MINUTES OF THE 35th MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE (EAC) ON ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF THERMAL POWER PROJECTS HELD DURING 14th November, 2019.

The 35th Meeting of the re-constituted EAC (Thermal Power) was held on 14th November, 2019 in the Ministry of Environment, Forest & Climate Change at Teesta Meeting Hall, First Floor, Vayu Wing, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi under the Chairmanship of Dr. Navin Chandra. The following members were present:

1.	Dr. Navin Chandra	-	Chairman
2.	Dr. N.P. Shukla	-	Member
3.	Shri Gururaj P. Kundargi	-	Member
4.	Shri N.S. Mondal	-	Member (Rep. of CEA)
5.	Dr. S. Kerketta	-	Member Secretary

Dr. Sharachchandra Lele, Shri Mohan Karnat, Dr. Jai Krishna Pandey, Shri Suramya D. Vora, Dr.(Mrs.) Manjari Srivastava, Dr R.K. Giri (Representative of IMD), Dr. S.K. Gupta (Representative of ISM Dhanbad), Dr. S.K. Paliwal (Representative of CPCB) could not be present due to pre-occupation.

Item No.35.0: CONFIRMATION OF THE MINUTES OF THE 34th EAC MEETING.

The Minutes of the 34th EAC (Thermal Power) meeting held on 21.10.2019 were confirmed in the presence of Members present in the meeting.

Item No. 35.0: CONSIDERATION OF PROJECTS

(35.1) 1x660 MW (Unit-VI) Bhusawal Coal Based Super Critical TPP at Village Pimpri-Sekam, Bhusawal Taluk, Jalgaon District, Maharashtra by M/s Maharashtra State Power Generating Co. Limited–reg. extension of validity of EC.
(F.No. J-13012/75/2010-IA.II(T)& Proposal No. IA/MH/THE/124319/2019)

(35.1.1) Project Proponent has submitted the online application on 6.11.2019 for extension of validity of Environmental Clearance dated 27.11.2012 for further period of three years. The EC dated 27.11.2012 was initially valid for five years and extended for two years (26.11.2019) vide Ministry's letter dated 30.05.2017.

(35.1.2) Project Proponent along with Consultants M/S Pollution & Ecology Control Services has made the presentation and inter alia provided the following information:

i. The Expansion project of Unit-VI: 1x660 MW Capacity could not be completed within seven years due various constraints in project management.

ii. The following works have been completed or under progress till date.
   a. Obtained Consent to Establish from MPCB.
   b. Obtained permission from Airports Authority of India for construction of 275 m stack.
   c. 90% of open storage yard has been completed.
   d. 5 out of 6 storage shed erection completed.
   e. Drinking and service water made available at the site.
   f. Power facility for construction made available.
   g. Internal road and drainage work is in progress.

h. Labour colony work in progress.
i. 11 no. of High mast are erected.
j. LOA issued to BHEL for additional scope of work to meet revised stack emission norms and additional O&M requirement.
k. Started project related activities like excavation and foundation work for AHP & Chimney, Bunker, Bottom ash hopper, ESP Control Room and wagon tippler work.

iii. The following civil and mechanical work has been completed as on date:
a. Excavation: 2,95,000 m^3.
b. RCC: 9278 m^3.
c. Fabrication: 779 MT
d. Boiler Material Supply: 16,000 MT
e. Boiler Foundation work completed.
f. ESP Foundation completed for 2 passes.
g. Main Power house foundation work in progress.

iv. Estimated Project Cost as per the EC is Rs.4548 Crores. Revised project cost including FGD and SCR to comply with new emission norms is Rs.5116.02 Crores. About Rs.400 Crores have been spent till date.

v. CSR Fund of Rs. 18.20 Crores towards capital cost has been forwarded to Competent Authority for necessary approval. This fund will be spend on various CSR activities as per demand of local people after approval from Competent Authority which is expected very shortly.

(35.1.3) Committee noted that only excavation and foundation work for plant facilities have started. The reasons for delay has not been informed by the proponent. However, proponent mentioned that BHEL has been awarded for constructing the power plant. Further, proponent has provided the chart containing timelines/milestones to complete the construction activities. As per the time chart, it is expected to commission the unit by June, 2022. As the award for construction had already been granted, Committee is of the opinion that the plant can be commissioned within three years, if the progress of construction is done at faster pace.

(35.1.4) Committee after detailed deliberations, **recommended for extension of validity of EC issued vide dated 27.11.2012 for further period of three years** subject to the following additional conditions:

i. Progress (both physical and financial) of construction of power plant including provisions installation of FGD and SCR shall be submitted as a part of six monthly compliance report.

ii. Emission norms and specific water consumption as per the Ministry's norms dated 7.12.2018 and 28.6.2018 shall be complied with. As committed, Flue-Gas Desulphurisation Unit and Selective Catalytic Reactor to control SO_2 and NO_X respectively shall be installed.

iii. Technology selection for adoption of FGD for control of SOx. In case of wet FGD, source of limestone, impact of transportation, handling, storage and disposal of Gypsum including land requirement.

iv. Alternate technology analysis and justification of Technology Selection for NOx reduction.

v. The stack emissions (minimum, maximum, average and 98% percentile) shall be submitted for the period of six months in the compliance report. Further, daily water withdrawal, consumption, power generation and average PLF shall

be submitted. The specific water consumption per MWhr shall be calculated based on water consumption and power generation and to be submitted in the compliance report.

vi. The commitment letter in the form of undertaking for shutting/closing down the existing unit of 210 MW capacity which was commissioned in 1982 and more than 25 years shall be submitted with the date of closure.

vii. Further, Specific Condition No.i of EC dated 27.11.2012 states that existing units (Unit-II & III: 2x210 MW) shall be retrofitted with ESPs to ensure that PM emissions will be below 50 mg/Nm^3. Status of this conditions shall be submitted.

(35.2) 1x660 MW (Unit-VI) Bhusawal Coal Based Super Critical TPP at Village Pimpri-Sekam, Bhusawal Taluk, Jalgaon District, Maharashtra by M/s Maharashtra State Power Generating Co. Limited-reg. amendment in EC. (F.No. J-13012/75/2010-IA.II(T)& Proposal No. IA/MH/THE/124253/2019)

(35.2.1) Project Proponent vide online application dated 6.11.2019 requested for amendment in EC for change in coal source and changes in stack parameters. As per the Environmental Clearance dated 27.11.2012, the coal requirement for 1x660 MW Bhusawal Power Project is 3.99 MTPA at 85% PLF. As per the EC, the Machakata Coal Block in Talcher Coalfields, Village Bagadia, Tehsil Chhendipada, District Angul, Odisha was linked coal source. Further, 1 MTPA from Western Coalfields Ltd. has been granted as tapering linkage till the Machakata Mine becomes operational.

(35.2.2) Project Proponent along with the Consultants M/S Pollution & Ecology Control Services has made the presentation and inter alia provided the following information:

i. As per EC letter No. J 13012/75/2010-IA.II (T) dated 27th November 2012 clause No. (ix) in specific condition a stack of 275 m height with flue gas velocity not less than 22m/s shall be installed and provide with continues online monitoring equipment's for SOx, NOx & PM_{10}. Mercury emission from stack may also be monitored on periodic basis.

ii. In view of revised environmental norms dated 07/12/2015, FGD and SCR as pollution control equipment need to be installed. Due to incorporation of FGD design with revised chimney sizing calculations, flue gas velocity at stack exit has changed. Hence same has to be incorporate in EC amendment and extension.

iii. Coal Requirement mentioned in EC as 3.99 MTPA shall be revised to 3.18 MTPA.

iv. Environmental clearance was granted considering the coal linkage from Machakata Coal Block. In view of Supreme Court decision, dated 24/09/2014 the coal allocation of the Machakata Coal Block has been cancelled. As such, the coal linkage to Bhusawal 1x660 MW project has changed and same has to be incorporate in EC amendment.

