulin cover till the railway facilities are established, reiteration of EAC recommendations in its meeting held during 19<sup>th</sup>-20<sup>th</sup> May, 2015 for road**

**transportation till 31.3.2018 along with the corrections in land requirement and ash content,** subject to the following additional conditions:

- i. The status of complaint No.2472/19 filed before the Chief Judicial Magistrate, Ranchi by the Jharkhand State Pollution Control Board u/s 19 of Environment (Protection) Act, 1986 shall be submitted. Copies of the orders passed by the Chief Judicial Magistrate shall be submitted.
- ii. The narrow road stretches and damaged portions near Tatisilwai Village has to be strengthened at the cost of Project Proponent in consultation with the custodian of the road (PWD/NHAI).
- iii. CSR activities shall be carried out as per the commitment made in the Tatisilwai and nearby by villages for upliftment of socio-economic conditions.
- iv. Avenue plantation shall be carried out in consultation with Social Forestry Department and NHAI or PWD along the routes proposed for transportation. The progress report such as number of saplings planted, length of road covered, survival rate, expenditure on maintenance (tree guard, watering and manure supply) shall be submitted along with six monthly compliance report.

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**(29.3) Proposed 1x660 MW based Coal Supercritical Sagardighi Thermal Power (Phase-III Extension Unit-5), Village Manigram, Chandpara, Kanchanpara, Harirampur, at District Murshidabad, West Bengal by M/s The West Bengal Power Development Corporation Ltd- reg. Environmental Clearance. (F.No.J-13012/01/2019-IA.I(T) & Proposal no.IA/WB/THE/107519/2019)**

(29.3.1) Project Proponent has submitted the online application on 11.6.2019 for grant of Environmental Clearance.

(29.3.2) Project Proponent made the presentation along with EIA consultants M/s Development Consultants Pvt. Ltd. inter-alia submitted the following information:

- i. The proposed power project of 1x660 MW will be set up within the existing premises of 2x300 MW & 2x500 MW power plant in Murshidabad District. The details of these units are as below:

Unit No.	Phase	Capacity	Date of Commissioning	Remarks
1.	Phase-I	300 MW	7.9.2008	EC issued on 6.10.2004 for 2x250 MW and amended on 4.9.2008 for changing the configuration to 2x300 MW
2.		300 MW	6.11.2008	
3.	Phase-II	500 MW	1.6.2015	EC issued on 18.5.2011
4.		500 MW	20.12.2017	
5.	Phase-III	660 MW	Proposal Project	ToR issued on 15.1.2015 and validity expired on 14.1.2018. Application for grant of EC could not be submitted within the validity period of ToR.

- ii. The Terms of Reference (ToR) proposed 1x500 MW (Unit-5) has been issued by the Ministry on 15.1.2015. The ToR has been amended to 1x660 MW on 11.7.2016.
- iii. Accordingly, draft EIA has been prepared from 660 MW and Public Hearing has been conducted on 3.10.2016. Subsequently, ToR validity has expired for submitting the final EIA report to the Ministry. Accordingly, it was advised to take fresh ToR which was issued on 26.3.2019.
- iv. As stipulated in the new ToR, one season baseline data has been collected during 1.1.2019 to 31.3.2019.
- v. The draft EIA report was submitted to West Bengal Pollution Control Board for publishing on the website and the same was done on 8.5.2019 and local Bengali and English newspapers.
- vi. Company has overall area of about 705.36 Ha. The main plants for Phase-I, Phase-II & Phase-III expansion unit is located within a common boundary covering an overall area of about 365 Ha. Further, 185Ha land is for the ash pond. This will accommodate auxiliary plants viz. AHP, FGD cooling towers, transformer yard, switchyard and all other auxiliaries. CHP phase-II will be utilized for the extension unit also, for Water reservoir phase-II will cater the requirement for extension unit also. For ash and township purpose no land acquisition for Phase-III extension unit would be involved.
- vii. There is no forest land involved in the project area. Further, there are no wildlife sanctuaries, National Parks and Biosphere Reserves within 10 km radius of the study area.
- viii. Coal consumption for 1X660 MW (Phase-III) is estimated to be around 453 TPH in TMCR condition and 497 TPH in BMCR running condition. Considering an average GCV of 3300 kCal/kg and average station heat rate of 2151 kCal/kWh approximate annual coal requirement of for Phase-III station at 90% PLF works out to be 3.39 million MT. Pachwara (North) Coal Block is one of the linked mines allotted for SgTPP. Geological reserve of the block is about 609.35 MMT whereas mineable reserve of the block is estimated to 392.84 MMT. Average GCV of the coal is 5492 kCal/kg with 19.97% ash content.
- ix. Water requirement for all phases is 72.8 Cusecs which will be drawn from Bhagirathi river. The water withdrawn for the total project is very meagre percentage of surface water available in the Bhagirathi River. Further, the water will be re-cycled and reused as well as closed cycle recirculating system of cooling have been conceived.
- x. It has been estimated that with design coal for Phase-III unit about 1.08MTPA of Fly ash and 0.272 MTPA of Bottom Ash would be generated. Bottom ash will be extracted in wet form and will be disposed in ash disposal area in wet form. Fly ash will be collected and stored in dry form in fly ash silos.
- xi. Ash water recovery system for Phase-I (2x300 MW) has been completed and Phase-II (2x500 MW) is under construction. The existing ash disposal is through lean slurry concentrated disposal system. Conversion of existing system to the HCSD system may not be essential due to various water conservation and ash utilisation schemes taken up for implementation. Dry and pneumatic collection system for flyash has been installed for existing power plant.
- xii. 33% of the total project area will be developed under greenbelt.
- xiii. Permission from NMCG is under consideration for water withdrawal from Bhagirathi river.

- xiv. Feasibility study for FGD for all four units have been carried out.
- xv. Online emission and effluent monitoring systems have already been installed for Phase-I and II. The same will be connected to CPCB server.
- xvi. Overall literacy rate in the study area is 52.01%.
- xvii. The estimated capitalized project cost of the project has been worked out to be Rs. 4,402 cores. Around 200 O&M personnel will be required during operation phase of the project. In addition, around 200 permanent staff shall be engaged in construction activities.

(29.3.3) Committee noted that the EIA report lacks several important information such as water source sustainability study, comparison of baseline data of two seasons collected in 2019 and 2016, input pollution load for air quality modelling, NMCG permission, the time bound action plan for issues mentioned in the Public Hearing, the preparedness to meet new emission norms, wastewater discharge from the plant premises, the mode of coal transportation, firm coal source whether it is ECL mines or Pachwara mines.

**(29.3.4) Committee after deliberations, deferred the project for want of following information:**

- i. Letter from WBPCB that EIA report has been uploaded on their website and whether any representations/comments have been received. In case, representations are received, an action plan to address the issues mentioned in the representation shall be submitted.
- ii. The time bound action plan for addressing public hearing comments.
- iii. The status of implementation of pollution control measures to meet new emission norms and specific water consumption as per Ministry's notification dated 7.12.2015.
- iv. Permission from the NMCG for water withdrawal.
- v. Source sustainability study shall be conducted by taking competing users in the downstream, in-situ uses, environmental flow before drawing such huge quantity of water 1,75,296 m<sup>3</sup>/day.
- vi. It has been mentioned that evaporation loss is 4733 m<sup>3</sup>/hr which accounts to be 66% of the total water requirement which is not reasonable. The revised water balance diagram with all details shall be furnished.
- vii. Copies of coal linkages for existing and proposed project shall be submitted.
- viii. RO certified EC compliance report and its action plan shall be uploaded online at PARIVESH portal.
- ix. Particulate Matter 10 (PM<sub>10</sub>) in the ambient air quality exceeds the National Standard. Justification is to be submitted. The stack height for the proposed project has been designed for the height of 150 m. The incremental concentrations shown by the dispersion modelling for PM<sub>10</sub> is 18.31 µg/m<sup>3</sup> which will be very high as the baseline itself crossed the national standard.
- x. Dispersion modelling shall be carried out for various scenarios with stack height of 150 m & 275 m and for worst case scenarios such as stable weather class- E & F which occurs in the winter, Class-A: Unstable and Class-D: Neutral.
- xi. The input parameters such as pollutant load, climate data and stability class considered for dispersion modelling shall be mentioned in the EIA report.

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**(29.4) 2x660 MW Super Critical Coal based Meja Thermal Power Plant near Kohadar, Bhagdeva & Mai Kalam Villages, Taluk Meja, District Allahabad, Uttar Pradesh by M/s Meja Urja Nigam Pvt. Ltd.- reg. amendment in EC. (F.No. J-13012/03/2008-IA.II(T) & Proposal no. IA/UP/THE/107454/2019)**

(29.4.1) Project Proponent has submitted online application on 7.6.2019 for amendment in certain conditions prescribed in the Environmental Clearance dated 10.1.2011 regarding online emission monitoring and CSR expenditure.

(29.4.2) The Environmental Clearance for 2x660 MW Super Critical Power Project has been issued vide Ministry's letter dated 10.01.2011. The following amendments/validity extensions have been granted by the Ministry.

