## MINUTES OF THE 43<sup>rd</sup> MEETING OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE (EAC) ON ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF THERMAL POWER & COAL MINING PROJECTS

The 43<sup>rd</sup> Meeting of the reconstituted EAC (Thermal Power) was held on 18<sup>th</sup> September 2015 in the Ministry of Environment, Forest& Climate Change at Teesta Meeting Hall, Vayu Wing, First Floor, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi-110003. The following members were present:

1. Prof. C.R. Babu - Vice Chairman (Acting Chairman)

2. Shri T.K.Dhar - Member
3. Shri J.L Mehta - Member
4. Shri N.K. Verma - Member
5. Shri A.K. Bansal - Member
6. Shri G.S. Dang - Member

7. Dr. S.S. Bala - Member (Representative of CPCB)
8. Shri P.D. Siwal - Member (Representative of CEA)

9. Shri B.B. Barman - Member Secretary

Dr. S.D. Attri, Dr. Ratnavel and Dr. Asha Rajvanshi could not be present. List of other participants is at **Annexure-I**.

### Item No.1: CONFIRMATION OF THE MINUTES OF THE 41stEAC (LAST) MEETING.

No comments/observations were received and therefore, the Minutes of the 40<sup>th</sup> EAC (Thermal Power) meeting held on 23<sup>rd</sup> July, 2015were confirmed.

#### Item No. 2: CONSIDERATION OF PROJECTS

2.1 Expansion by addition of 1x135 MW (GCPP &in-lieu of one of the existing 60 MW Unit) and 1x350 MW (IPP) Imported Coal Based Thermal Power Plant at Villages Sithurnatham, Sirupulalpettai and Eguvarpalayam, Taluk Gummidipoondi, District Thiruvallur, Tamil Nadu by M/s ARS Metals Ltd. – reg. EC

The Project Proponent (PP) along with their environmental Consultant, Vimta Labs, Hyderabad made a presentation and *inter-alia* provided the following information:

- (i) The existing power plant (2x60 MW) was accorded EC on 20.05.2011, which generates 1x60 MW out of 2x60 MW approved. The proposed project involves augmentation of one of its existing 60 MW to 135 MW and erection of additional 350 MW TPP Independent Power Plant (IPP) in addition to the existing 1x60 MW under operation. Terms of Reference (ToR) for the proposed expansion was accorded on 18.09.2014. The purpose of proposed expansion is to meet its group captive for 135 MW and 350 MW will be sold to Tamil Nadu state grid.
- (ii) The existing project area is 25.49 ha (62.99 acres) and an additional barren land of 11.49 ha (28.39acres) has been acquired for the proposed expansion. There are no ecologically sensitive areas like Wild Life Sanctuaries, National Parks and Biospheres within 10 km radius. There are no R&R issues. The total cost for the proposed expansion will be Rs. 2,400 crores. Pulverized coal fired boilers, air cooled condensers (ACC), Finfan coolers for cooling of turbine, generator & boiler auxiliaries and dry ash collection system shall be installed.

- (iii) The primary fuel of the power plant will be 100% Indonesian coal. The maximum total annual coal consumption for the power plant after expansion will be about 2.31 MTPA. The sulphur and ash content of the imported coal are 0.5% and 9.0% respectively. An MoU was signed with M/s. Visa Resources Pte Ltd., Singapore for supply of imported coal. Coal from Indonesia would be transported through sea to Ennore port and thereon through trucks to the plant site. In principle approval was obtained from Indian Railways for rail line from Gummidipoondi to plant site and route survey is in progress.
- (iv) The base-line environmental monitoring was done during May-July, 2014. The maximum base line concentration for PM, SO<sub>2</sub> and NOx were 83.1 μg/m³, 26.9 μg/m³ and 33.2 μg/m³respectively. The cumulative incremental concentration of PM,SO<sub>2</sub> and NOx considering surrounding power plants would be 1.97μg/m³, 23.8μg/m³ and 20.1μg/m³respectively. The resultant GLCs of the said parameters will be within the National Ambient Air Quality Standards (NAAQS).
- (v) The total water requirement (existing + expansion) is 240 KLD, met from the existing bore wells/rain water harvesting system and permission to draw ground water is available from Central Ground Water Authority (CGWA). Fly ash will be utilized as per the latest Fly Ash Utilization Notification. Dry ash will be sold to cement industries as well as fly ash brick manufacturing Units. An agreement was signed with M/s. Ramco Cements Ltd. on 06.08.2015 in this regard. The fly ash generated from the existing 1x60 MW Unit is being disposed to M/s. Ramco.
- (vi) Public Hearing/Public Consultation for the project was conducted by Tamil Nadu Pollution Control Board on 28.01.2015. It was noted that the issues raised in the PH pertained to employment to the locals, air and water pollution due to the operation of the power plant etc. The Committee discussed the issues raised in the PH and the reply of the PP.
- 2. After detailed deliberations, the Committee sought the following information/documents/study, and hence the proposal was **deferred**:
- I. Authenticated map from Chief Wild Life Warden depicting the boundaries of the project site, Pulicat Bird Sanctuary& its eco-sensitive zone. NBWL clearance shall be required, if the project site falls within the stipulated distance as per the EIA Notification 2006 and its subsequent amendments.
- II. Although, as submitted by the PP, the proposed 350 MW IPP is supercritical, the concurrence of CEA shall have to be obtained for the compliance of the policy of MoP/CEA.
- III. Health survey of the workers and local inhabitants within 10 km radius of the project site has to be carried out.
- IV. Detailed Hydrological study of the area to be conducted with specific reference to ground water quantity and quality, and the impacts of using rainwater harvested on the ground water and stream flows within the study area.
- V. Temperature profile of the area for the last 10 years and the impact of the proposed 350 MW TPP on the temperature of the area.
- VI. Detailed Action taken on the non-compliance of the EC conditions as reported by the R.O.