(35.2.3) Committee noted that Project Proponent has prima facie sought two amendments, viz. change in coal source and change in stack parameters such as stack height and flue gas exist velocity. Committee noted that Project Proponent applied to Ministry of Power/ Standing Committee for Coal Linkages

for seeking coal source from Western Coalfields Ltd. However, the Standing Committee is yet to grant any linkage. Further, the power project is in initial stage of construction and has requested for extension of validity of EC for a period three years. Committee is of the opinion that the amendment in coal source change cannot be considered at this time as the project is yet to get coal linkage from Standing Committee. Further, w.r.t to stack parameters, Project Proponent has not presented revised chimney sizing calculations, flue gas velocity at stack exit.

(35.2.4) Committee after detailed deliberations, **returned the proposal** and suggested the PP to approach the Ministry once the coal linkage from Standing Committee is confirmed and the emission dispersion modeling is carried out with proposed stack parameters.

(35.3) 2x800 MW Coal based Lara Super Thermal Power Project at villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh in Taluk Pussore, in District Raigarh, in Chhattisgarh by M/s NTPC Ltd.-reg. amendment in EC for permission for transportation of coal by road.
(F.No.J-13012/79/2007-IA.II(T)& Proposal no. IA/CG/THE/123986/2019)

(35.3.1) Project Proponent has submitted online application on 4.11.2019 for seeking permission to transport 18,075 TPD coal by road for a period of two years (till November, 2021) as an interim measurement. The Environmental Clearance for 2x800 MW Power Project has been accorded vide Ministry's letter dated 13.12.2012. With regard to coal source change, Talaipalli Coal block was allotted for this project. However, the block is yet to start the production, coal from Lakhanpur Block of M/s MCL and Korea Rewa field of M/s SECL has been obtained as bridge linkage. The Ministry vide letter dated 26.4.2017 granted permission to transport coal of 6,913 MTD by road from Lakhanpur Coal block for a period of one year. Subsequently, Ministry vide letter dated 15.11.2018 granted permission to transport 9,000 MT/day by road from various sources for one year.

(35.3.2) Project Proponent along with the Consultants, M/s Min Mec Consultancy Pvt. Ltd. made the presentation inter-alia submitted the following information:

i. Total Coal Requirement for the project is about 22,000 TPD. Coal Transportation by Rail: 3,500-7,000 TPD (Via ACB Railway Siding/ Others)
ii. Coal Transportation by Road: 15,000 TPD (Via Various Routes)
iii. In the most optimistic scenario, 15,000 TPD of coal shall be transported by road for Lara STPP (2x800).
iv. A consolidated report has been prepared taking in view all the amendments (received from MOEF&CC and submitted by NTPC to MOEF&CC, which are in pipeline, as on October 2019).
v. The consolidated proposal for transportation of coal is envisaged by road for 2 years from November 2019 to November 2021, when rail connectivity of Lara STPP with Mumbai-Howrah rail line of Indian Railways and of MGR with Talaipalli Coal mine project is expected.
vi. Completion of priority rail connectivity between Lara STPP & Mumbai-Howrah railway line is expected by December 2019, enabling movement of 1 to 2 rakes in a day easily and might achieve movement of 3 rakes, with stringent monitoring.

vii. Thus, the transport of coal from bridge linkage mines or from Dulanga CMP (via ACB siding) to Lara STPP via rail will be restricted to approximately 7000 (2 rakes) to 10,500 (3 rakes) TPD only.

viii. The following are the details of the quantity of coal proposed to be transported and routes:

Routes	From	Mines/ Source of coal	Quantity of Coal, TPD	No. of trucks to & fro	Capacity of trucks, T	Distance for road transportation, km	Status of road transportation permission as on Oct 2019
1	MCL	Basundhra-Garjanbahal area (Kulda & Basundhra mines)	2500	200	25	101.3**	Entire 5,500 TPD till November 2019 permitted vide Ministry's dated 15.11.2018
2		Ib valley area (Samleshwari & Lajkura mine)	500	68	15	65.6	
3		Lakhanpur area (Lakhanpur, Lilari & Belpahar mines)	700	94	15	49.4	
4	SECL	Raigarh area (Baroud & Jampali mines)	1800	144	25	76.6	
5	MCL/ SECL	Railway sidings at Bhupdeopur/ Bimla/ Vedanta/ BEMR to Lara STPP	7000	560	25	Bimla ~ 37 Bhupdeopur-42.7 Vedanta ~ 51 BEMR ~ 62	3,500 TPD till November 2019 permitted vide Ministry's dated 15.11.2018. Seeking enhancement to 7,000 TPD in this proposal.
6	NTPC Ltd.	Dulanga CMP to Lara STPP by road	3000	200	30	122**	Recommended till March, 2020 by EAC (Coal) vide MOM of EAC meeting dated 03.10.2019.
7		Transportation of 12000 TPD of coal from Dulanga to ACB railway siding and from there to Lara STPP or any other Projects of NTPC	Out of which 3500 (~1 rake)	234	30	29.2	Submitted to Ministry for amendment in EC of Dulanga CMP by NTPC on 21st October 2019.

8		Talaipalli Coal Mining Project	2575	258	20	68.4	2575 TPD till Dec 2021 by Ministry's letter dated 06.11.2019

ix. Analysis of traffic on roads through urban areas

a. At CP-23, 24, 25 & 37 (all in/around Raigarh) and at CP-32 & 33 (all in/around Gharghoda), the existing traffic and resultant traffic after 2 years will be within the DSV limits of the road.
b. Further, in view of the no entry timings in Gharghoda the traffic movement through Gharghoda has been proposed for only 8 hours during night time.

x. Analysis of traffic on roads through rural areas

a. In case of the roads passing through the rural areas, there are total 31 census points.
b. At all the census points except CP-27 & 29, the road width will have sufficient capacity to support the existing and the additional proposed traffic at LoS-B/C.
c. Due to Narrow road width at CP-27 (Near Dumarpali) & CP-29 (Near Samaruma), traffic vollume at these two location exceeds DSV limits of the road. However, traffic volume will be well within the maximum carrying capacity of the road.

xi. The baseline air quality and the predicted concentrations due to proposed traffic is provided as below:

Parameters	Highest Value observed in study area as per monitoring ($\mu g/m^3$)	Highest Incremental Values from dispersion modelling ($\mu g/m^3$)	Resultant ($\mu g/m^3$)	NAAQS – 2009 ($\mu g/m^3$)
PM10	86.0	6.65	92.65	100
PM2.5	51.7	1.63	53.33	60
SO_2	18.9	4.45	23.35	80
NO_2	23.2	30.45	53.65	80

xii. Environmental Mitigation measures:

a. Continue to maintain plantation already done and replace damaged saplings in plant and mine area
b. The tippers used for transportation of coal are covered with tarpaulin and tarpaulin is properly tied with the help of rope and tipper is fully covered so that there is no spillage of coal and/ or emission of dust during transportation.
c. The tippers have PUC certification as per manufacturers norms and it ensure that unadulterated diesel is used and procured from authorized dealers only.
d. Only those vehicles having fitness certificate are allowed to ply.
e. Provision for wheel washing at unloading point within the power plant.
f. No honking along the settlements stretch, which would be silent zones.
g. All trucks undergo preventive maintenance as per manufacturers schedule and their silencers are maintained and operational at all times.
h. Installation of speed bumps near settlements to ensure slow driving.

i. Awareness to Truck drivers & villagers through hoardings on roads regarding road safety
j. Contact number of crane operators along the routes made available to all vehicle drivers.
k. All trucks carry first aid kits and drivers are trained in provision of first aid in case of emergency.
l. Creating awareness for road safety to villagers and drivers and ensuring availability of ambulance facility for the accident victims, if any.
m. The PWD is immediately informed in case of observation of any damage to the road so that repairs can be requested and carried out at the earliest.
n. Facilities for Drivers will be provided such as rest rooms, parking facilities, etc.