- i. The temporary permission for a period of one year for transportation of 2 Lakh Tons per Annum of coal by road or till the commissioning of railway siding whichever is earlier has been issued vide Ministry's letter dated 21.07.2017
- ii. This Ministry has further extended the EC dated 10.1.2011 for further period of 1 year, vide letter dated 8.1.2018.
- iii. Ministry vide letter dated 28.3.2019 further extended the temporary permission for transportation of 5,220 MT/Day coal by road for temporary period of till 31.03.2019 and validity of EC till 09.07.2019.

(29.4.3) The EC condition Nos. vii and xxii are as below:

*"Condition No.vii.: Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipment for SOX, NOX and PM2.5 and PM10".*

*"Condition No.xxii: An amount of Rs. 37.10 Crores shall be earmarked as one time capital cost of CSR programme as committed by the project proponent. Subsequently, a recurring expenditure of rs.7.40 Crores per annum till the life of the plant shall be earmarked as recurring expenditure for CSR activities".*

(29.4.4) Project Proponent made the presentation and submitted the following information:

- i. Online continuous monitoring instruments are available for PM2.5 and PM10 in the ambient air. However, these instruments are not available for monitoring stack emissions for PM2.5 and PM10 separately.
- ii. NTPC has published Expression of Interest for supply of such instruments in India and abroad. Till date no positive response received from any vendor.
- iii. Provision of one time expenditure on CSR activities may be re-aligned with the provisions under OM dated 1.5.2018 regarding CER.
- iv. Provision for recurring expenditure of Rs.7.40 Crores per annum till the life of the plant may be waived off as Companies Act already takes care of CSR activities during operation phase.

(29.4.5) Committee noted that the condition regarding online monitoring of PM<sub>2.5</sub> & PM<sub>10</sub> in the stack emissions may have been stipulated erroneously. Committee has no objection to suitably amend the condition. Committee further noted that the conditions regarding CSR/CER activities had already been reviewed in the last meeting and accordingly the conditions regarding capital investment to be modified in line with the OM dated 1.5.2018 or stipulated amount whichever is the higher. W.r.t recurring investment, it may be aligned with Companies Act based on profits.



(29.4.6) Committee after detailed deliberations, recommended for amendment of the following specific conditions and stipulated additional conditions in the Environmental Clearance dated accorded vide dated 10.1.2011:

- i. Specific Condition No. (xii): Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipment for SO<sub>x</sub>, NO<sub>x</sub> and PM.
- ii. While commissioning the proposed unit, the compliance of revised emission norms issued vide Notification dated 07.12.2005 shall be achieved along with specific water consumption as per the notification dated 28.06.2018. The FGD System and NO<sub>x</sub> control measures such as SCR/SCNR/De-NO<sub>x</sub> burners shall be installed to achieve the revised emission norms.
- iii. As per the Revised Tariff Policy notified by Ministry of Power vide dated 28.01.2016, project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality/ local bodies/ similar organization located within 50 km radius of the proposed power project to minimize the water drawl from surface water bodies. The details of Sewage Treatment Plants located within 50 km radius along with the capacities shall be submitted.
- iv. With respect to the Capital Expenditure on CER/CSR activities as one time amount should be in-line with the Ministry's Circular dated 1.5.2018 or the amount stipulated in the EC, whichever is higher. Project Proponent has to submit the revised/latest project cost, calculate the one time CER expenditure based on revised project cost, compare with the amount stipulated in the EC and adopt the highest amount. The details in this regard along with an undertaking to adopt the highest amount shall be submitted within three months.
- v. With respect to the recurring CSR expenditure, any condition stipulating the recurring amount per annum in the EC may be made redundant. The recurring amount shall be in-line with Section 135 of Companies Act, 2013 which states that company shall spend (in every financial year) at least two per cent of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy.
- vi. The details of average net profit made during the last three years to be submitted including the amount earmarked for CSR activities (at least 2%) from this project and the details of various activities undertaken along with expenditure, extent of villages covered, benefited population, the proximity to the project area, etc. as a part of EC compliance report (October-March on 1<sup>st</sup> June and April-September on 1<sup>st</sup> December) to the Ministry and its Regional Office.

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**(29.5) 3x660 MW (Stage-I) Sipat Super Thermal Power Project, Village Sipat, Tehsil Masturi at District Bilaspur, Chhattisgarh by M/s NTPC Ltd. - reg. amendment in EC.**

**(F.No. J-13011/10/1996-IA.II (T) & Proposal no.IA/CG/THE/107493/2019)**

(29.5.1) Project Proponent has submitted online application on 14.6.2019 requested for amendment in the Ministry's permission dated 17.5.2018 regarding transportation of coal with open wagons instead of tarpaulin covered wagons.

(29.5.2) The EC was accorded by MoEF for 2000 MW (4x500) on 22.02.1999 and subsequent amendments/letters dated 14.01.2000, 30.04.2002 and 08.09.2014 for change of fuel composition, change in configuration (from 4x500 MW to 3x660 MW) and temporary permission for transportation of coal by open wagons for one year respectively. However, permission for transportation of coal by open wagons is accorded vide Ministry's letter dated 8.9.2014 for one year with the stipulation that within one year, NTPC shall come out with a plan of carrying coal in a cleaner way. Subsequently, Ministry vide letter dated 8.2.2017 issued temporary permission for one more year (till 31.1.2018) to transport coal in open wagons covering with tarpaulin cover.

(29.5.3) Further, Ministry vide dated 17.5.2018 accorded the permission for transportation of coal in the wagons covered with tarpaulin sheet/cloth. The permission dated 17.5.2018 stipulates the following condition:

- i. Top surface of the Coal Wagons shall be completely covered with tarpaulin sheet/cloth so that coal will not get exposed to atmosphere and becomes secondary emissions. This will avoid fugitive dust emissions during the transport. Water sprinkling shall be done on the top surface of coal at loading point before covering with tarpaulin sheet. Due safety procedures shall be followed so that the covered sheet doesn't open up and flyaway during transport which will endanger safety of nearby people, agricultural fields, etc. Water sprinkling measures as proposed at loading and unloading point shall be continued. Progress report of implementation shall be submitted to this Ministry and concerned Regional Office as part of Compliance Report.

(29.5.4) Project Proponent made the presentation and inter-alia submitted the following information:

- i. Covering wagons requires manual process of covering and uncovering which is not feasible to transport the coal 9.82 million tonnes per annum using covered wagons. It takes about six persons each to cover and uncover two wagons at mine and power plant end respectively.
- ii. The time required for covering is about 15 minutes while the same for uncovering is about 5 minutes.
- iii. Considering one gang of 6 persons is deployed for every 2 wagons, 22 gangs (132 persons) will be required for covering 44 wagons at loading end and the same number at unloading end. Also, to operate 3 shifts round the clock, required manpower will be 4 groups and require approximately 1056 workers to the existing strength of contract workers.
- iv. It takes one hour for covering and uncovering work, which is not envisaged in the design of MGR system. It delays the supply of coal to power plant and disturbs the schedule of coal transportation in MGR route.
- v. The cycle time increases by nearly 2 hours which will reduce 4 rakes/day. The present receipt capability of 16-17 rakes/day (44,000 MT/day) will reduce down to 12-13 rakes/day (33,000 MT/day) which is far less than our daily coal consumption of 44,000 MT/day.
- vi. Further, use of tarpaulin sheets shall lead to environmental hazard and generation of plastic wastes.
- vii. Other infrastructure is also required to be built to accommodate this activity such as working platform, lighting, labour rest rooms, drinking water facility at loading and unloading end. There is a space constrain to construct this infrastructure.

- viii. Water sprinkling is done at four points along the total stretch of 42 km viz. loading, unloading points, ½ km before entry, at 22km chainage point (mid section).
  - ix. Accordingly, the covering of tarpaulin cover may be exempted.
- (29.5.5) Committee noted that covering wagon surface will reduce dust pollution which is possible for longer distances involving several hundred kilometres. In the present case, the transportation involves 42 km and would take approximately an hour to reach the power plant. Accordingly, tarpaulin sheet covering may increase more cycle time which is reducing the coal intake as informed by project proponent. However, NTPC being a large consumer of the coal should start developing wagons with mechanical sliding of the cloth along the two sides of the wagon. The cover can be closed mechanically with screw and pinion arrangement or automatic arrangement during loading and unloading operations. Further, NTPC argument of employing 1056 persons only for covering the tarpaulin sheet is not justified as fixed number of people can be stationed throughout the day in shifts. Further, there are several alternatives to tarpaulin such as jute and cloth covers, however, there is a constraints in providing a elevated platform for covering the tarpaulin sheet. The aim is to prevent coal being carried away with air which cause pollution. This also prevents exothermic reaction of coal.
- (29.5.6) Committee after detailed deliberations, recommended for waiving of covering wagons with tarpaulin cover subject to following additional conditions:
- i. As proposed, the water sprinkling at four points viz. loading point, unloading points, ½ km before entry, at 22 km chainage point (Mid Section) shall be carried out to keep the coal wet and to control dust generation.
  - ii. NTPC being a large consumer of coal, should take up an R&D activity of developing a mechanical sliding of the cloth over wagon top which should be easily closed/opened with mechanical arrangement and should also not hamper loading operations. Once successful, this can be replicated in the country as best environmental practice to prevent air pollution from coal. This will also prevent oxidation.