- VII. Maximize the CSR capital cost as the same is quite less.
- VIII. Responses to the objections raised in the representation received by the Ministry and
- IX. Cumulative impact studies on the air and water qualities within 5 km radius of the project site.

## 2.1(A) 2x660 MW Imported Coal Based TPP at Villages Birra, Siladeshi and Gatwa, Taluk Bamnidhi, District. Jangir Champa, Chhattisgarh M/s MB Power (Chhattisgarh) Ltd. - reg. reconsideration for EC.

The proposal was earlier discussed in the 1<sup>st</sup> Meeting of the EAC (Thermal) held during 19<sup>th</sup> -20<sup>th</sup> September, 2013the minutes of which are as under:

Quote "The PP made a presentation and inter-alia provided the following information. The proposal is for setting up of 2x660 MW Imported Coal Based TPP at villages Birra, Siladehi and Gatwa, in Bamnidhi Taluk, in District Jangir Champa, in Chhattisgarh. Land requirement will be 925 acres, out of which 743 acres is single crop agriculture land; 138 acres is waste land and 44 acres comprises of abandoned minor canals. Green belt will be raised in an area of 160 acres. The co-ordinates of the site are located within Latitude 21°45'57.77" N to 21º46'14.69" N and Longitude 82º44'24.92" E to 82º45'56.38" E. Imported coal requirement will be 5.7 MTPA at 90% PLF. Imported Coal will be obtained from Indonesia. FSA has been signed with M/s PT. Mitra Setia Tanah Bumbu. Ash and sulphur contents in imported coal will be 15-25% and 0.1-0.4% respectively. Imported coal will be brought from Indonesia to Dhamra Port and thereafter by train to plant site. About 0.94 MTPA of fly ash and 0.24 MTPA of bottom ash will be generated. Ash pond area will be 190 acres and will now be located within the plant boundary. Bi-flue Stack of 275m shall be provided. Induced Draft cooling system will be installed. Water requirement of 36 MCM will be sourced from Mahanadi River. Water Resource Department, Chhattisgarh has planned to construct a barrage (Mironi Barrage) on Mahanadi River. An amount of Rs 22.6 crore has been already paid to WRD, Govt. of Chhattisgarh for construction of the barrage. There are no National Parks, Wildlife Sanctuaries, Heritage Sites, Tiger/Biosphere reserves etc. are within 10 km of the project site. Public Hearing was held on 21.10.2011. Cost of the project will be Rs.7890Crores.

The project proponent has also informed that a petition has been filed in High Court at Bilaspur by some of the land owners challenging the procedure adopted for land acquisition by Govt. of Chhattisgarh. The case is pending for disposal.

The Committee noted that baseline AAQ data has been mentioned in the EIA Report collected during October to December, 2009, whereas, TOR was issued on 04.12.2009. The project proponent clarified that while consideration for TOR, the proposal had gone twice to the Committee and permission for using data for post monsoon period of September – December, 2009 was sought and agreed to during the deliberation of the EAC meeting held in October, 2009.