(35.3.3) Committee noted that Unit-1 (800 MW) has achieved COD and second Unit (800 MW) is still under construction stage. Accordingly, there is no requirement of coal of 18,000 TPD. Further, Ministry had already permitted 9,000 TPD for a period of one year for transportation by road for one unit. It has been informed that MGR between Talaipalli Coal mine and Lara Power Plant is expected by November, 2021. Committee further noted that the traffic sufficiency is to be drawn as per the individual routes. All the census points have been kept together to find out the existing traffic and proposed traffic. It is difficult to predict the flow of traffic and its sufficiency along the single route with varying widths. The traffic volume at census points to be taken as the baseline traffic and to be superimposed at all widths of every route to see the traffic sufficiency. The traffic volumes are exceeding the design volumes of the road along the route of Jampali and Barod mines. Further, the road is originating from Talaipalli mine is narrow for a length of 3.4 km which has width of 3.5 to 4 m and is only single. Further, there are three villages (Muskura, Kotrimar and Salhepali of Gharghoda Tehsil of Raigarh District) along this road which will be affected due to traffic interms of environment and safety angle. Further, Ministry's permission dated 15.11.2018 stipulates that route along Dulanga mines has width of 3-4 m for a length of 6 km. Further, Rs.2.53 Crores as part of Wildlife Management Plan to be deposited to State Wildlife Department. The status of these conditions needs to be submitted. As regards air quality, baseline and incremental predictions are within the National Standards. Committee further noted that Proponent has to submit the satellite image to examine the details of villages, sensitivity, forests and other spatial attributes.

(35.3.4) **Committee after detailed deliberations recommended to extend the permission dated 15.11.2018 for the quantity of 9,000 TPD for a period of one year (w.e.f. 15.11.2019 till 14.11.2020)** with the following changes:

i. The quantity of 1800 TPD permitted earlier from Baroud and Jampali mines is not permitted as the predicted traffic volumes have exceeded the design volume. The same quantity may be obtained from Dulanga mines.
ii. As far as possible, the quantities permitted from Dulanga mines (1800 TPD) and Basundhara & Kulda Mines (2,500 TPD) shall be brought to ACB siding and then the rail transportation shall be continued. In no case, complete road transportation from Dulanga mines to Lara Power Plant (122 km) is not permitted. Coal from Dulanga mines shall be transported by road up to ACB siding and then by rail to the power plant.
iii. The quantity of 3,500 TPD from Bhupdeopur permitted earlier is now permitted to bring any of the sidings of Bhupdeopur, BEMR, Vedanta and Bimla sidings as they are located in a cluster.

(35.3.5) **The following additional conditions are recommended for stipulation**:

i. The quantities transported from each route, mode and length of transportation, and total quantities transported daily-wise against the permitted quantity of each route as per the permission issued by the Ministry and power generation in terms of PLF/Units shall be submitted to the Ministry as part of six monthly compliance report. These quantities will be examined by the EAC during further extension based on which a decision will be taken.

ii. Progress (Physical and financial) of MGR laying from Talaipalli mine to Lara Power Plant shall be submitted.

iii. At least two water sprinklers on each route shall be deployed for dust suppression continuously during transportation. The number of sprinklers used and the quantity of water (in KLD) sprinkled daily shall be reported as part of six monthly compliance report.

(35.4) 2x800 MW Coal based Lara Super Thermal Power Project at villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh in Taluk Pussore, District Raigarh, Chhattisgarh by M/s NTPC Ltd. – reg. extension of validity of EC. (F.No.J-13012/79/2007-IA.II(T)& Proposal no. IA/CG/THE/123339/2019)

(35.4.1) Project Proponent submitted online application on 28.10.2019 for extension of validity of EC dated 13.12.2012 for further period of one year (till 12.12.2020). The said EC is valid for period of seven years (till 12.12.2019). Further, Ministry vide letters dated 26.4.2017 and 15.11.2018 allowed to transport coal by road 6913 Tons/day and 9000 Tons/day for a period of one year, respectively.

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

i. The COD of Unit#1 (800 MW) of the project has been declared on 01.10.2019. However, Unit#2 is in its advanced stage of completion and expected be to be declared COD by June, 2020.

ii. Delay in implementation of the project is attributed to delays occurred in following project related activities which were beyond the control of NTPC;
   a. Delay in Land acquisition for Make-up water, MGR system, CHP area, Reservoir. Acquisition process was delayed due to Land Acquisition Act 2014, and frequent Law & Order issues in the area.
   b. Delay in Right of Use (ROU) for land of MUW corridor.
   c. Contractual issues i.e. Performance of Vendors, Delay in Supply of Materials/ Equipment.

iii. The schedules of Unit-2 construction activities are mentioned below:

Sl. No.	Description	Expected Target Dates
1	Main Plant Award	Completed
2	Start of Boiler Erection	Completed
3	Condenser Erect. Start	Completed
4	TG Erect. Start	Completed
5	Boiler Hydro Test	Completed
6	Boiler Light Up	Completed
7	TG Box Up	Completed
8	TG Oil Flushing Compl.	Completed

9	Steam Blowing Compl.	Nov-19
10	Synchronization	Dec-19
11	Full Load	March-20
12	COD	Jun-20

iv. Although COD of Unit#2 is expected by June, 2020 and keeping the margin for any contingency that may arise, it is requested that the validity of EC for Lara STPP, Stage-I (2x800 MW) may please be extended for another one (1) years i.e. till 12.12.2020.

v. Project cost as per EC is Rs.9,568.27 Crores. The revised project cost including FGD package is Rs.12,075 Crores. An investment of Rs.632.84 Crores has been approved and the package has been awarded on 31.8.2019. The FGD is expected to be completed on 16.4.2021.

(35.4.3) Committee noted that Unit-1 has been commissioned within the validity period and Unit-2 has also achieved significant progress. However, the FGD package has been awarded by Proponent on 31.7.2018 and is expected to commission only by 16.4.2021. Either proponent has to meet the new emission norms at the time of operation or get the extension of timelines approved by Central Pollution Control Board. The details of extension, if any have not been furnished by the Proponent.

(35.4.4) **Committee after detailed deliberations, recommended for extension of EC issued vide dated 13.12.2012 for further period of one year i.e. till 12.12.2020** subject to the following additional conditions:

i. Progress (physical and financial) of construction FGD and De-NOx measures shall be submitted as part of six monthly compliance report.

ii. Technology selection for adoption of FGD for control of SOx. In case of wet FGD, source of limestone, impact of transportation, handling, storage and disposal of Gypsum including land requirement.

iii. Alternate technology analysis and justification of Technology Selection for NOx reduction.

iv. Water requirement for FGD to be installed in the existing units has to provided. Therefore, water balance to be modified based on the water requirement for whole units including a plan on ZLD.

v. Emission norms and specific water consumption as per the Ministry's norms dated 7.12.2018 and 28.6.2018 shall be complied with. As committed, Flue-Gas Desulphurisation Unit and Selective Catalytic Reactor to control SO_2 and NO_X respectively shall be installed.

vi. The stack emissions (minimum, maximum, average and 98% percentile) shall be submitted for the period of six months in the compliance report. Further, daily water withdrawal, consumption, power generation and average PLF shall be submitted. The specific water consumption per MWhr shall be calculated based on water consumption and power generation and to be submitted in the compliance report.

vii. The plant shall operate only after meeting the new emission norms as notified by the Ministry. Else, extension of timelines from the CPCB for implementing pollution control measures for meeting new norms shall be obtained and a copy of the same shall be submitted to the Ministry.