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**(29.6) 2x800 MW Coal based Lara Super Thermal Power Project at Villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh, Taluk Pussore, District Raigarh, in Chhattisgarh by M/s NTPC Ltd. – reg. amendment of EC.**

**(F.No.J-13012/97/2007-IA.II(T) & Proposal no. IA/CG/THE/107445/2019)**

(29.6.1) Project Proponent vide online application dated 14.6.2019 requested for amendment in the conditions prescribed in the Environmental Clearance dated 13.12.2012 regarding long-term radio activity, stack monitoring and CSR expenditure.

(29.6.2) The condition no.v, vii and xxx of EC dated 13.12.2012 are given as below:

*Condition No.v: A long term study of 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.*

*Condition No.vii: Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring*

equipments for SO<sub>x</sub>, NO<sub>x</sub>, PM<sub>2.5</sub> & PM<sub>10</sub>. Mercury emissions from stack may also monitored on periodic basis.

*Condition No.xxx: An amount of Rs.38.0 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent. Subsequently a recurring expenditure of Rs.7.65 Crores per annum till the life of the plant shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six month with road map for implementation.*

(29.6.3) Project Proponent has made presentation and submitted the following information:

- i. There is no instrument for online in-built continuous monitoring of heavy metals worldwide and there are no regulations or BIS standards for monitoring of Radio activity in coal and ash in India.
- ii. Only periodic sampling of Heavy metals and radio activity is usually being conducted through reputed Laboratory/Institute, i.e. Baba Atomic Research Center (BARC).
- iii. Online continuous monitoring instruments are available for PM<sub>2.5</sub> and PM<sub>10</sub> in the ambient air. However, these instruments are not available for monitoring stack emissions for PM<sub>2.5</sub> and PM<sub>10</sub> separately.
- iv. NTPC has published Expression of Interest for supply of such instruments in India and abroad. Till date no positive response received from any vendor.
- v. Provision of one time expenditure on CSR activities may be re-aligned with the provisions under OM dated 1.5.2018 regarding CER.
- vi. Provision for recurring expenditure of Rs.7.65 Crores per annum till the life of the plant may be waived off as Companies Act already takes care of CSR activities during operation phase.

(29.6.4) Committee noted the difficulty expressed by M/s NTPC to measure radioactivity online through in-built instruments. Further, online monitoring of PM<sub>2.5</sub> & PM<sub>10</sub> in the stack emissions may have been stipulated erroneously. Committee has no objection to suitably amend the condition. Committee further noted that the conditions regarding CSR/CER activities had already been reviewed in the last meeting and accordingly the conditions regarding capital investment to be modified in line with the OM dated 1.5.2018 or stipulated amount whichever is the higher. W.r.t recurring investment, it may be aligned with Companies Act based on profits.

**(29.6.5) Committee after detailed deliberations, recommended for amendment of the following specific conditions and stipulated additional conditions in the Environmental Clearance dated accorded vide dated 13.12.2012:**

- i. Condition No.v: Radio activity and heavy metals contents on coal and fly ash (including bottom ash) shall be carried out through a reputed institute once in a year.
- ii. Condition No.vii: Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipments for SO<sub>x</sub>, NO<sub>x</sub>, PM. Mercury emissions from stack may also monitored on periodic basis.
- iii. While commissioning the proposed unit, the compliance of revised emission norms issued vide Notification dated 07.12.2005 shall be achieved along with

specific water consumption as per the notification dated 28.06.2018. The FGD System and NO<sub>x</sub> control measures such as SCR/SCNR/De-NO<sub>x</sub> burners shall be installed to achieve the revised emission norms.

- iv. As per the Revised Tariff Policy notified by Ministry of Power vide dated 28.01.2016, project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality/ local bodies/ similar organization located within 50 km radius of the proposed power project to minimize the water drawl from surface water bodies. The details of Sewage Treatment Plants located within 50 km radius along with the capacities shall be submitted.
- v. With respect to the Capital Expenditure on CER/CSR activities as one time amount should be in-line with the Ministry's Circular dated 1.5.2018 or the amount stipulated in the EC, whichever is higher. Project Proponent has to submit the revised/latest project cost, calculate the one time CER expenditure based on revised project cost, compare with the amount stipulated in the EC and adopt the highest amount. The details in this regard along with an undertaking to adopt the highest amount shall be submitted within three months.
- vi. With respect to the recurring CSR expenditure, any condition stipulating the recurring amount per annum in the EC may be made redundant. The recurring amount shall be in-line with Section 135 of Companies Act, 2013 which states that company shall spend (in every financial year) at least two per cent of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy.
- vii. The details of average net profit made during the last three years to be submitted including the amount earmarked for CSR activities (at least 2%) from this project and the details of various activities undertaken along with expenditure, extent of villages covered, benefited population, the proximity to the project area, etc. as a part of EC compliance report (October-March on 1<sup>st</sup> June and April-September on 1<sup>st</sup> December) to the Ministry and its Regional Office.

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**(29.7) 500 MW (Stage-IV) Coal Based Feroz Gandhi Unchahar Thermal Power Station in Villages Babhanpur & Niranjapur, Tehsil Unchahar, Raebareli District, Uttar Pradesh by M/s NTPC Ltd.reg- amendment in EC. (F.No. J-13012/50/2010-IA.II(T) & Proposal no.IA/UP/THE/107452/2019)**

(29.7.1) Project Proponent submitted online application on 14.6.2019 for amendment in EC dated 10.5.2013 for amending the conditions related to radio-activity, CSR expenditure and online stack monitoring.

(29.7.2) The conditions v and xi of the EC dated 10.5.2013 are as below:

*Specific Condition No.v: Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipments for SO<sub>x</sub>, NO<sub>x</sub>, PM<sub>2.5</sub> & PM<sub>10</sub>. Mercury emissions from stack may also monitored on periodic basis.*

*Specific Condition No.xxx: An amount of Rs.11.95 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent. Recurring expenditure of Rs.2.4 Crores per annum till the life of the plant. Social*

*audit by a reputed University or an Institute shall be carried out annually and details to be submitted to MoEF besides putting it on Company's Website.*

*General Condition No.v: A long term study of 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.*

(29.7.3) Project Proponent has made the presentation and inter-alia submitted the following information:

- i. There is no instrument for online in-built continuous monitoring of heavy metals worldwide and there are no regulations or BIS standards for monitoring of Radio activity in coal and ash in India.
- ii. Only periodic sampling of Heavy metals and radio activity is usually being conducted through reputed Laboratory/Institute, i.e. Baba Atomic Research Center (BARC).
- iii. Online continuous monitoring instruments are available for PM<sub>2.5</sub> and PM<sub>10</sub> in the ambient air. However, these instruments are not available for monitoring stack emissions for PM<sub>2.5</sub> and PM<sub>10</sub> separately.
- iv. NTPC has published Expression of Interest for supply of such instruments in India and abroad. Till date no positive response received from any vendor.
- v. Provision of one time expenditure on CSR activities may be re-aligned with the provisions under OM dated 1.5.2018 regarding CER.
- vi. Provision for recurring expenditure of Rs.2.4 Crores per annum till the life of the plant may be waived off as Companies Act already takes care of CSR activities during operation phase.

(29.7.4) Committee noted the difficulty expressed by M/s NTPC to measure radioactivity online through in-built instruments. Further, online monitoring of PM<sub>2.5</sub> & PM<sub>10</sub> in the stack emissions may have been stipulated erroneously. Committee has no objection to suitably amend the condition. Committee further noted that the conditions regarding CSR/CER activities had already been reviewed in the last meeting and accordingly the conditions regarding capital investment to be modified in line with the OM dated 1.5.2018 or stipulated amount whichever is the higher. W.r.t recurring investment, it may be aligned with Companies Act based on profits.

(29.7.5) **Committee after detailed deliberations, recommended for amendment of the following specific conditions and stipulated additional conditions in the Environmental Clearance accorded vide dated 10.5.2013:**

- i. Condition No.v: Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipments for SO<sub>x</sub>, NO<sub>x</sub>, PM. Mercury emissions from stack may also monitored on periodic basis.
- ii. General Condition No.v: Radio activity and heavy metals contents on coal and fly ash (including bottom ash) shall be carried out through a reputed institute once in a year.
- iii. While commissioning the proposed unit, the compliance of revised emission norms issued vide Notification dated 07.12.2015 shall be achieved along with specific water consumption as per the notification dated 28.06.2018. The FGD

- System and NO<sub>x</sub> control measures such as SCR/SCNR/De-NO<sub>x</sub> burners shall be installed to achieve the revised emission norms.
- iv. As per the Revised Tariff Policy notified by Ministry of Power vide dated 28.01.2016, project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality/ local bodies/ similar organization located within 50 km radius of the proposed power project to minimize the water drawl from surface water bodies. The details of Sewage Treatment Plants located within 50 km radius along with the capacities shall be submitted.
  - v. With respect to the Capital Expenditure on CER/CSR activities as one time amount should be in-line with the Ministry's Circular dated 1.5.2018 or the amount stipulated in the EC, whichever is higher. Project Proponent has to submit the revised/latest project cost, calculate the one time CER expenditure based on revised project cost, compare with the amount stipulated in the EC and adopt the highest amount. The details in this regard along with an undertaking to adopt the highest amount shall be submitted within three months.
  - vi. With respect to the recurring CSR expenditure, any condition stipulating the recurring amount per annum in the EC may be made redundant. The recurring amount shall be in-line with Section 135 of Companies Act, 2013 which states that company shall spend (in every financial year) at least two per cent of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy.
  - vii. The details of average net profit made during the last three years to be submitted including the amount earmarked for CSR activities (at least 2%) from this project and the details of various activities undertaken along with expenditure, extent of villages covered, benefited population, the proximity to the project area, etc. as a part of EC compliance report (October-March on 1<sup>st</sup> June and April-September on 1<sup>st</sup> December) to the Ministry and its Regional Office.