The Committee also noted that the site is very close to Hasdeo River. It was also noted that the site being in conformity to guidelines on siting criteria i.e. 500 m from HFL of river etc. was an issue while the proposal was deliberated during considering for TOR in the meeting held in September, 2009. That a specific TOR provision at item (iii) was therefore prescribed to this effect and while deliberations in September, 2009 was asked to come with this confirmation with support of IRSA satellite imagery.

The Committee further noted that a network of canals appeared in the plant site which requires diversion and also some water bodies' vicinity. It was also observed that the proposed ash pond location was not appropriate and needed relocation.

It was observed that the report on R&R Plan, in particular the chapter on implementation arrangement and costing contains no specific commitment and action plan for implementation of various schemes devised. It was also noted that AAQ assessment appeared to be very ideal data and needed to be rechecked after carrying the modeling and data which should be resubmitted after rechecking.

The Committee discussed the Public Hearing issues and the response made by the project proponent. The major issues raised were regarding compensation for land; demand for educational and civic amenities; provision of employment to locals; adoption of village Birra; afforestation; medical facilities; opposition to acquisition of land; preservation of village ponds; protection of local deity (18th century Shivnarayan temple); impact due to pollution from power plant; marginalization of farmers due to loss of livelihood etc.

The Committee on perusal of the issues raised in the Public Hearing noted that the project may entail marginalization of farmers particularly landless farmers and therefore decided that implementation of R&R shall include formulation of special schemes for landless farmers whose sustenance was dependent on the land proposed to be acquired for the power project. The Committee therefore suggested that the project proponent shall identify such category of landless farmers and accordingly revise R&R plan.

The Committee observed that there are gaps in the information and therefore decided that the project is too premature for consideration in its present form and would be taken up on submission of the following additional details:

- i) Documentary evidence that the site is in conformity with the guidelines on citing criteria of thermal power plants and is at least 500 m away from HFL of river. IRSA satellite imagery superimposing HFL authenticated by concerned agency (WRD/Irrigation Deptt.) should be submitted;
- ii) Water availability especially during lean season keeping into consideration the riparian needs of Mahanadi/Hasdeo River and details of downstream competing sources shall be submitted:
- iii) Action plan for implementation of issues raised in Public Hearing along with activitywise committed expenditure for proposed CSR activities submitted;
- iv) Identification of marginalized section of community and formulation of scheme for their welfare. The R&R Plan to be revised suitably;
- v) Prior approval of Archaeological Survey of India (ASI) or a copy of application or NOC from ASI for setting up the power plant nearly 18th century temple located in study area:
- vi) AAQ assessment to be redone and resubmitted;
- vii) Ash pond location shall be revised and new location with co-ordinates on a topo-sheet submitted;
- viii) Identify institute for carrying out long term study on radio activity and heavy metals contents on coal to be used, ensuring that a mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) is also put in place; and
- ix) Submit soft copies of Form-I, Feasibility report, EIA/EMP report and its addendum, Public Hearing proceedings, MoU/FSA for fuel etc.(if not already done).

Accordingly the proposal was deferred for re-consideration at a later stage.

On submission of the above the matter was again taken up.

The project proponent reiterated that the proposal based on imported coal is only for an interim period until domestic coal is made available. Whereas the EIA study has been done based on domestic coal which has worst coal characteristics compared to the present proposal on imported coal from Indonesia.

The issue of water availability and needs for riparian rights was again discussed. It was noted that HFL of Hasdeo River is stated to be at 649 m from plant boundary. The project proponent also presented a superimposed map indicating HFL of the river over IRSA satellite imagery.

On the issue of water balance study during lean season keeping into consideration the riparian needs of Mahanadi/Hasdeo and downstream of competing sources, it was stated that 2000-2001 was the leanest year of water flow in the river. That the lean season flow for 100% dependable year has been considered for assessment of meeting the downstream riparian needs as well as other downstream competing sources after meeting the upstream requirement. That based on the analysis, it has been found that downstream riparian needs including requirement of competing sources are fully met with both Basantpur and Mironi Barrages. That water for the plant will be drawn u/s of Basantpur Barrage, being constructed by WRD, Govt. of Chhattisgarh.

The Committee noted that as per information provided by the project proponent Basantpur Barrage has committed annual water requirement for KSK Mahanadi Thermal Power Plants; NTPC Lara TPP; Jindal India Thermal Power Plant; Sona Power TPP; Govt. of Chhattisgarh, Irrigation scheme, the total requirement for which is 218 MCM. And the downstream flow for competing users and riparian needs is 7551.89 MCM. Whereas, committed annual water requirement from Mironi Barrage are for Athena Chhg TPP; NTPC Lara TPP; Shyam Century Ltd; and Govt. of Chhattisgrah, Irrigation Scheme, the total of which is 117.6 MCM. And the downstream flow for use by downstream competing users and riparian need is 7434.29 MCM. The distance between Basantpur and Mironi Barrages is 19.5 Km.