(35.5) **3x660 MW Nabinagar Coal Based Super-Critical Thermal Power Plant at Village Majhiyan, Nabinagar Taluk, Aurangabad District, Bihar by M/s Nabinagar Power Generating Company Private Limited-reg. extension of validity of EC.**
(F.No.J-13012/127/2007-IA.II(T) & Proposal No. IA/BR/THE/11929/2007)

(35.5.1) Project Proponent submitted online application on 21.10.2019 for extension for EC dated 27.12.2010 for further period of one year. The EC was initially valid for five years (till 26.12.2015). Further EIA amendment Notification dated 29.4.2015 increased the validity of EC to seven years. As the said EC was valid on the date of publication of the Notification, EC was automatically get extended upto seven years (till 26.12.2017). Subsequently, the EC was further extended for two years (26.12.2019) vide Ministry's letter dated 20.3.2018.

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

i. The Unit #1 of the project has been commissioned on 06.09.2019. The Units #2 & # 3 of project are in advanced stage of commissioning which are scheduled be to commissioned on 30.03.2020 and 20.12.2020 respectively.

ii. The delay in implementation has been due to various issues majorly relating to delay in Land acquisition for Make-up water, Railway Siding, Ash Dyke, CHP area, Switchyard, Cooling Tower. Acquisition process also delayed due to New Land Acquisition Act 2014, NCLT Order against Ash Handling & SG Civil Agencies, NGT ban on sand mining, Termination of contract for site levelling, Delay in availability of start up power, frequent Law and order issues in the area due to local/naxal bandhs. Further, this project is located in the Aurangabad of Bihar which is a LWE notified district, which are beyond the control of the company.

iii. About Rs. 13,966 Crore have already been spent on the development of the project till Sept. 2019.

iv. The Milestones of Unit-2 are mentioned as below:

SN	Description	Target dates
1	Drainable Hydro Test	**Completed**
2	Non-Drainable Hydro Test	**Done (31.08.19)**
3	Boiler Light Up	**Done (15.09.19)**
4	Boiler Chemical Cleaning	**Done (30.09.19)**
5	Steam Blowing Completion	30 Nov-19
6	Synchronization on oil	Dec-19
7	Full Load	Jan-20
8	Trial Operation (TO) & COD	March-20

v. The milestones of Unit-3 are mentioned as below:

SN	Description	Target dates
1	Drainable Press Parts Air leak test done in Apr-19	Done
2	Drainable Hydro Test	Jul-19 (A)
3	BLU	Apr-20
4	Boiler Chemical Cleaning	May-20
5	Steam Blowing Completion	July-20
6	Synchronization	Nov-20
7	Full Load	Nov'20
8	72 hr Trial Operation & COD	Dec-20

vi. Project Cost as per the EC is Rs.9,568.27 Cores. The revised estimated project cost Rs.17,304 Cores out of which an amount of Rs.925.22 Crores has been earmarked for installation of FGD to meeting new emission norms. The FGD package was awarded on 14.6.2019 and expected to be operationalize by 31.10.2021.

(35.5.3) Committee noted that though the construction of Unit-2 and Unit-3 is in advanced stage, the FGD and De-NO_X installation to meet new emission norms is not in commensurate with construction activities. The FGD package has been awarded recently in June, 2019 and is expected to be commissioned by October, 2021. It was informed that Unit-1 was commissioned in September, 2019 without installing FGD and meeting new emission norms. The details regarding extension of timelines by CPCB for installing FGD has been obtained or not, have not been furnished. A condition in this regard was already stipulated in the EC extension letter dated 20.3.2018. The condition is as below:

"In case plant is ready for commissioning and not meeting revised emission norms, operations shall be stopped unless otherwise an extension is given to the said power plant through a specific direction or an amendment to the Notification."

(35.5.4) **Committee after detailed deliberations, recommended for extension of validity of EC dated 27.12.2010 for a period of one year (till 26.12.2020)** subject to following additional conditions.

i. Technology selection for adoption of FGD for control of SOx. In case of wet FGD, source of limestone, impact of transportation, handling, storage and disposal of Gypsum including land requirement.

ii. Alternate technology analysis and justification of Technology Selection for NOx reduction.

iii. Progress (physical and financial) of construction power plant till its commissioning, installation of FGD and De-NOx measures shall be submitted as a part of six monthly compliance report.

iv. Emission norms and specific water consumption as per the Ministry's norms dated 7.12.2018 and 28.6.2018 shall be complied with. As committed, Flue-Gas Desulphurisation Unit and Selective Catalytic Reactor to control SO_2 and NO_X respectively shall be installed.

v. Water requirement for FGD to be installed in the existing units has to provided. Therefore, water balance to be modified based on the water requirement for whole units including a plan on ZLD.

vi. The stack emissions (minimum, maximum, average and 98% percentile) shall be submitted for the period of six months in the compliance report. Further, daily water withdrawal, consumption, power generation and average PLF shall be submitted. The specific water consumption per MWhr shall be calculated based on water consumption and power generation and to be submitted in the compliance report.

vii. The plant shall operate only after meeting the new emission norms as notified by the Ministry. Else, extension of timelines from the CPCB for implementing pollution control measures for meeting new norms shall be obtained and a copy of the same shall be submitted to the Ministry.

(35.6) Expansion of cogeneration power plant from 6 MW to 18 MW at Survey Nos. 250, 259, 260, 262, 471, 263 and 473, Village & Taluk Gokak, District Belagavi, Karnataka by M/s. Roquette Riddhi Siddhi Pvt. Ltd.-reg. reconsideration of EC.
(F.No. J-13012/06/2016-IA.I (T) & Proposal No. IA/KA/THE/53776/2016)

(35.6.1) Project Proponent has submitted online application on 21.5.2018 for grant of EC. The proposal was considered by the EAC in its meeting held on 27.6.2018 and 23.1.2019. The EAC in its meeting held on 23.1.2019 sought the following information:

i. Permission to draw water from the Ghataprabha River for the power plant.

ii. Impact on Ghataprabha Bird Sanctuary due to water withdrawal from the river, location of intake pipeline and emissions from the power plant. Specific comments from Chief Wildlife Warden are to be obtained.

iii. Time bound action plan to set up STP and action plan for lining of Wastewater lagoons as per the SPCB inspection report.