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**(29.8) Expansion from 2x600 MW to 2000 MW (2x600 + 1x800 MW) of Coal based Singareni Thermal Power Plant at Pegadapalli Village, Jaipur Mandal, Mancherla District Telangana by M/s Singareni Collieries Company Ltd.-reg. Site visit report.**

**(F.No. J-13015/08/2015-IA.I (T) & Online no. IA/TG/THE/27094/2015)**

- (29.8.1) The proposal for grant of Environmental Clearance has been submitted by the M/s SCCL on 03.11.2018. The proposal has been considered by the EAC (Thermal Power) on 30.11.2018 and the Committee recommended for a site visit by the sub-committee for assessing the requirement of additional ash pond, avenues for utilization of ash and filling in abandoned mines, greenbelt development, water availability from Godavari and Pranahita rivers, issues pertaining to wildlife management, decision to arrive at stack height of 100 m/275 m, CSR activities carried out till date and the need for shifting of Pegadapalli Village due to pollution caused by the project, etc.
- (29.8.2) The Ministry has constituted the sub-committee vide Ministry's letter dated 10.01.2019 comprising of following members.

- i. Dr. Navin Chandra - Chairman
- ii. Shri S.D. Vora - Member
- iii. Shri Gururaj Kundargi - Member
- iv. Shri Mohan Karnat - Member
- v. N. Subrahmanyam, MoEF&CC- Member Secretary

(29.8.3) The Sub-committee conducted the site visit during 30<sup>th</sup>-31<sup>st</sup> May, 2019. The Committee has visited the following areas:

- i. Srirampur Opencast Mine and its Coal Handling Plant;
- ii. Srirampur Area Coal Handling Plant and rail transportation;
- iii. Power Plant;
- iv. Pegadapalli Village adjacent to the Power Plant.

(29.8.4) **The report of the Sub-committee is enclosed as Annexure-A3. The recommendations made by the sub-committee are as follows:**

- i. The revised coal linkage documents for proposed coal requirement shall be submitted.
- ii. Action plan for not using groundwater from the infiltration galleries of Godavari River.
- iii. The plant layout showing demarcation of greenbelt along with width/length/area/co-ordinates and the action plan to develop greenbelt with timelines and financial allocations shall be submitted. Miyawaki system of greenbelt development needs to be developed in consultation with the Forest Department.
- iv. The proposed ash pond shall be restricted to 30 ha only. The proposed ash pond area of 59.44 ha shall be reduced to 30 ha. Accordingly, more open space shall be left between Pegadapalli and proposed Ash pond area. The open space shall be developed as greenbelt. The layout map showing existing ash pond (30 acres) and proposed ash pond (30 acres) shall be submitted.
- v. The Time bound action plan for implementing FGD and De-NO<sub>x</sub> systems to meet the revised emission standards. The extension from the CPCB/Ministry to install pollution control equipment to meet revised emission norms.
- vi. Action plan for setting up dedicated environmental cell with qualified environmental engineers/science graduates, and experts from soil biology and chemistry.
- vii. Action plan for adoption of Pegadapalli Village for developing as a model village and provision of permanent jobs for Villagers.
- viii. Action plan for construction of rainwater harvesting structures.

(29.8.5) **Committee deliberated the site visit report and suggested that the action plan from the project proponent and compliances to the observations made by the sub-committee be submitted for further consideration. Accordingly, project is deferred.**

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**(29.9) Amendment in Environmental Clearance conditions related sourcing of coal for the Thermal Power Plants in the State of Meghalaya in pursuant to the**



**proceeding of the Committee Constituted by Hon'ble NGT held on  
25.03.2019 –reg.  
(F.No. J-13015/17/2019-IA.II (T))**

(29.9.1) The MoEF&CC Regional Office, Shillong vide their letter dated 18.4.2019 has communicated the minutes of 11<sup>th</sup> Sitting of the Committee constituted by the Hon'ble NGT held on 25.3.2019 headed by the Hon'ble Justice B.P. Katakey, former Judge, Guwahati High Court.

(29.9.2) The relevant extract of the minutes are as below:

- i. The Central Pollution Control Board, vide its report has also informed the Committee that out of 9 Captive power Plants in the State of Meghalaya, the conditions for non-use of coal from the Local source is imposed only in case of Meghalaya Power Ltd in respect of the 43 MW. The Committee by the said Report has also been apprised that despite such condition since the said Captive Power Plant is procuring the coal from the local sources, show cause notice has already been issued by Ministry of Environment & Forests & Climate Change on 11.03.2019 asking for the non-compliance of such condition in the Environment Clearance granted. The representative of MoEF&CC present in today's Proceedings has informed the Committee that by the said notices, one month's time have been granted, necessary action shall be taken against the said Captive Power Plant only thereafter.
- ii. That being the position, the Committee directs the Additional Director General of Forests (C), MoEF&CC, North Eastern Regional Office, Shillong to submit a report relating to the action against the said Captive power Plant for violation of the aforesaid conditions in the Environmental Clearance.
- iii. The Committee, having regard to the fact that the illegal activities of coal mining is rampant in the State of Meghalaya, which however has been directed to be stopped by the Hon'ble National Green Tribunal and also for non-compliance of the provisions of Mines and Minerals (Developmental Regulation) Act, 1957 as well as environmental Laws, is of the view that a condition of non-use of the coal from the local sources is required to be added in the Environmental Clearance granted to other Captive Power Plant, by the appropriate authority, viz. MoEF &CC and State Environment Impact Assessment Authority (SEIAA). Hence, the Additional Director General ©, MoEF&CC, North Eastern Regional Office, Shillong Shall make necessary recommendations to the appropriate authority in the Ministry of Environment & Forests, Government of India in that regard so that a decision in that regard can be taken at the earliest, keeping in mind the public interest involved.
- iv. The Committee has also been apprised that the Chairman, Central Pollution Control Board vide the communication dated 16<sup>th</sup> April, 2018 has already directed all the Captive Power Plants including the Powers in the State of Meghalaya to install Flue Gas De-Sulphurization (FGD Plant) to control Sulphur dioxide to the environment by 30<sup>th</sup> June, 2020 and in terms of the

said directions, such Plant has to be installed by all the Captive Power Plants by the said out-off date.

(29.9.2) Committee noted that the recent mishap of 13 people getting trapped in a rat hole coal mining in East Jaintia Hills District of Meghalaya in December last year. It has been noted that the illegal coal mining is rampant in Meghalaya. Accordingly, Hon'ble NGT in 2015 has put a ban on illegal mining. It is understood that the stipulation of condition regarding not to use local coal from Meghalaya State is to discourage the illegal coal mining, which is causing loss of human life. The committee also felt that to check/curb illegal coal mining in the state, strong administrative actions by the State Government may also be helpful. The RO, Shillong has furnished a total of nine (9) Environmental Clearances issued by the Ministry/SEIAA, Meghalaya state for standalone thermal power plants including Captive Power Plants.

S.No.	Subject	Capacity	Issued on	Issued by	File No.
1.	Cement Plant (Clinker 1.42; Cement 1.5 MTPA) along with Captive Power Plant (25 MW) near Village Umlaper, District Jaintia Hills, Meghalaya by <b>M/s Amrit Cement Industries Limited</b>	25 MW	17.03.2010	MoEF&C C	J-11011/75/2009-IA.II(I) (Industry-I Sector)
2.	Expansion of Cement Plant (from 900 TPD-2600 TPD along with 18 MW Captive Power Plant at Thangskai, Jaintia Hills District by <b>M/s Meghalaya Cements Ltd.</b>	18 MW	25.03.2009	SEIAA, Meghalaya	No. SEIAA/Project-2/2007/18
3.	1x43 MW Imported Coal Based Thermal Power Plant at village Lumshnong, in Khliehriat Taluk, in Jaintia hills District., in Meghalaya by <b>M/s Meghalaya Power Ltd.</b>	43 MW	3.6.2011	MoEF&C C	J-13012/33/2011-IA.II(T)  (Thermal Sector)
4.	100% Coal-based 8 MW Thermal Power Plant project at Lumshnong, Jaintia Hills District, by <b>M/s Meghalaya Power Ltd.</b>	8 MW	20.08.2009	SEIAA, Meghalaya	No. SEIAA/Project-4/2007/20
5.	Cement (1.5 MTPA), Clinker (1.3 MTPA) alongwith Captive Power Plant (25 MW) at Thangskai, Jaintia Hills, Meghalaya by <b>M/s Adhunik Cements Ltd.</b>	25 MW	04.05.2010	MoEF&C C	J-11011/190/2007-IA.II(I)  (Industry-I Sector)
6.	Expansion of Ferro Alloy Plant (18 MVA to 27 MVA) at Export Promotion Industrial Park (EPIP), Rajabagan, Byrnihat, Taluka Nongpoh, District Ri-Bhoi, Meghalaya by <b>M/s Shyam Century Ferrous [A Division of Century Plyboards (I) Ltd.</b>	13.8 MW	19.10.2009	MoEF&C C	J-11011/330/2008-IA.II(I)  (Industry-I Sector)