The Committee also revisited the issues raised in the public hearing and the response and action plan for implementation prepared by the project proponent. With regard to marginalized farmers, it has been noted that about 334 farmers have been identified as marginalized out of 831 project affected families (PAFs) due to land acquired for the project. It has been stated that each of these farmers will be employed in the project. It was further committed that a comprehensive development plan for Birra and other villages as part of CSR will be implemented. An amount of Rs 31.00 Crores as one time cost and Rs 6.0 Crores has been committed for CSR activities.

The Committee noted that the revised AAQ impact assessment need to be examined by representative of IMD and thereafter its findings be conveyed to the Ministry. It was also noted that the status of pending High Court matter and the issues thereon are unavailable.

The issue of procedural deviation w.r.t AAQ and other data collected prior to issue of TOR was also raised. It was informed that perusal of the minutes of the project wherein TOR was recommended does not seem to indicate the Committee having conceded to the purported plea of using data already collected. The Committee therefore decided that in addition a one season AAQ data (including metrological and others) shall be collected and impact assessment in the form of an addendum to EIA submitted.

The Committee also informed the project proponent to submit confirmation from the Port and Railway Authorities on availability of capacity for handling their imported coal and transportation from port to site.

# In view of the observation made above, the Committee decided that the proposal be deferred and shall be taken up once information/study noted above are submitted. Unquote"

- 2. On submission of the above information, the proposal was placed before the EAC, wherein the PP made a presentation along with their environmental consultant, Greencindia Consulting Private Limited, Ghaziabad and inter-alia provided the following information:
  - (i) As desired by EAC, one season AAQ Data was collected (including meteorological and others) from the period December, 2013 to February, 2014. The assessment in form of "Environmental Monitoring Addendum Report" was submitted to IMD and MoEF. The Cumulative Resultant Concentrations shall be within the NAAQS.
  - (ii) Regarding letter from railway authorities for transportation of imported coal from port to site, SECR, Bilaspur has given Railway Transport Clearance vide letter dated 05.06.2013 regarding transportation from Western port to site.
  - (iii) Regarding letter from port authorities confirming capacity for handling imported coal, Adani Port vide letter dated 04.02.2014 has given in principle consent for import of coal through Mundra Port.
  - (iv) Regarding the status of pending High Court matter, a Petition was filed against the Govt. of Chhattisgarh challenging the land acquisition process adopted by the Govt. of Chhattisgarh in 2012. The single bench had given Judgment in favor of petitioners. The Government of Chhattisgarh, CSIDC and MB Power (CG) Ltd. had filed Writ Appeal against the Order passed by the Hon'ble Single Judge. The Division Bench of Hon'ble High Court of Chhattisgarh has quashed the single bench Judgment and given decision in favor of Govt. of Chhattisgarh, CSIDC and other Industries including the PP and reinstated the land acquisition proceedings. Certified copy of the Judgment has been submitted.
- 3. After detailed deliberations, the Committee sought the following information/documents, and hence the proposal was **deferred**:
  - I. Comments of the member from IMD on the revised AAQ impact assessment as per the earlier decision.
- II. Action plan for commissioning of the railway siding so that there would be no road transportation of coal.
- III. Revised detailed budgetary action plan for PH issues taking into account the recent Court Judgment(s).
- IV. Permanent corpus fund for land/livelihood losers in addition to the CSR and R&R already agreed earlier.
- V. Responses to the issues raised in the representation received.

# 2.2 2x300 MW (Phase-I) Coal Based Thermal Power Plant at Villages Ghankukh (Bijora), Taluk Mahagaon, District Yavatamal, Maharashtra by M/s. Jinbhuvish Power Generations Pvt. Ltd. – reg. Amendment of EC.