(35.6.2) Project Proponent submitted the reply on 6.11.2019 to the information sought by EAC along with EIA Consultant, M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd. made the presentation inter alia submitted the following information:

i. Water drawl permission from Government of Karnataka has been issued by the Water Resource Development Organisation (WRDO), Karnataka vide Sr. No.: WRDO 5 NIN 2018 dated 11/09/2019 for renewal of water drawl for 1.0 cusec per day and water drawl permission for additional 0.6 cusecs per day from Ghataprabha river.

ii. Permission has been accorded to draw 1.6 cusecs of water from Ghataprabha river. Most of the migratory birds flock the sanctuary during the post monsoon season (winter) when the river will never be dry. Migratory Birds fly 20 to 30 Km every day for hunting / feeding. There are no breeding or nesting grounds near the plant site. Among the three important bird species listed: Peacock does

not depend on aquatic flora or fauna. Demoiselle crane (Grus virgo) feeds in the surrounding Paddy fields and wetlands. European white stork (Ciconia ciconia) nests on trees in residential areas also. Thus, they are not dependent on aquatic flora or fauna for their survival.

iii. The existing intake of water is sufficient after the expansion also. Inview of this, the drawl of water from Ghataprabha for the proposed expansion is not going to pose any additional threat to the birds or the bird sanctuary.

iv. Water is drawn from bank of Ghataprabha river by pipeline to nearby well which is at distance of 20 meter from the river bank which is existing since 30 years. A mesh had already been provided at the entrance pipeline at the river bank to stop fishes and other aquatic fauna. Same pipeline & intake structure are adequate for drawl of water after the expansion. Hence, there will be no impact on Ghataprabha Bird Sanctuary due to water drawl from Ghataprabha river.

v. To implement conservation measures, PCCF(Wildlife) vide letter dated 14.02.2019 has approved conservation plan for Ghataprabha Bird Sanctuary for an amount of Rs. 36 Lakhs for a period of five years.

vi. Ghataprabha River flows at distance of 420 meters from existing plant boundary.

vii. No increase in coal stacking quantity (3500 MT) with expansion and the same quantity of coal will be stored. But number of days of storage of coal will come down to 4 days for 18 MW. Coal will be stored in covered sheds/yard covered with GI sheets on all the sides with cladding arrangement to prevent fugitive dust. No additional coal storage area is envisaged due to the present expansion proposal.

viii. Based on the reliability and availability, company will install Conduit type coal conveyers for coal transfer to prevent fugitive dust and as second option overhead conveyer will be installed for coal transfer with state of art de-dusting system to control fugitive dust.

ix. The emission norms will be in accordance with latest MOEF standards for Thermal Power plants.

x. All air emission control systems such as ESP, dust extraction systems with bag filters, dust suppression systems, covered conveyers, pucca internal roads, etc., will be provided /installed and operated to comply with the norms. Interlocking system will be provided to ESP in such a way that whenever ESP fails, the coal feed to the boiler will stop and there will be no power generation till the ESP is rectified. Stacks height will be in accordance with the CPCB norms. Outlet particulate emission will be below 30 mg/Nm^3.

xi. Existing plant Greenbelt and additional 100 m wide greenbelt has been developed in the existing plant towards Markendeya river will help in further mitigating the emissions.

xii. Zero liquid effluent discharge system is being followed in the existing Maize processing & 6 MW co-generation power plant. Similar practice will be maintained after expansion of power plant also. Ash will be stored in silos only and there will not be any open storage of ash within the premises.

xiii. Limestone to be used as bed material in the CFBC Boiler will act as sulphur absorbent. Stack height of 73 m will be provided as per CPCB norms for effective dispersion of SO_2 emissions. Lime dosing will be provided to bring down the SO_2 emissions to < 100 mg/Nm^3.

xiv. 50% work related construction of STP and lining of waste water lagoons has been completed as on 01-11-2019 and balance work will be completed by March 2020.

xv. Further, company name has been changed from M/s Roquette Riddhi Siddhi Pvt. Ltd. to M/s Roquette India Private Limited. Registrar of Companies, Maharashtra has issued fresh Certificate of Incorporation dated 19th March, 2019, changing the name of the Company, pursuant to Rule 29 of the Companies (Incorporation) Rules, 2014. There is no change in ownership while changing the name of the company.

xvi. An undertaking in the name of new company has also been submitted by stating that all terms and conditions in the ToR and EC will be duly complied with.

(35.6.3) Committee noted that the wildlife conservation plan will help in conserving the birds in the Ghataprabha sanctuary. Further, the emissions from all the stacks shall be reported and ensured they are within the stipulated standards. There should not be any wastewater discharge from the plant including Maize Processing Plant. The plant activities and water drawal shall in no way affect the Ghataprabha Bird Sanctuary.

(35.6.4) **Committee after detailed recommended for grant of Environmental Clearance** subject to following additional conditions:

i. As proposed, Interlocking system shall be provided to ESP so that whenever ESP fails, the coal feed to the boiler will automatically get stopped and there will be no power generation till the ESP is rectified.

ii. As per commitment, ash shall be stored in silos only and there shall not be any open storage of ash within the premises.

iii. Total water withdrawl from Ghataprabha river shall not exceed 1.6 cusecs (4530 m^3/day, 50.45 MCFT/year).

iv. As per the approval of Water Resource Department, Govt. of Karnataka dated 11.9.2019 valid till 31.3.2023, water shall be drawn only during rainy season and the create storage facilities during non-rainy season. All other conditions prescribed in the permission shall be complied with. A copy of renewal of water permission beyond 31.3.2023 shall also be submitted to Ministry.

v. Wastewater generation shall not exceed the 1590 m^3/day and it shall be reused for the plant operations. Zero effluent discharge system shall be adopted.

vi. As approved, the conservation plan with an amount of Rs.36 Lakhs shall be implemented by the State Wildlife Department. The funds shall be transferred to the department. The status of implementation and expenditure shall be furnished as part of compliance report.

vii. All emissions from the stacks (existing: 23 and proposed:1) shall be reported and compared against the emission standards. The

viii. The coal source will be based on imported coal (1,88,100 Tons/annum) with ash content of 8% and Sulphur content of 0.5%. Bagasse may be used along with Imported coal depending on the availability. The coal and bagasse combination would be 99,000 Tons/annum and 92,400 Tons/annum respectively. Transportation of coal and bagasse is by covered trucks.

ix. As per the action plan submitted, Sewage Treatment Plant of 80 KLD shall be commissioned by March, 2020. All wastewater lagoons shall be lined.

x. As per the Ministry's notification dated 7.12.2015 and 28.6.2018, the emissions and specific water consumption shall be complied with. The emi

xi. The stack emissions (minimum, maximum, average and 98% percentile) shall be submitted for the period of six months in the compliance report. Further, daily water withdrawal, consumption, power generation and average PLF shall be submitted. The specific water consumption per MWhr shall be calculated based on water consumption and power generation and to be submitted in the compliance report.

xii. Bird census in Ghataprabha Bird Sanctuary shall be conducted once in three years in consultation with Wildlife Department assess the possible threats in case of dwindling numbers and conservation measures shall be suggested. The census study shall be conducted by the institute specialised in Ornithology.

(35.7) Modernization & Expansion in Power Plant from 125.3 MW to 141 MW at existing Shriram Nagar Industrial Area, Tehsil – Ladpura, District – Kota, Rajasthan by M/s DCM Shriram Ltd.- reg. amendment in Environmental Clearance.
(F.No.J-13012/07/2017-IA.I (T) & Proposal No. IA/RJ/THE/124344/2019)

(35.7.1) Project Proponent has submitted online application on 6.11.2019 for amendment in EC dated 3.1.2019 regarding zero liquid discharge. Environmental Clearance for expansion and modernization of Captive Power Plant from 125.3 MW to 141 MW was accorded by the Ministry vide letter dated 3.1.2019. A corrigendum was issued for correcting project cost and typo graphical error regarding State Pollution Control Board vide Ministry's letter dated 28.5.2019

(35.7.2) Project Proponent along with EIA Consultant, M/s Kadam Environmental Consultants have made the presentation inter-alia submitted the following information:

i. After expansion, existing 75 MW (35 MW + 40 MW) power plants will comply with New Water Consumption standard i.e. <3.5 m^3/MWh.

ii. Treated Effluent Discharge currently (for 125.3 MW) 4,757 KLD will reduce to 2,862 KLD (for 141 MW) after proposed expansion & modernization.

iii. Treated Effluent Water Discharge Quality complies with stipulated norms.

iv. On-line treated effluent quality monitoring system & PTZ camera installed at Final outlet.

v. Regular Treated Effluent Water Quality monitoring for final discharge, up-stream & down stream of Kansua nallah is being carried out.

vi. Treated effluent discharged into perennial/seasonal nallah, helps in maintaining at least some flow & sustenance of aquatic life in the downstream.

vii. ZLD may not be insisted upon on the old plants.