7.	Cement Plant (Clinker, 1.65 MTPA; Cement, 2.5 MTPA) along with Captive Thermal Power Plant (2x20 MW) at Village Musiang Lamare (Old), P.O. Chiruphi, District Jaintia Hills, Meghalaya by <b>M/s Goldstone Cements Ltd.</b>	40 MW	30.09.2010	MoEF&C C	J-11011/851/2008-IA.II(I)  (Industry-I Sector)
8.	Ferro Alloy Plant (Fe-Si, 8,490 MTPA) along with Captive Power Plant (10 MW) at Villages Riwiang, BPO Seinduly, Near Riango, via Nongstoin, West Khasi Hills, Meghalaya by <b>M/s Shree Shakambari Ferro Alloys Pvt. Ltd.</b>	10 MW	26.10.2010	MoEF&C C	J-11011/500/2009-IA.II(I)  (Industry-I Sector)
9.	Grain Based Distillery (100 KPLD) with Co-Generation Power Plant (3.5 MW) at New Industrial Area (MIDC), Byrnihat, District Ri Bhoi, Meghalaya by <b>M/s CMJ Breweries Product Ltd.</b>	3.5 MW	26.02.2013	MoEF&C C	J-11011/153/2011-IA.II (Industry-I Sector)
10.	M/s Maithan Alloy Ltd.	Information is not available			

Further, Committee noted that the Environmental Clearance for coal mining projects is required for lease area having more than 5 ha under EIA Notification, 1994 for 25.6.2014. Under EIA Notification, 2006, EC is not required for mining leases less than or equal to 5 ha. However, the Environmental Clearance for mining leases less than 5 ha also require prior EC from 7.10.2014 onwards as the EIA amendment notification 7.10.2014 mandates for EC for all coal mining irrespective of lease area. Committee further noted that some of the Environmental Clearances were issued by the Industry-I and Industry-II sectors of IA Division of the Ministry and SEIAA, Shillong as these projects are integrated and inter-linked projects.

(29.9.3) **Committee after detailed deliberations, recommended for stipulation of the following conditions in the Environmental Clearances of 09 Power Projects** as provided by the RO, Shillong in the interest to discourage the illegal mining in Meghalaya State:

- i. Local coal source from Meghalaya State shall not be used for operation of power plant unless the Coal mine in Meghalaya has a valid Mining Lease and Approved Mine Plan under Mines and Minerals (Development and Regulation) Act, 1957 & its amendments and connected Regulations. In addition, the Coal Mine from the State of Meghalaya shall also have valid Environmental Clearance (leases with more than 5 ha under EIA Notification, 1994; leases with more than equal to 5 ha under EIA Notification, 2006 up to 15.1.02016; all coal mining leases irrespective of lease area from 15.1.2016 onwards).
- ii. The Project Proponent shall submit the source of the coal mine, its location, along with boundary co-ordinates of lease, quantity of coal transported along with the mode of transportation, copies of valid mining lease, approved mine plan and Environmental Clearance to the Ministry and its Regional Office before sourcing the coal from Meghalaya State. Further, this information is to be updated and

submitted along with the Six Monthly EC compliance report to the Ministry and its Regional Office.

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**(29.10) ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR**

**50 MW Greenfield (Dual Fuel Power Project) Andaman & Nicobar Gas Power Project at Hope Town at Ferrargunj Tehsil in South Andaman District, Andaman and Nicobar by M/s NTPC Vidyut Vyapar Nigam Limited. - reg. reconsideration for ToR.**

**(F.No.J-13012/14/2018-IA II (T) and Online No. IA/AN/THE/84074/2018)**

(29.10.1) Project Proponent has submitted online application on 01.11.2018 for grant ToR to set up 55 MW Dual Fired Gas/Diesel based Power Project in South Andaman District of Andaman and Nicobar Islands.

(29.10.2) The proposal has been considered in the EAC (Thermal Power) in its 23<sup>rd</sup> meeting held on 30.11.2018. The findings of the committee are as below:

- i. The details of other two alternate sites along with the detailed map indicating topographical & geographical features and sensitive areas may be made available to arrive at the best possible site for the proposed project. Further, Project Proponent may furnish the quantities of LNG and Diesel fuels required for the proposed project. Details regarding storage of LNG or Diesel may also be furnished. Committee noted that the selected location (Site near Hope Town) out of three locations identified by the Project Proponent is falling within 100 m from the HTL/shoreline of the Bay of Bengal which forms CRZ area. If the project is located there, it attracts the Island Protection Zone Notification, 2011.
- ii. Committee noted that from the Island Protection Zone, 2011, it appears that the proposed project at Hope Town may not fit in the permissible activities given in the Notification as it is falling within 100 m from the HTL/Seafront. As there is no expert available in the CRZ area, Committee suggested that the CRZ Division of the Ministry may be consulted to obtain opinion whether the proposed LNG/Diesel based Power Project of 55 MW is permissible activity at the selected location (Near Hope Town).
- iii. Committee after deliberations, deferred the project till the opinion of CRZ division is made available to the Committee and the information as sought above is provided by the Project Proponent.

(29.10.3) Subsequently, after consultation with CRZ division, Ministry has requested Project Proponent to find an alternate location which is out purview of CRZ areas vide letter dated 25.2.2019.

(29.10.4) The Lieutenant Governor, Andaman & Nicobar Islands has also made request to the Ministry to consider the project on a special case. Further, the Dept. of Environment & Forests, Andaman and Nicobar Administration letter dated 26.4.2019 communicating the recommendations of Andaman and Nicobar

Coastal Zone Management Authority (ANCMZA) for establishing power project at the same site as special case though it is non-permissible activity in the No Development Zone of CRZ-III. The recommendations also include Re-gasification unit and desalination plant which are permissible activities in CRZ areas. The ANCMZA held the meeting on 10.4.2019 and made the following observations:

- i. MoEF&CC advised the project proponent to submit the revised proposal with suitable alternate location that is away from ICRZ as the project is not permissible activity in ICRZ.
- ii. The Electricity Department justified that the present location has quick access to the entrance of the Port Blair Bay, it involves low cost of dredging, less requirement of laying pipeline and suitable for avoiding conversion of Liquefied Natural Gas to Natural Gas due to heating.
- iii. Difficulty in finding suitable land away from the coast as these areas are populated or hilly or forest lands. In case of forest land, project requires forest clearance under FC Act, 1980.
- iv. The present location is isolated, sheltered posing little danger to life and property.

(29.10.5) Accordingly, the CRZ division has been consulted once again. The CRZ Division has provided comments that the project may be considered in view of the uniqueness of the project even though it is not permissible activity under Island Coastal Regulation Zone. It has been mentioned that suitable changes in the ICRZ regulations facilitating the project will be considered, if the project is approved by the EAC (Thermal Power). The CRZ division has recommended that a conditional ToR may be issued.

(29.10.6) Accordingly, the proposal is placed before the EAC for consideration of ToR. The committee first noted that the proposal is for dual fired power project based on Diesel and LNG. However, the requests made by the Administration of Andaman and Nicobar Islands state that only Gas based power project has been proposed at Hope Town. Further, the power project is not permissible activity under ICRZ Notification. However, the CRZ division of the Ministry and ANCMZA have recommended the project for granting ToR. Accordingly, the EAC has no objections to prescribe the ToR. However, as proposed, the diesel run power project may not be allowed. Only LNG/Gas based power project may be permitted at the proposed location.

(29.10.7) **Committee after detailed deliberations, recommended for grant of following ToR in addition to the standard ToR at Annexure-A1:**

- i. The ToR is only for establishing 55 MW LNG based Power Project. No diesel/HSD fired power project is permitted at the location as Power Project is not permissible activity in the CRZ area and the diesel fired power plant is highly polluting.
- ii. The mapping of wildlife protected areas such as National Parks, Wildlife Sanctuary, Wildlife Reserves, Eco-sensitive Areas/Zones located within 10 km radius of the project site shall be carried out and authenticated by the Chief Wildlife Warden along with specific comments on recommendation of the project.

- iii. CRZ mapping as per ICRZ Notification, 2019 shall be carried out by the authorised agency. The CRZ maps shall be analysed in comparison with the approved Coastal Zone Management Plans.
- iv. Marine EIA shall also be prepared as per the guidelines provided in the CRZ Notification by accredited Consultants.
- v. The EIA report shall also include the proposed pipeline route from the LNG terminal.
- vi. A copy of the Notification of port limits along with detailed map showing the proposed project area vis-à-vis Port area shall be submitted.
- vii. Enumeration of trees to be felled in the project areas in the forest land and non-forest land shall be submitted. Compensatory afforestation shall be planned to offset the carbon foot print.

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As there being no agenda item left, the meeting ended with a vote of thanks to the Chair.

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**Terms of Reference (TOR):**

- i) The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
- ii) Vision document specifying prospective long term plan of the project shall be formulated and submitted.
- iii) Latest compliance report duly certified by the Regional Office of MoEF& CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
- iv) The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
- v) Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
- vi) Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
- vii) The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
- viii) Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
- ix) Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
- x) Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
- xi) If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.
- xii) The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
- xiii) Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
- xiv) Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of

- the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
- xv) Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.
  - xvi) A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
  - xvii) A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
  - xviii) Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash.
  - xix) The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re-circulation of effluents.
  - xx) Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
  - xxi) It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
  - xxii) Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.
  - xxiii) Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
  - xxiv) Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.