The PP made a presentation and *inter-alia* provided the following information:

- (i) EC was accorded to the above project on 30.07.2012. Subsequent to the EC, the acquisition of remaining land has resulted into slight modification of orientation namely the co-ordinates of sites for main plant area, ash pond, water reservior, colony/township/hospital and green plantation. Additional land has been acquired for main plant area (20.24 ha), ash pond and utilities (1.22 ha), water reservior (46.94 ha), green plantation (18.23 ha), township + guest house + hospital (CSR) (8.09 ha). As per EC, the total land requirement was 191.02 ha (472 acres) and the revised land requirement is 248.13 ha (613.15 acres)
- (ii) As advised by the State Water Resoruces Department vide its water agreement, that project proponent has to make own arrangement of water storage during lean season (four months) for which land has been procured. After calculatin of four months water requirement, additional land was acquired for water reserviour which was not provided earlier. After purchasing the land, there were minor changes in co-ordinates. The township, guest house and hospital were not provided earlier. No forest or government land is involved.
- 2. After detailed deliberations, the Committee sought the following information/documents, and hence the proposal was **deferred**:
  - I. The modified layout should overlay on the detailed layoutshowing various facilities and the areaearmarked for each facility as proposed in EC.
  - II. Explore the feasibility of installation of ACC in lieu of WCC to conserve the water The rain water harvesting shall be maximised to reduce the consumption of water from the river/stream.

# 2.3 2x515 MW Imported Coal Based Thermal Power Plant at Villages Kattupalli & Kalanji, Taluk Ponneri, District Thiruvallur, Tamil Nadu, by M/s. Chennai Power Generation Ltd.- reg. ToR

The PP along with their environmental Consultant, Creative Engineers & Consultants, Chennai made a presentation and *inter-alia* provided the following information.

(i) The above location was selected by Tamil Nadu Electricity Board (TNEB) for setting up the Power Plant and allotted through MOU route to the PP (CPGL). The MOU was signed with TNEB on 18.2.95. Land was reserved vide G.O No. 47 dated 5-2-1998 for setting up of this power plant. Initially 1000 MW Gas based power plant was proposed based on LNG Terminal to be erected by TIDCO. EC from MOEF was obtained vide letter dated 19.3.1997 using naphtha as fuel and various other clearances were also obtained. Subsequently, TIDCO dropped the proposal to establish the LNG Terminal. Then the company approached MOEF to give amendment for change of fuel from Naptha to Imported coal (Ltr. no 27/12/2007). MOEF asked for revised EIA/EMP report for the proposed imported coal based thermal power-plant.

- Subsequent to submission of fresh application to get EC to MOEF for the project during January 2009, based on the EAC Meeting held during 12th - 13th March, 2009 and again on 15th-16th April, 2009, TOR was issued for the project on 03.06.2009. During the presentation to the EAC, it was informed that there is overlapping of lands between this project site and the North Chennai Power Company Project site and CPGL requested the Committee to impress upon North Chennai Power to spare 70 acres of land for this project so that both the projects can come up in the same area. However, M/s North Chennai Power Company refused to spare and MOEF gave EC to North Chennai Power Company ignoring our objections and also imposed two special conditions in our ToR namely a) Clear ownership of the lands belonging to the company free of all encumbrances and b) There should not be any overlapping of the lands belonging to any other company and we have to get a certificate from Revenue Authorities for the above two conditions. Even though studies were completed as per TOR, could not proceed further as Pollution Control Board, Tamil Nadu refused to conduct Public Hearing stating that overlap of land issue was not resolved. As the project could not proceed further and in order to get remedy, CPGL approached Hon'ble High Court, Madras in W.P. No. 25545 of 2010 and 25080 of 2010 for cancellation of environmental clearance issued to M/s North Chennai Power Company.
- (iii) In the counter filed by MOEF, it was stated that MOEF had no objection for the two power projects co-existing in the areas in question with maintenance of environmental integrity of power project to come up vis-à-vis that of the base line environment. Further, during the arguments in the Court, M/s North Chennai Power Company submitted that they have no objection for CPGL to acquire lands in the overlapping area and proceed with their project. Based on the assurance given by MOEF in the Counter that both projects can co-exist, the case pending in the High Court of Madras was disposed on 29.11.2011. During the litigation in the Court, the validity of TOR given to our project on 03.06.2009 had expired and as per the direction of MOEF, fresh application for issue of TOR has been submitted.
- 2. The Committee noted that there is no documentary proof that the North Chennai Power Company agreed for the use of some land which was already included in the EC given to North Chennai Power Plant, although the PP claims that there is no objection of the use of land by the Chennai Power Corporation. Further, North Chennai Power Company has also not approached the Ministry for any amendment in the EC regarding deletion of the land claimed by the Chennai Powewr Plant from the EC. Hence, the Committee suggested that the PP may amicably resolve the issue with North Chennai Power Company and both shall approach the Ministry for further consideration of the TOR for Chennai Power Corporation TPP. The proposal was, accordingly, deferred.