(35.7.3) Committee noted that the main request is not to insist Zero Liquid Discharge for existing 75 MW (40+35 MW) which will discharge about 2862 KLD wastewater. Total water requirement for the plant is 12,469 KLD. The total wastewater generation is 3766 KLD (2862 for existing 75 MW and 904 KLD for proposed 66 MW). Project Proponent agreed to follow ZLD for 904 KLD wastewater. However, proponent is not inclined to ensure ZLD for 2862 KLD. As the environmental clearance for the entire complex was not issued and the existing power plant was established in 1969 and 2005 (35 MW and 40 MW), there is a need to revamp the Effluent Treatment Plant to meet the zero discharge. Further, Rajasthan being the dry area, there may not be sufficient water available in the Chambal River. Further, the Chambal river has been declared as Son Ghariyal Sanctuary under Wildlife (Protection) Act, 1972. If the zero discharge is ensured for entire 3766 KLD, the total fresh water requirement will come down to 8703 KLD instead of 12,469 KLD which will drastically reduce the fresh water requirement. Though the existing regulation dated 7.12.2015 does not mandate for zero discharge and only mandates specific water consumption of 3.5 m^3/MWh, Committee is of the opinion that Project Proponent should upgrade the existing Effluent Treatment Plant to meet the zero liquid discharge for the entire complex including existing 75 MW and proposed 66 MW. This will reduce burden on Son Ghariyal Sanctuary for drawing fresh water and pollution to Kansua Nallah. Consent to Operate issued by Rajasthan Pollution Control Board stipulates for discharge of 6500 KLD (Effluent: 5000 KLD; Ash pond discharge: 1000 KLD and Sewage: 50 KLD). The proponent is treating sewage of 50 KLD through septic tank and soak pit. Proponent should plan for construction of Sewage Treatment Plant of 50 KLD and stop discharging Sewage into the water bodies. A condition in this respect was already stipulated in the Environmental Clearance. However, Project Proponent is yet to comply with the condition. Committee noted that STP can be set up for as small as 5 KLD, whereas proponent is generating 50 KLD which is a huge quantity and needs to be treated through STP and treated water to be used within the complex.

(35.7.4) Committee after detailed deliberations as presented by the PP and the notification issued vide date 07.12.2015, opined that all the Thermal Power Plants to be commissioned on or after 01.01.2017 shall be complied with ZLD. Therefore, as per the request of the PP and as mentioned in the requisite Form, the EAC recommended that the changes as requested by the PP may be agreed upon and amended accordingly.

(35.8) **55 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. Discussion on site visit report.

(F.No.J-13012/14/2018-IA II (T) and Online No.IA/AN/THE/113957/2018)

(35.8.1) The Terms of Reference (ToR) have been issued vide Ministry's letter dated 2.8.2019 for establishing 55 MW Gas based Power Project with the following condition which mandated to use only LNG/Gas as fuel. Subsequently, the proposal for amendment in ToR for switching to additional fuel, i.e. HSD/Diesel along with Natural Gas was discussed in the EAC meeting held on 23.8.2019 and the Committee recommended for amendment in ToR for using High Speed Diesel as pilot fuel along with LNG (Primary fuel), up to maximum of 1% HSD. Further, the capacity of the Power Project may be modified as 55 MW Power Project. Simultaneously, EAC has also recommended for conducting site visit by sub-committee.

(35.8.2) Ministry has accorded the amendment in ToR vide letter dated 22.10.2019 for additional fuel as Diesel/HSD up to maximum of 1% along with additional ToR.

(35.8.3) Sub-committee comprising of following members have visited the site on 2.11.2019:

1.	Dr. N.P. Shukla	: Chairman
2.	Shri Surmya D. Vora	: Member
3.	Shri N.S. Mondal	: Member
4.	Dr. S. Kerketta	: Member Secretary

(35.8.4) Sub-committee has made the following observations:

i. Notification dated 24.08.2001 states that all waters including tidal waters westward and enclosed by lines joining points A, B, C and D in sequence cover the port limits of Port Blair. It does not define the port limits towards land side of the Port beyond waters, hence site of proposed project does not fall within the Port Limits.

ii. The above mentioned notification has been issued under Section 5 of Indian Ports Act, 1908 superseding earlier notification dated 07.05.1990. Under Section 4(3) of Indian Ports Act, the limits defined may include certain activities within 50 yards of water mark. It gives A&N UT powers to declare any area within 50 yards of water mark as port limit. However, this power has not been exercised.

iii. The land allotment to A&N Electricity Department has been done by Revenue Authorities as Revenue Land, which further indicates that the area is not part of Port Limit.

(35.8.5) **Sub-committee has made the following recommendations during the site visit.** The site visit report of the Sub-committee is enclosed as ***Annexure-A3*** along with photographs.

i. The sub-committee observed that the area where the proposed project has been earmarked is coming within ICRZ-III and within 200 m distance from HTL and as per ICRZ-III Notification, it is a No Development Zone.

ii. A&N Administration may amend the Notification dated 24.08.2001 and may notify the Hope Town LPG Jetty Area and land area within 50 yards of water mark as the Port Limit and transfer the land to the Port Authorities. This will facilitate the project area falling in the "No Development Zone" obsolete.

iii. PP requested that MoEF & CC may take a separate call by amending CRZ notification suitably (ICRZ Notification) in the form of special exemption for implementation of the proposed dual fuel power project at Hope Town area without any precedence in future; as requested by A&NCZMA on account of the following compelling situations:

   a. Andaman and Nicobar Islands have 7% Revenue Lands only, the rest is forest land.
   b. The draft of sea near the project site is sufficient, therefore, the proposed site is more suitable for locating FSRU and also the power plant.
   c. The location is easily accessible and manoeuvrable by ships for supply of RLNG to FSRU from main navigational channel of Port Blair. In case of Tsunami and any other exigencies, the FSRU can be taken away to the open sea at once. At other alternate locations like Hathitapu, this advantage is not available due to non-availability of turning radius.
   d. The proposed power project is envisaged to replace the existing old Diesel Generator sets, with reduction in carbon-foot print and also more environmental friendly project.

iv. A&N Islands have limited economic activities due to shortage of power. Govt. of India has drawn an ambitious plan for future economic development of A&N Islands and therefore, under Sea Communication Cables are being laid from Chennai which also includes CRZ Area. Strengthening of communication facility may turn the Port Blair area into an IT Hub. An assured supply of power from the proposed power plant shall ensure the long term goal of the above plan.

v. The livelihood of the Fisherman Folks to be addressed properly in the EIA/EMP report.

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

***

Navinchandra
Dr. Navin Chandra
(Chairman)

Skerlekar 4/11/2019
Dr. S. Kerketta
(Member Secretary)

ANNEXURE- A1

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-conducive 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_{10}, $PM_{2.5}$, SO_2, NO_x, 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.

xlviii) 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_2 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.

ANNEXURE- A2

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^3 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.

ANNEXURE- A3

Site visit report of 55 MW Greenfield (Dual Fuel Power Project) Andaman & Nicobar Gas Power Project at Hope Town at Ferrargunj Tehsil in South Andaman District, Andaman & Nicobar Islands by M/s NTPC Vidyut Vyapars Nigam Limited (NVVN).