- xxv) Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.
- xxvi) Feasibility of near zero discharge concept shall be critically examined and its details submitted.
- xxvii) Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
- xxviii) Plan for recirculation of ash pond water and its implementation shall be submitted.
- xxix) Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
- xxx) Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
- xxxi) Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
- xxxii) If the area has tribal population it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
- xxxiii) A detailed CSR plan along with activities wise break up of financial commitment shall be prepared. CSR component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified. Separate budget for community development activities and income generating programmes shall be specified.
- xxxiv) While formulating CSR schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CSR details done in the past should be clearly spelt out in case of expansion projects.
- xxxv) R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
- xxxvi) Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
- xxxvii) Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company

shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conductive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.

- xxxviii) One complete season site specific meteorological and AAQ data (except monsoon season) as per latest MoEF Notification shall be collected and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration of the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre-dominant downwind direction at a location where maximum ground level concentration is likely to occur.
- xxxix) In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
- xl) A list of industries existing and proposed in the study area shall be furnished.
- xli) Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modeling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
- xlii) Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
- xliii) Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
- xliv) Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
- xlv) Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
- xlvi) For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
- xlvii) Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including

- truck drivers during operation phase should be adequately catered for and details furnished.
- xlvi) EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
  - xlix) A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Mock drills shall be suitably carried out from time to time to check the efficiency of the plans drawn.
    - l) The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
    - li) Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary with tree density of 2000 to 2500 trees per ha with a good survival rate of around 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO<sub>2</sub> and other gaseous pollutants and hence a stratified green belt should be developed.
    - lii) Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months.
    - liii) Corporate Environment Policy
      - a. Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
      - b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
      - c. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
      - d. Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.

All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.

- liv) Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.

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**Specific Conditions related to Thermal Power Projects:**

- (i) Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional Office of the Ministry within **six months**.
- (ii) 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.
- (iii) A long term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute and results thereof 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.
- (iv) Online continuous monitoring system for stack emission, ambient air and effluent shall be installed.
- (v) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 30 mg/Nm<sup>3</sup> or as would be notified by the Ministry, whichever is stringent. 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 along with an environment friendly sludge disposal system.
- (vi) 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.
- (vii) 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 also be undertaken and results/findings submitted along with half yearly monitoring report.
- (viii) A well designed rain water harvesting system shall be put in place within six months, which shall comprise of rain water collection from the built up and open area in the plant premises and detailed record kept of the quantity of water harvested every year and its use.
- (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) 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.
- (xi) Fly ash shall be collected in dry form and storage facility (silos) 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 off in low lying area.
- (xii) 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 co-ordination with the State Pollution Control Board.
- (xiii) Fugitive emission of fly ash (dry or 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.
  - (xiv) Green Belt consisting of three tiers of plantations of native species all around plant and at least 50 m width shall be raised. Wherever 50 m width is not feasible a 20 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 80 %.
  - (xv) Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.
  - (xvi) 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.
  - (xvii) CSR schemes identified 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 prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programmes.
  - (xviii) 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.
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**Site Visit Report**  
**of**  
**Expansion project from 2x600 MW to 2000 MW (2x600 + 1x800 MW) Coal based**  
**Singareni Thermal Power Plant at Pegadapalli Village, Jaipur Mandal, Mancherial**  
**District in Telangana by M/s Singareni Collieries Company Ltd.**  
**held during**  
**30<sup>th</sup>-31<sup>st</sup> May, 2019.**

**Introduction:**

1. The Environmental Clearance has been issued to 2x600 MW Coal based Singareni Thermal Power Plant at Pegadapalli Village, Jaipur Mandal, District Mancherial (Old name: Adilabad Dist.), Telangana by M/s Singareni Collieries Company Ltd. vide Ministry's letter dated 27.12.2010. Project Proponent has now proposed for 1x800 MW Coal based Supercritical Power Project within the premises of existing power plant.

2. The Terms of Reference (ToR) has been issued vide Ministry's letter dated 27.5.2015 for establishing 1x600 MW Coal based Thermal Power Plant in the existing premises of 2x600 MW Thermal Power Plant which is in operation. The validity of the said ToR is three years, i.e. till 26.5.2018. Further, an amendment in ToR for change in configuration from 1x600 MW (Sub-critical Technology) to 1x800 MW (Super-critical Technology) has been issued vide Ministry's letter dated 26.9.2017. The validity of ToR has been extended for six months, i.e. till 26.11.2018 vide Ministry's letter dated 14.5.2018.

3. Project Proponent has submitted online application for grant of Environmental Clearance on 03.11.2018 which has been considered by the EAC (Thermal Power) in its meeting held on 30.11.2018. The Committee recommended for a site visit by the sub-committee for assessing the requirement of additional ash pond, avenues for utilization of ash and filling in abandoned mines, greenbelt development, water availability from Godavari and Pranahita rivers, issues pertaining to wildlife management, decision to arrive at stack height of 100 m/275 m, CSR activities carried out till date and the need for shifting of Pegadapalli Village due to pollution caused by the project, etc.

4. The Ministry has constituted the sub-committee vide Ministry's letter dated 10.1.2019 comprising of following members.

- |      |                           |   |                  |
|------|---------------------------|---|------------------|
| i.   | Dr. Navin Chandra         | - | Chairman         |
| ii.  | Shri S.D. Vora            | - | Member           |
| iii. | Shri Gururaj Kundargi     | - | Member           |
| iv.  | Shri Mohan Karnat         | - | Member           |
| v.   | N. Subrahmanyam, MoEF&CC- |   | Member Secretary |

5. Accordingly, Sub-committee conducted the site visit during 30<sup>th</sup>-31<sup>st</sup> May, 2019. The Committee has visited the following areas. The representatives of M/s SCCL were present and the attendance sheet is enclose as **Annexure-1**.

- i. Srirampur Opencast Mine and its Coal Handling Plant
- ii. Srirampur Area Coal Handling Plant and rail transportation
- iii. Power Plant
- iv. Pegadapalli Village adjacent to the Power Plant

**6. Details of Land:** The land used for existing power plant of 2x660 MW and proposed power project of 1x800 MW is as below:

Sl.No.	Particulars	Area in Ha		
		2x600 MW	1x800 MW	Total 2000 MW
1.	Main Plant & Equipment	110	47.632	177.932
2.	Coal Handling Plant	20.30		
3.	Raw Water Reservoir	47.92	Nil	47.92
4.	Ash Dyke	30	59.44	89.44
5.	Greenbelt	72.18	20.24	92.42
6.	Land for Main Plant	280.40	127.31	407.71
7.	Land required for transportation of coal by rail system	15.245	Nil	15.245
8.	Land required for water pipeline	5.327	Nil	5.327
9.	Total land requirement	300.972 (743.72 acres)	127.31 (314.59 acres)	428.28 (1058.30 acres)

The Committee has observed during the site visit that the ash dyke of 30 ha is lined with clay lining but not HDPE lining. Committee noted that the proposed ash pond in an area of 59.44 ha is the double the area of phase-I requirement and further the proposed ash pond is adjacent to the Pegadapalli. Committee noted that the Village may be affected due to air borne dust and groundwater problems in the long run. In the interest of the Pegadapalli Village committee suggested that only 30 ha of ash dyke may be permitted and the area proposed towards Pegadapalli village to be used for greenbelt. It has been informed that Stage-I Forest Clearance for diversion of 2.99 ha of forest land for laying 2 TMC pipe line.

**7. Coal requirement and transportation:** The coal requirement for operating and proposed power plants put together is 8.8 Million Tonnes per annum. As informed Srirampur Opencast Mines is expanding its production to 3.5 MTPA and the production of Ramakrishnapur Opencast Mine is 3.3 MTPA. Accordingly, there is a shortfall of 2 MTPA. The linkages are to be furnished.

The coal is brought from Srirampur Opencast Mine and Ramakrishnapur Opencast Mine. The Coal from Srirampur Opencast Mine is transported to Srirampur Area Coal Handling Plant and then transported to the plant by rail. The coal handling plant at Srirampur OCP is under construction. If connected to the existing rail line, it will avoid the road transportation of 5 km.

Coal Stock yard with 15 days storage is available within the plant. Stacker and reclaimer feed the required blend to the feeder bins.

**8. Water requirement and cooling systems:** Water requirement for existing power plant and proposed project is 88,800 m<sup>3</sup>/day and 48,000 m<sup>3</sup>/day (Total: 1,36,800 m<sup>3</sup>/day). It has been informed that that 2.0 TMC water from Pranahita River (45.3 km pipeline) and 1.05 TMC from Godavari River (8.65 km pipeline) has been approved by the State Government. Water storage reservoir has been constructed in 47.92 ha which will suffice for proposed power project also.

However, Committee noted that the State Ground Water Department permitted to draw 18 MGD of water (lr.no: 157/T/2008 date: 07-08-2008) through infiltration galleries from Godavari River, near Shetpalli village, Jaipur mandal. Committee is of the opinion that no groundwater shall be drawn for the operations of the power plant.