# 2.4 Expansion by addition of 1x250 MW Coal Based Thermal Power Plant near Village Paras, District Akola, Maharashtra by M/s. Maharashtra State Power Generation Co. Ltd.- reg. Extension of validity of ToR

The PP made a presentation and *inter-alia* provided the following information.

(i) ToR for the above proposal was accorded by MoEF on 26.09.2012. Baseline study was conducted by NEERI during October-December, 2012. The source of coal was changed from Mahanadi Coal Block to Mahajanwadi Coal Block by Ministry of coal vide letter dated 06.09.2014. Due to change in source of coal and revision in EIA report, MAHAGENCO has requested for extension of validity of ToR and the same was granted by MoEF&CC upto 25.09.2015.

- (ii) The Public Hearing was scheduled by MPCB for 29.04.2015 but postponed due to unavoidable reasons. An application was submitted to MPCB vide letter dated 28.07.2015 for revised date of Public Hearing and MPCB vide letter dated 25.08.2015 has asked to take extension of validity of ToR. Therefore, extension of ToR validity till 25.09.2016 is sought.
- 2. After detailed deliberations, the committee recommended for extension of validity of ToR for further one year as per the Ministry's Policy in this regard and subject to the following additional ToR.
  - (i) The concurrence of MoP/CEA shall be obtained for installation of sub-critical Unit in light of O.M. dated 13.11.2009 of MoP.

#### Item No. 3: ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR.

3.1 Marwa Thermal Power Plant of 2x500 MW at Marwa, District Janjgir Champa in Chhattisgarh by M/s Chhattisgarh State Power Generation Company Ltd.- reg. Reconsideration for Extension of EC.

The proposal was earlier discussed in the 28th and 34th Meetings of the EAC (Thermal) held during **22nd** -23rd **December**, **2014** and **29th**-30th **April**, **2015** respectively, the minutes of which are as under:

**Quote** "The PP made a presentation and inter-alia provided the following information. The proposal is for extension of validity of EC accorded by the Ministry for the above project on 05.02.2008. Consent to Establish (CTE) was accorded by Chhattisgarh Environment Conservation Board (CECB) on 05.05.2008 and the validity was extended till 01.05.2016. The Consent to Operate (CTO) for Unit 1 was accorded vide letter dated 31.03.2014 with the validity of three months. The validity extension has been requested from CECB and the same is awaited.

- 2. Regarding current status of the project, trial synchronization of Unit 1 was done on 20.12.2013 and coal fired synchronization of Unit 1 was done on 30.03.2014 to achieve the CEA capacity addition plan. O&M team is available at site for operation of Unit 1. The construction of track hopper is under progress and CHP commissioning is expected by March, 2015. Rail connection from the Naila Railway Station for coal transport is expected by January, 2015. Ash dyke civil work for HCSD and water mash lagoon was completed and laying of piping is under progress, which is expected to be completed by end of January, 2015. Steam blowing of Unit 2 (steam piping) was done and normalization is under process, which is planned for synchronization in February, 2015. Work on ETP is in progress.
- 3. Raw water from Hasdeo River is being utilized for different utilities of the power plant i.e. D. M water, clarified water, fire fighting system etc. Two reservoirs of 5 lakh cu.m each are ready and D.M plant has been commissioned. Tapering coal linkage from SECL was obtained and FSA signed on 04.09.2013 between SECL and CESPGCL. The compliance to conditions stipulated in the EC was presented. The progress of various units/facilities including CSR activities along with photographs was presented. An amount of Rs. 18.75 lacs has been incurred for CSR activities during 2009-13. It is proposed to donate Rs. 8.6 crores for an engineering college in the District and first installment of Rs. 2.0 crores has already been provided to District Administration. Green belt development shall be initiated after completion

of erection activities. However, plantation of one lac tree in vicinity of intake pump house in 44.534 ha has been done in the year 2010-12 through Rajya Van Vikas Nigam, Chhattisgarh.