****

Background:

During 32nd meeting of the EAC for Thermal Power Project held on 23.08.2019 at Ministry of Environment, Forest and Climate Change, New Delhi, it was decided by the EAC that a Sub-committee consisting of five Member committee could be constituted, which shall visit the project site of the proposed 55 MW Greenfield (Dual Fuel Power Project) Andaman & Nicobar Gas Power Project at Hope Town at Ferrargunj Tehsil in South Andaman District, Andaman & Nicobar Islands by M/s NTPC Vidyut Vyapar Nigam Limited. The Sub-committee would comprise of the following:

1.	Dr. N.P. Shukla	:	Chairman
2.	Shri Surmya D. Vora	:	Member
3.	Dr. S.K. Paliwal	:	Member
4.	Shri N.S. Mondal	:	Member
5.	Dr. S. Kerketta	:	Member Secretary

Based on the site visit, this Sub-committee shall submit a report on the viability of implementation of the project at the proposed site. The Sub-committee was duly approved by the Competent Authority vide Ministry's Office Order No. J-13012/14/2018-IA.II (T), dated 22.10.2019. Dr. S.K. Paliwal could not come to the project site due to preoccupation. The Sub-committee visited the project site on 02.11.2019 and held discussions with Officials of NVVN, NTPC, Andaman & Nicobar Islands Administration, Electrical Department and also A&N Costal Zone Management Authority. During visit, proposed Power Plant area, the Alternate Site (at Hathitapu), etc. were visited. The following officials and other senior officers were present from the project site:

1.	Shri Asim Kumar Poddar	:	CEO, NVVN
2.	Shri A.K. Srivastava	:	A.G.M., NVVN
3.	Shri Sanjay Bodh	:	Sr. Manager, NVVN
4.	Dr. Vijay Prakash	:	G.M., NTPC
5.	Shri CH. Kiran Kumar	:	Sr. Manager, NTPC
6.	Shri Yogesh Tiwari	:	A.E, Electricity Deptt., A&N Admn.
7.	Shri Ajit Bernard	:	S.E, Electricity Deptt., A&N Admn.
8.	Shri Ajit V John	:	ACF (FC), A&NCZMA

Discussion was held with the PP and *inter-alia,* the PP and Consultant provided the following information to the Sub-committee:

PP submitted the proposal online on 01.11.2018 for grant of fresh ToR and preparation of EIA/EMP report and also conduct of Public Hearing. The project is proposed to set up 55 MW Duel Fired Gas/Diesel based Power Project in South

Andaman District of Andaman and Nicobar Islands for which a total of three sites were identified and examined. The alternate sites are given below:

a. Site 1: At Hope Town.
b. Site 2: Within premise of Surya Chakra Power Ltd (an IPP) DG plant.
c. Site 3: At Shore Point Junction (in West direction of Bamboo flat jetty)..

During visit of the Sub-committee, the PP informed that one more site at Hati Tapu was also proposed, but PP submitted that in case of Tsunami and any other exigencies, the FSRU from this site cannot be taken away to the open sea easily due to non-availability of turning radius. This site was also visited by the Sub-committee and due to the above constrained, the Sub-committee also agreed that this location is not suitable for implemention of the Power Plant.

After comparison of various environmental and technical aspects, the site near Hope Town (Site No.1) has been selected as most preferred site to install duel fuel (LNG & HSD) based Power plant. About 2 acres of undulated barren land having irregular topography with elevation of 2 m above MSL shall be used for setting up of the proposed power project. The Site near Hope Town, out of three locations identified, is falling within 200 m from the HTL of the Bay of Bengal which forms CRZ area. If the project is located there, it attracts the Island Protection Zone Notification, 2011.

The proposed area falls within 200 m from the HTL. There are several ecologically sensitive areas within 10 km of the project site viz. at 1.3 km Mangroves in Bamboo flat, at 3.4 km Mount Harriet National park, at 7.0 km Snake Island Sanctuary-I, at 7.1 km Snake Island Sanctuary-II, at 11.2 km Loha Barrack crocodile sanctuary and at 0.7 km north Mount. Harriet Hills. Two defence installations viz., Navy's Floating Dry Dock and Air Force Station Prothrapur exist within 10 km radius of the proposed site. It falls in Seismic Zone-V. It was informed that the proposed land is Government land and is under physical possession of A&N Administration. No forest land is involved. Topography of the site is rocky and undulated terrain. LNG required for proposed Power Project is to be met from proposed LNG Terminal and Floating Storage Regasification Unit (FSRU) at Hope Town. Diesel requirement for the power project is to be met from the Oil Depot of M/s IOCL, which is located at about 50 km from the Site.

In Gas operation, the C.I. Engine works according to the lean-burn Otto cycle. In this process, the gas and air is mixed before the inlet valves, during the air intake period. After the compression phase, the gas-air mixture is ignited by a small amount of pilot fuel. The pilot fuel is pressurized, and fed into the cylinders by a small common rail system. The combustion is fast, and after the working phase, there exist exhaust gas valves. In HSD fuel operation, the engine works according to the Diesel process. In this process, liquid fuel is injected in the cylinder at high pressure by camshaft-operated pumps. The fuel is ignited instantly due to the high temperature resulting from the compression. Combustion takes place under constant pressure with fuel injected into the cylinder during the combustion. About 8 KLPD of fresh water is required to meet the requirement of Cooling Water System and Service Water System of the plant for which desalination plant of 25 KLPD shall be installed to meet the water requirement of the project. The Commercial Operation Date (COD) of the project

is envisaged in 18 months from the date of award of the construction of the Main Plant. The estimated project current cost of the project is Rs. 387.80 Crore.

It has been stated that there are 6 DG sets (4 for IPP and 2 for A & N Administration), of which decision has already been taken for decommissioning of all the DG Sets owned by IPP (30 MW). Decision is yet to be taken for remaining two DG sets (24.8 MW). In the process, reduction of diesel consumption of four DG sets (30 MW) shall be 174 kl (based on sp. consumption of diesel @0.27 kl/kWh). Similarly, consumption 100% use of diesel in Dual Fuel Power Plant (50 MW) shall be 174 kl ((based on sp. consumption of diesel @0.16 kl/kWh). Further, in case of consumption of 100% diesel in Dual Fuel Power Plant (55 MW) shall be 190 kl (based on sp. consumption of diesel @0.16 kl/kWh). So, there is a marginal increase of diesel for the Dual Fuel Power Plant. However, the Dual Fuel Power Plant has been planned to run primarily on gas (RLNG) and the use of diesel shall be limited during initial period of non-availability of RLNG and during operation diesel of only 1% of fuel requirement shall be used. Further, during forced majeure situations viz., earthquake, cyclone, tsunami or any other naturl/manmade disaster, etc. v diesel shall be used.

Sub-committee noted that the details of other alternate sites along with the detailed map indicating topographical & geographical features and sensitive areas have been examined to arrive at the best possible site for the proposed project and based on the suitability, navigational point of view and also safety on the natural calamities viz., Tsunami, etc. agreed as finalized by PP to implement at Hope Town. However, the Site near Hope Town is within 200 m from the HTL of the Bay of Bengal which forms part of the ICRZ-III area. If the project is located there, it attracts the Island Protection Zone Notification, 2011. As the proposed location falls in ICRZ-III, area up to 200 from HTL towards the landward side, in case of seafront, is earmarked as No Development Zone. The Sub-committee noted that facilities for generating power by non-conventional energy sources, facilities for desalination plants and associated facilities are permitted in the No Development Zone. Further, as per the ICRZ, setting up of new industries and expansion of existing industries is prohibited except facilities for generating power by non-conventional energy sources and setting up of desalination plants in the areas not classified as ecologically sensitive area under this notification based on an impact assessment study including social impacts.