**9. Plant Operations:** During the visit, both the units are running at 603 MW and 602 MW load with the frequency of 50.05 Hz. The boiler steam temperature and pressure are 504°C and 171 bar respectively. The coal consumption is 320 TPH at 606 MW load



for one unit. Mainstream flow is 1943 TPH at 616 MW load which comes about 3.2 Tons/MWhr. The calorific value, the ash and Sulphur content of the coal is 3400 kCal/Kg, 42-43% and 0.34-2%, respectively. The photographs showing plant operations and facilities is enclosed as **Annexure-2**.

**10. Ash handling and disposal systems:** The ashpond in an area of 30 ha has been constructed. The ash pond is lined with clay. However, no HDPE/LDPE has been used for lining the ash pond. Presently, the fly ash and bottom ash generation is 5000 MT/day and 1800 MT/day respectively. The flyash is being evacuated by dry bulkers through pneumatic conveying system. It has been informed that the ash utilisation percentage for the years 2016-17, 2017-18 and 2018-19 is 87%, 91.02% and 102.71% respectively. It has been further informed bottom ash is utilized as stowing material in underground mines of Srirampur, Mandamarri and Ramagundam area. During the visit, no fly ash is being disposed into the ash pond. Committee opined that the new ash pond proposed shall be lined with HDPE layer.

**11. Emission and Effluent Handling and Monitoring Systems:** During the visit all the flue gas emission parameters are being monitored online. The emission concentrations of the one stack are as below:

Parameter	Concentration
SPM	43.2 mg/Nm <sup>3</sup>
NO <sub>x</sub>	275.10 mg/Nm <sup>3</sup>
SO <sub>x</sub>	1945.8 mg/Nm <sup>3</sup>
CO	14.073 mg/Nm <sup>3</sup>
CO <sub>2</sub>	12.5%
Stack Temperature	137.74 °C
O <sub>2</sub>	3.58%

Committee observed that concentrations of SO<sub>x</sub> and NO<sub>x</sub> are exceeding the standards. Further, stack exit velocity is not monitored online. Further Mercury and stack exit velocity along with other parameters are measured manually through approved laboratory. It has been informed that budge for installation of FGD has been approved by the Singareni Board of Directors for the amount of Rs.645.32 Crores. It was informed that the pollution control equipment will be installed by 2022. However, it has been informed that there is no extension sought from the CPCB/Ministry.

Further, the dispersion modeling carried out by the consultant for proposed unit with FGD and existing unit without FGD for various scenarios:

Predicted values for post-monsoon 2017 with exist velocity of 22 m/sec	Existing: Stack 275 m; Without FGD. Proposed: Stack 275 m; with FGD (mg/m <sup>3</sup> )	Existing: Stack 275 m; Without FGD. Proposed: Stack 100 m; with FGD. (mg/m <sup>3</sup> )	Baseline (mg/m <sup>3</sup> )	Total GLC (275 m/100 m stack) (mg/m <sup>3</sup> )
Incremental PM	1.7	1.8	83.5	85.2/85.3
Incremental SOX	19	20	18	37/38
Incremental NOX	33	17	25.4	58.4/42.4

Committee noted that dispersion modeling has been carried out for weather data of Oct, 2017 to Dec, 2017. Committee further felt that there is a need for modeling the plume dispersion during stable conditions such Pasquill atmospheric stability classes-E and F

which occur during winter nights and early mornings so that actual dispersion of pollutants with 100 stack height is known.

It has been informed that Effluent Treatment Plant with 2x2400 KLD and STP with 0.6 MLD has been installed and operational. Committee observed that zero liquid discharge concept is to be implemented for both Effluent and Sewage considering the availability of less water in Godavari during lean season.

**12. Greenbelt development:** It has been informed that greenbelt development has been done within an area of 80 ha. Further, existing mango orchard in area of 13.72 has been preserved. The committee during the visit observed that the greenbelt is sparse and the plantation is in the primary stage. It felt that there is a need for extensive greenbelt within the plant area, along the periphery of the plant and around the boundary of the ash pond. The space available between Pegadapalli Village and Ashpond area requires dense plantation to act as buffer for minimizing environmental pollution. It has been proposed that another 75 ha will be developed under greenbelt which will achieve 33% greenbelt of the total area.

**13. CSR and Community Development:** It has been informed that Rs.21.89 Crores of budget has been sanctioned for CSR activities and Rs.14.14 Crores has been spent so far in several surrounding villages in the area of infrastructure, training, health and support to agriculture. Further, several works worth of Rs.7.75 Crores are under progress. Committee visited the Pegadapalli Village which is adjacent to the Power Plant. Committee interacted with the Villagers to know about environmental problems caused by the power plant. Though villagers acknowledged the dust problem from the power plant, they mentioned that they would not like to be relocated as livelihood is the major problem, if shifted. Further, villagers mentioned that contractual job was given to one person in the family and requested for a permanent job. Committee has observed some of the developmental works in the villages such as borewell construction, road construction, etc. It felt that the Villages which are close to the power plant such as Pegadapalli should be adopted by the Company. Committee further noted that technical trade training is to be given so that employment and livelihood is generated. It was informed that several parameters of ground water quality such as Iron, hardness, Calcium etc. are high due to geographical conditions of the areas. M/s SCCL has informed that they have deposited an amount of Rs.51 Lakhs with District Collector, Mancherla for installation RO Plants at surrounding villages.

**14. Others:** Committee noted that though environmental cell has been set up, but there are no qualified persons in the field of environmental engineering/sciences, biology and chemistry. Committee suggested that at least two persons from environmental engineering/sciences, one soil biologist and one chemist to implement and oversee the environmental protection measures at the plant site. Committee noted that Rainwater Harvesting Structures as approved by the Central Ground Water Board, Hyderabad shall be implemented immediately without delay. It has been informed that there are no wildlife sanctuaries, national parks and other protected areas within 10 km radius of the project. However, there are several reserve forests within 10 km radius of the project. It has been informed that wildlife management plan had already been prepared and sent to Chief Wildlife Warden for vetting.

**15. Committee has made the following recommendations:**

- i. The revised coal linkage documents for proposed coal requirement shall be submitted.
- ii. Action plan for not using groundwater from the infiltration galleries of Godavari River.

- iii. The plant layout showing demarcation of greenbelt along with width/length/area/co-ordinates and the action plan to develop greenbelt with timelines and financial allocations shall be submitted. Miyawaki system of greenbelt development needs to be developed in consultation with the Forest Department.
- iv. The proposed ash pond shall be restricted to 30 ha only. The proposed ash pond area of 59.44 ha shall be reduced to 30 ha. Accordingly, more open space shall be left between Pegadapalli and proposed Ash pond area. The open space shall be developed as greenbelt. The layout map showing existing ash pond (30 ha) and proposed ash pond (30 ha) shall be submitted.
- v. The Time bound action plan for implementing FGD and De-NO<sub>x</sub> systems to meet the revised emission standards. The extension from the CPCB/Ministry to install pollution control equipment to meet revised emission norms.
- vi. Action plan for setting up dedicated environmental cell with qualified environmental engineers/science graduates, and experts from soil biology and chemistry, is to be submitted.
- vii. Action plan for adoption of Pegadapalli Village for developing as a model village and provision of permanent jobs for Villagers, is to be submitted.
- viii. Action plan for construction of rainwater harvesting structures, is to be submitted.

Sd/-

Gururaj Kundargi  
(Member)

Sd/-

Suramya Vora  
(Member)

Sd/-

N. Mohan Karnat  
(Member)

Sd/-

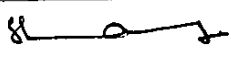
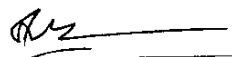
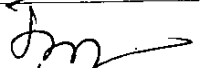
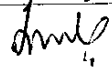
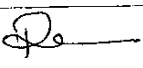
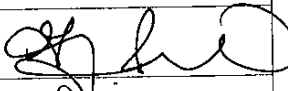


Dr. Navin Chandra  
(Chairman)

*N. Subrahmanyam*  
N. Subrahmanyam  
(Member Secretary)

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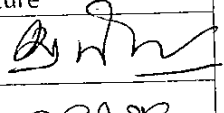
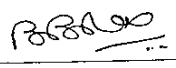
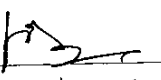
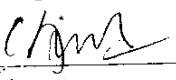
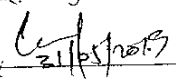
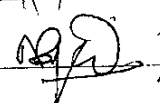

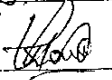
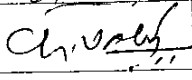
**Annexure-1: Attendance of representatives of M/s SCCL**

Representatives of M/s SCCL at 2x600MW, STPP  
Dtd: 30/5/

S. No	Name ( Sri )	Designation	Signature
1	S. Shankar	Dir (E&M)	
2	S. K. SURE	cce	
3	J N Srineth	Chief	
4	L. V. Ganapathi Rao	GM (E&M)	
5	N. Ravendhar	Chief Env Scientist EPTRI	
6	M. Prabhakaran	SE (EE)	
7	S. Kaniitha	EIAC EPTRI	
8	V. GOPIKRISHNA	EPTRI, PP	









Representatives of M/S SCCL at Singareni thermal power plant (2x600MW  
STPP)

Date: 31-05-2019

SL NO	Name	Designation	signature
1	Sureshendra Pandey	Advisor forestry	
2	B. Bhagya Rao	Director (P&P)	
3	P. Sathish	Gen. Insp.	
4	Ch. Ramakrishna Babu	DCM (C) STPP	
5	J. P. Sathy	CEM (ENV) - STPP	
6	N. K. V. Ravi	DDGM (ENV) / DCM (ENV)	
7	Bh. Venkateswararao	DCM (ENV) / comp	
8	E. Thiruvikrama Rao	SE / RM / COAL / STPP	
9	Ch. Vasudevamurthy	DCM (ENV)	