- 4. The reasons for delay in implementation of the project are delay in land acquisition and very slow progress by BOP vendor.
- 5. The Committee noted that the Ministry has received a representation from Mr. Jaigopal Soni against the project. The reply of PP to the representation was sought by the Committee for further consideration of the project.
- 2. On submission of the above said reply, the proposal was placed before the EAC, wherein the PP made a presentation on the issues raised in the said representation and interalia provided the following information-
- 1) The ultimate capacity of Marwa Power Plant was informed as 3x500 MW in year 2007 to MoEF. No additional land for Unit No. I & II over and above the limit of 508 Ha has been acquired. The land for Phase-II shall facilitate enhancement of the capacity utilizing the common facilities and infrastructure. Trial synchronization of Unit no. 1 was done on 20.12.2013 and coal fired synchronization was done on 30.3.2014. Trial synchronization of Unit #2 was done on 31st March, 2015 with oil support. Work of coal unloading facility is on the verge of completion and commissioning of Coal handling Plant (CHP) is expected by March, 2015. The delay in the project was because of the land acquisition.
- Regarding reply to the representation, it was submitted that the complainant has stated in its complaint that he has lodged some complaint to the Revenue Authorities who have asked him to approach Court of Law. CSPGCL cannot therefore comment on this issue as it is between the complainant and Revenue Authorities of the State. Complainant has never approached CSPGCL in this matter. However, his main complain is regarding some small piece of land. It was submitted that entire land for the Project has been acquired through the Collector, Janigir - Champa who has issued awards after observing all necessary formalities as per LA Act CSPGCL is a Govt. of Chhattisgarh undertaking and is fully committed for implementation of approved R&R Policy of the State Govt. R&R Policy of State Govt. is being followed. There is distinction between displaced family/person and affected family/person. Compensation over and above payable as per award under LA Act has been given on demand of the land owners. Policy provides the order of preference for employment to the displaced people on the basis of percentage of total land holding. Employment / alternate arrangement is to be provided on the basis of availability and eligibility. There have been many such applications and out of total 52 cases filed by the land owners in the High Court of Bilaspur, 48 nos. have been disposed off and three have been replied. Reply against only one petition is to be filed.
- 3) The Committee also discussed the issues raised by the Appellant in his e-mail dated 27.04.2015. It was noted that the issues are primarily w.r.t R&R and the State Govt. is the concerned Authority which needs to look into the matter. Regarding Consent to Establish (CTE) and Consent to Operate (CTO) issues, the MOEF & CC may get clarification from the Chhattisgarh Environment Conservation Board (CECB).
- 4) The issue of construction/trial operation without a valid EC for this expansion project, it was informed by the PP that they had applied for extension of EC to the Ministry prior to the expiry of the validity period of EC. However, the statement of the PP could not be ascertained. It was noted that at the time of synchronization of this expansion unit, the EC was not valid as it had expired.

- 5) The Committee was of the view that since the Unit is already synchronized, there is nothing technically prohibiting the extension of EC. However, legal aspect of validity of applying period needs to be looked into by the Ministry. In view of the advanced stage of implementation of the Project, the Committee decided that in accordance with the provisions of EIA Notification, 2006 and in public interest, the **request for extension upto 31.12.2015 can be agreed with** and the additional conditions which were earlier not prescribed but relevant now be also stipulated." **Unquote**
- 2. The above proposal was again referred to the EAC as it was noted by the Ministry that the PP did not submit the mandatory Form-I when the proposal was earlier considered by the EAC. The same was subsequently sought from the PP and was submitted. The PP was directed to submit the differences, if any, of earlier information and that of the Form-I.
- 3. Accordingly, the PP clarified that regarding litigations, in Form-I Sl. No. 15 & 25, the information has been given as 'No' & 'Nil' respectively against the query stating that 'is there litigation pending against the project and or land, however in the earlier submitted Form titled 'Basic Information', it was mentioned at Sl. No. 27 against query regarding Litigation pertaining to the project, as "Out of total 52 cases filed in the High Court of C.G., 48 cases have been disposed off, in 3 cases reply has been filed and in 1 case (Mr. Khemraj) Jaiswal Vs. CSPGCL, Petition No. 1262/14) reply is to be filed". Both the replies are technically correct as no litigation is pending against the project and its installation, however, the W.Ps have been filed by the PAPs for seeking employment under R&R scheme of the project. The matter pertains to the jurisdiction of the court and it is not violation of any environmental issues/conditions. Further, as of now the number of total W.Ps filed have changed to 64, out of which 60 cases have been disposed off and remaining four cases, replies have been filed and hearing has been completed in three cases.

Regarding hazardous wastes, in Sl. No. 4.3 of Form –I, the information regarding hazardous wastes was submitted, which was not mentioned in earlier submitted "Basic Information" as there was no query/point about the same in the prescribed format.