Observation of the Sub-committee:

1. Notification dated 24.08.2001 states that all waters including tidal waters westward and enclosed by lines joining points A, B, C and D in sequence cover the port limits of Port Blair. It does not define the port limits towards land side of the Port beyond waters, hence site of proposed project does not fall within the Port Limits.
2. The above mentioned notification has been issued under Section 5 of Indian Ports Act, 1908 superseding earlier notification dated 07.05.1990. Under Section 4(3) of Indian Ports Act, the limits defined may include certain activities within 50 yards of water mark. It gives A&N UT powers to declare any area within 50 yards of water mark as port limit. However, this power has not been exercised.

3. The land allotment to A&N Electricity Department has been done by Revenue Authorities as Revenue Land, which further indicates that the area is not part of Port Limit.

Way Forward:

1. The sub-committee observed that the area where the proposed project has been earmarked is coming within ICRZ-III and within 200 m distance from HTL and as per ICRZ-III Notification, it is a No Development Zone.
2. A&N Administration may amend the Notification dated 24.08.2001 and may notify the Hope Town LPG Jetty Area and land area within 50 yards of water mark as the Port Limit and transfer the land to the Port Authorities. This will facilitate the project area falling in the "No Development Zone" obsolete.
3. PP requested that MoEF&CC may take a separate call by amending CRZ notification suitably (ICRZ Notification) in the form of special exemption for implementation of the proposed dual fuel power project at Hope Town area without any precedence in future; as requested by A&NCZMA on account of the following compelling situations:
    a. Andaman and Nicobar Islands have 7% Revenue Lands only, the rest is forest land.
    b. The draft of sea near the project site is sufficient, therefore, the proposed site is more suitable for locating FSRU and also the power plant.
    c. The location is easily accessible and manoeuvrable by ships for supply of RLNG to FSRU from main navigational channel of Port Blair. In case of Tsunami and any other exigencies, the FSRU can be taken away to the open sea at once. At other alternate locations like Hathitapu, this advantage is not available due to non-availability of turning radius.
    d. The proposed power project is envisaged to replace the existing old Diesel Generator sets, with reduction in carbon-foot print and also more environmental friendly project.
4. A&N Islands have limited economic activities due to shortage of power. Govt. of India has drawn an ambitious plan for future economic development of A&N Islands and therefore, under Sea Communication Cables are being laid from Chennai which also includes CRZ Area. Strengthening of communication facility may turn the Port Blair area into an IT Hub. An assured supply of power from the proposed power plant shall ensure the long term goal of the above plan.

Any other matter:

1. The livelihood of the Fisherman Folks to be addressed properly in the EIA/EMP report.
2. Few photographs of the site visit are annexed as **Annexure-I.**

-sd-	-sd-	-sd-
(S. Kerketta)	**(N.S. Mondal)**	**(S.D. Vora)**

-sd-

(N.P. Shukla)

Annexure-1

Location of FSRU and Power Project on Google Map

Photograph of Site from Sea Side

Photograph of Site from Land Side

Nearly Vertical Face of Mine Stone Quarry

Photograph of FSRU Site with LNG Terminal in Background

Photograph of Site from LNG Terminal Side

EAC Members Discussing at Site

EAC Members Discussing at Site

Attendance Sheet

35th EXPERT APPRAISAL COMMITTEE MEETING (Thermal)

DATE & TIME : 14th November 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	Navinchandra
2.	Shri Suramya D. Vora, IFS (Retd.) Member	– Abs –
3.	Dr. Narmada Prasad Shukla Member	
4.	Sh. N. Mohan Karnat, IFS Member	Abs.
5.	Dr. Sharachchandra Lele Member	Abs.
6.	Sh. N.S. Mondal, CEA Member	14.11.19
7.	Dr. R.K. Giri, IMD Member	Abs.
8.	Dr. S.K. Paliwal, CPCB Member	– Abs –
9.	Prof. S.K. Gupta (ISM/ IIT Dhanbad) Member	Abs.
10.	Dr. Jai Krishna Pandey Member	Abs
11.	Dr. Manjari Srivastava Member	Abs
12.	Dr. Gururaj P Kundargi Member	14.11.19
13.	Dr. S. Kerketta Member Secretary, MoEFCC	14.11.2019

AGENDA OF 35th MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE ON THERMAL POWER PROJECTS

DATE : 14st November, 2019
TIME : 10.30 A.M. ONWARDS
VENUE : TEESTHA MEETING HALL, GROUNDFLOOR, JAL WING, IPB,JORBAGH ROAD, NEW DELHI-110003.

ITEM	
Item No. 35.0	**CONFIRMATION OF MINUTES OF 34th EAC (THERMAL) MEETING**
Item No.	**CONSIDERATION OF PROJECTS**
35.1	1x660 MW (Unit-VI) Bhusawal Coal Based Super Critical TPP at Village Pimpri-Sekam, Bhusawal Taluk, Jalgaon District, Maharashtra by **M/s Maharashtra State Power Generating Co. Limited -reg. extension of validity of EC.** F.No. J-13012/75/2010-IA.II(T)& Proposal No. IA/MH/THE/124253/2019.
35.2	1x660 MW (Unit-VI) Super Critical Technology Bhusawal Coal Based TPP at Village Pimpri-Sekam, Bhusawal Taluk, Jalgaon District, Maharashtra by **M/s Maharashtra State Power Generating Co. Limited -reg. amendment in EC.** F.No. J-13012/75/2010-IA.II(T)& Proposal No. IA/MH/THE/124319/2019.
35.3	2x800 MW Coal based Lara Super Thermal Power Project at villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh in Taluk Pussore, in District Raigarh, in Chhattisgarh by **M/s NTPC Ltd. – reg. amendment in EC for permission for transportation of coal by road.** F.No.J-13012/79/2007-IA.II(T)& Proposal no. IA/CG/THE/123986/2019
35.4	2x800 MW Coal based Lara Super Thermal Power Project at villages Armuda, Chhapora, Bodajharia, Devalpura, Mahloi, Riyapalli, Lara, Jhilgitar and Kandagarh in Taluk Pussore, District Raigarh, Chhattisgarh by **M/s NTPC Ltd. – reg. extension of validity of EC.** F.No.J-13012/79/2007-IA.II(T)& Proposal no. IA/CG/THE/123339/2019.
35.5	3x660 MW Nabinagar Coal Based Super-Critical Thermal Power Plant at village Majhiyan, in Nabinagar Taluk, in Aurangabad District in Bihar by **M/s Nabinagar Power Generating Company Private Limited-reg. extension of validity of EC.** F.No. J-13012/127/2007-IA.II (T) & Proposal No. IA/BR/THE/11929/2007.
35.6	Expansion of cogeneration power plant from 6 MW to 18 MW at Sy. Nos. 250, 259, 260, 262, 471, 263 and 473, Village & Taluk Gokak, District Belagavi, Karnataka by **M/s. Roquette Riddhi Siddhi Pvt. Ltd.-reg. reconsideration of EC.** F.No. J-13012/06/2016-IA.I (T) & Proposal No. IA/KA/THE/53776/2016.
35.7	Modernization & Expansion in Power Plant from 125.3 MW to 141 MW at existing Shriram Nagar Industrial Area, Tehsil - Ladpura, District - Kota, Rajasthan by **M/s DCM Shriram Ltd.- reg. amendment in Environmental Clearance** F.No.J-13012/07/2017-IA.I (T) & Proposal No. IA/RJ/THE/124344/2019.

35.8	55 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 Ltd.-reg. discussion on site visit.** F.No. J-13012/14/2018-IA.II(T) & Proposal No. IA/AN/THE/113957/2018
35.9	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.