## Annexure-2: Photographs of the Site Visit of the Thermal Power Plant and Srirampur Opencast Mine

	
Power Plant Panoramic View	Existing Ash pond
	
Plantation	Existing Ash pond
	
Coal stack yard with stacker reclaimer	Coal Transportation
	
Wagon Loading at Srirampur Area CHP	Srirampur OC Coal loading into trucks

## Annexure-2: Photographs of the Site Visit of the Thermal Power Plant and Srirampur Opencast Mine



Srirampur Opencast Mine



Srirampur Opencast Mine



Interactions with Pegadapalli Villagers



Sub-Committee with representatives of M/s SCCL



## Attendance Sheet

### LIST OF MEMBERS (Attendance Sheet)

#### 29<sup>th</sup> EXPERT APPRAISAL COMMITTEE MEETING (Thermal)

DATE & TIME : 26<sup>th</sup> June 2019, 10:30 AM  
 VENUE : Teesta Hall, Vayu Wing, First Floor, Indira Paryavaran Bhawan, New Delhi

Sr.No.	Name of Member	Signature
1.	Dr. Navin Chandra Chairman	<i>Navinchandra</i>
2.	Shri Suramya D. Vora, IFS (Retd.) Member	<i>Souvik</i>
3.	Dr. Narmada Prasad Shukla Member	<i>NSC</i> <i>26.6.19</i>
4.	Sh. N. Mohan Karnat, IFS Member	<i>Ab-</i>
5.	Dr. Sharachchandra Lele Member	<i>Ab-</i>
6.	Sh. N.S. Mondal, CEA Member	<i>N.S. Mondal</i> <i>26/6/19</i>
7.	Dr. R.K. Giri, IMD Member	<i>- Ab -</i>
8.	Dr. S.K. Paliwal, CPCB Member	<i>- Ab -</i>
9.	Prof. S.K. Gupta (ISM/ IIT Dhanbad) Member	<i>S.K. Gupta</i> <i>26/6/19</i>
10.	Dr. Jai Krishna Pandey Member	<i>K. Pandey</i> <i>26/6/19</i>
11.	Dr. Manjari Srivastava Member	<i>Ab-</i>
12.	Dr. Gururaj P Kundargi Member	<i>G. Kundargi</i> <i>26/6/19</i>
13.	Dr. S. Kerketta Member Secretary, MoEFCC	<i>S. Kerketta</i> <i>26/6/2019</i>



## Approval of Minutes by the Chairman-EAC

7/11/2019

[https://mail.gov.in/twc\\_static/layout/shell.html?lang=en&3.0.1.2.0\\_15121607](https://mail.gov.in/twc_static/layout/shell.html?lang=en&3.0.1.2.0_15121607)

Subject: Re: 29th EAC (Thermal Power) minutes of meeting held on 26.6.2019  
To: Dr S Kerketta <s.kerketta66@gov.in>

Date: 07/11/19 10:29 AM  
From: navin chandra <navinchandrar1@yahoo.com>  
Reply-To: navin chandra <navinchandrar1@yahoo.com>

29th MoM\_Thermal version 10072019.docx (126kB)

11/07/2019,

Dear Dr. Kerketta Ji,

Thanks for the draft of the minutes of the EAC (Thermal) held on 26/06/2019. I have gone through the minutes. There are a few minor corrections. I am attaching the corrected Minutes with this e-mail. In my opinion, it is now ready for uploading on the website of the MoEFCC.

With warm regards,

yours sincerely,

(NAVIN CHANDRA)

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Dr. Navin Chandra,  
Chairman, Coal Mining & Thermal Power,  
MoEF&CC, GOI, New Delhi.  
Ex-Director General MPCST, Bhopal,  
Ex-Vice Chancellor, SSSUTM, Sehore (MP)  
(Retd.) Director (Actg.), CSIR-AMPRI, Bhopal  
Member, RC, CSIR-AMPRI, Bhopal.  
Phone (Res.) 91-755-2454600  
navinchandrar1@yahoo.com, navinchandraampri@gmail.com

On Wednesday, 10 July, 2019, 5:02:44 pm IST, Dr S Kerketta <s.kerketta66@gov.in> wrote:

Sir,

The Minutes of the EAC for Thermal Power Projects held on 26.7.2019 have been circulated to members. The comments received have been incorporated in the minutes. The revised minutes including the Meghalaya issue are hereby submitted for your kind approval please.

-

regards,

[https://mail.gov.in/twc\\_static/layout/shell.html?lang=en&3.0.1.2.0\\_15121607](https://mail.gov.in/twc_static/layout/shell.html?lang=en&3.0.1.2.0_15121607)

1/2

**AGENDA OF 29<sup>th</sup> MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE ON THERMAL POWER PROJECTS**

**DATE : 26<sup>th</sup> June, 2019**

**TIME : 10.30 A.M. ONWARDS**

**VENUE : TEESTA MEETING HALL, FIRST FLOOR, VAYU WING, IPB, JORBAGH ROAD, NEW DELHI-110003.**

<b>ITEM</b>	
<b>Item No. 29.0</b>	<b>CONFIRMATION OF MINUTES OF 28<sup>th</sup> EAC (THERMAL) MEETING</b>
<b>Item No.</b>	<b>CONSIDERATION OF PROJECTS</b>
29.1	2x520 MW Coal based Thermal Power Plant at Village Palavalasa, Taluk Pedagantyada, District Vishakhapatnam, Andhra Pradesh by <b>M/s Hinduja National Power Corporation Ltd.-reg. amendment in EC for transportation of Coal by road.</b> F.No. J-13012/92/2008-IA.II (T) & Online no. IA/AP/THE/10774/2008.
29.2	2x10 MW Coal Based Captive Thermal Power Plant at Village Tatisilwai, Ranchi District, Jharkhand by <b>M/s Usha Martin Ltd. reg. amendment in EC for transportation of Coal by road.</b> F.No. J-13012/122/08-IA. II(T) & Proposal No. IA/JH/THE/10337/2011.
29.3	Proposed 1x660 MW based Coal Supercritical Sagardighi Thermal Power (Phase-III Extension Unit-5), Village Manigram, Chandpara, Kanchanpara, Harirampur, at District Murshidabad, West Bengal by <b>M/s The West Bengal Power Development Corporation Ltd- reg. Environmental Clearance.</b> F.No.J-13012/01/2019-IA.I(T) & Proposal no. IA/WB/THE/107519/2019.
29.4	2x660 MW Super Critical Coal based Meja Thermal Power Plant near Kohadar, Bhagdeva & Mai Kalam Villages, Taluk Meja, District Allahabad, Uttar Pradesh by <b>M/s Meja Urja Nigam Pvt. Ltd.- reg. amendment in EC.</b> F.No. J-13012/03/2008-IA.II(T) & Proposal no. IA/UP/THE/107454/2019.
29.5	3x660 MW (Stage-I) Sipat Super Thermal Power Project, Village Sipat, Tehsil Masturi at District Bilaspur, Chhattisgarh by <b>M/s NTPC Ltd. - reg. amendment in EC.</b> F.No. J-13011/10/1996 -IA.II (T) & Proposal no. IA/CG/THE/107493/2019.
29.6	2x800 MW Coal based Lara Super Thermal Power Project at Villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh, Taluk Pussore, District Raigarh, in Chhattisgarh by <b>M/s NTPC Ltd. – reg amendment of EC.</b> F.No. J-13012/97/2007-IA.II (T) & Proposal no. IA/CG/THE/107445/2019.
29.7	500 MW (Stage-IV) Coal Based Feroz Gandhi Unchahar Thermal Power Station in Villages Babhanpur & Niranjanpur, Tehsil Unchahar, Raebareli District, Uttar Pradesh by <b>M/s NTPC Ltd.reg- amendment in EC.</b> F.No. J-13012/50/2010-IA.II (T) & Proposal no. IA/UP/THE/107452/2019.
29.8	Expansion from 2x600 MW to 2000 MW (2x600 + 1x800 MW) of Coal based Singareni Thermal Power Plant at Pegadapalli Village, Jaipur Mandal, Mancherla District Telangana by <b>M/s Singareni Collieries Company Ltd.- reg. Site visit report.</b> F.No. J-13015/08/2015-IA.I (T) & Online no. IA/TG/THE/27094/2015.

29.9	Amendment in Environmental Clearance conditions related sourcing of coal for the <b>Thermal Power Plants in the State of Meghalaya</b> in pursuant to the proceeding of the Committee Constituted by Hon'ble NGT held on 25.03.2019 -reg. F.No. J-13012/50/2010-IA.II (T)
29.10	ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR.

**Note:** If project documents are not submitted to Committee Members on time along with brief summary/basic information as per pro-forma, it will be the Committee's discretion to consider the project. Project proponents shall bring shape file (.kml file) containing project boundaries & facilities and shall be saved on computer in the meeting hall. Project Proponents are required to bring hard copy (A0/A1 size) and soft copy (pdf) of a map showing project facilities superimposed on Survey of India Toposheet. Proponents shall submit the attendance form duly filled to the Member Secretary before starting the presentation.