- 4. Chhattisgarh Environment Conservation Board (CECB) has granted 'Consent to Operate' for both the Units till 29.03.2016, accordingly trial & commissioning activities are being undertaken. For achieving COD of Unit #1the machine was put on trial run during 23.06.2015 to 29.06.2015, but due to some teething troubles the Unit was stopped and subsequently on 14.07.2015 a fire accident occurred in Crusher House of the Plant, which can be restored in 3-4 months time, therefore as per the revised programme Units are proposed to be commissioned by end of FY 2015-16. In view of this mishap, it is likely that the time extension for commissioning as proposed by Hon'ble EAC till December, 2015 may not suffice for completion of balance works. Hence, it is requested to consider time extension for five years i.e. till 04.02.2018.
- 5. After detailed deliberations, the Committee noted that there was no suppression/significant deviation in the information presented from the earlier information submitted. Therefore, the committee reinstated its earlier recommendation. The committee also recommended the extension of validity of EC for another period of five years i.e. till 04.02.2018, considering the unexpected delays etc.

## 3.2 Request from Association of Power Producers (APP) to Revisit Restrictive Condition of Maximum 12% ash content on imported coal fired in Coastal Thermal Power Plants.

Association of Power Producers (APP) has requested the Ministry to revisit the restrictive condition of maximum 12% ash content on imported coal fired in coastal TPPs. The following was inter-alia submitted:

- (i) Due to the condition of maximum 12% ash in steam coal specified in the O.M. dated 05.02.2013 by the Ministry, the power projects set-up and situated in the coastal region and based on imported coal are unable to utilize high grade bituminous steam coal available from Australia, South Africa, Russia, Columbia. At present, TPPs are being forced to use Indonesian coal having very low heat value (GCV of 3400-4000 Kcal/Kg) and very high moisture content (34-40%) which results in reduced efficiency and increased coal consumption.
- (ii) In order to produce 1000 MW power annually, Indonesian coal requires additional 1.70-2.55 MMT of Coal as compared high grade (Australian/South to African/Russian/Columbian) coal. This results in 60% - 85% increased consumption of coal further leading to increased energy waste & pollution, reduced efficiencies and increased costs to power plants. The ash generation by use of Indonesian coal and Australian /South African/Russian/Columbian would be 0.56-0.66 MMT and 0.74 MMT respectively. Hence, it is requested to review the ash content percentage restriction and revise the same to 25%, so that high grade, low moisture imported coal can be utilized, thus delivering high efficiencies and lower cost of generation with actual ash generation remaining the same.
- 2. The matter was earlier referred to the EAC and the EAC opined that the comments of CEA may first be sought. The observations of CEA were placed before the Committee and the matter was deliberated at length. The Committee inter-alia noted that lesser is the ash generation the lesser would be its environmental impacts. However, by restricting the ash content upto 12 %, the source of coal gets restricted to a particular origin and thus the price competitiveness may have to be compromised. This may also be contrary to the objectives of the Competitive Bidding Guidelines and the Electricity Act, 2003.
- 3. Further, bulk of the imported coal having ash content lower than 12 % are typically of Indonesian origin having high moisture content of about 30-40%. When high moisture coals are fired in boilers, a substantial amount of the heat input is used to evaporate and superheat the moisture in the fuel, thus pay a substantial price in efficiency. Contrary to Indonesian coal, the other major sources of imported coal viz, Australia, Russia, USA, etc. are having ash content of about 25 % with moisture content of upto 15 %.
- 4. After detailed deliberations, the Committee recommended that the restriction on maximum ash content of imported coal may be increased upto 25% and EIA, be carried out accordingly.

There being no agenda item left, the meeting ended with a vote of thanks to the Chair. The next meeting of the EAC (Thermal Power) is scheduled for **29**<sup>th</sup>-**30**<sup>th</sup>**October**, **2015**.

\*\*\*\*\*

(Prof. C.R. Babu) (Shri T.K.Dhar) (Shri J.L Mehta) Vice Chairman (Acting Chair) Member Member (Shri G. S. Dang) (Shri N.K. Verma) (Shri P.D. Siwal) Member Member Member (Shri S.S. Bala) (Shri A. K. Bansal) (Shri B.B. Barman) Member Member Member Secretary

#### **List of Participants**

### 2.1 M/s. ARS Metals Ltd.

- 1. Sh. Rajesh Bhatia
- 2. Sh. R. Saravanan
- 3. Sh. K.A. Ganesh
- 4. Sh. J. Bharatraj, Env. Engr., Vimta Labs
- 5. Sh. Muneswava, Vimta Labs

### 2.1(A) M/s. MB Power (Chhattisgarh) Ltd.

- 1. Sh. Gopal Krishna, Project Head
- 2. Sh. B.K. Singh, Sr. Vice President
- 3. Sh. Shahid Khan, Dy. Manager
- 4. Sh. Baninder, Manager
- 5. Mrs. Nandini, Greencindia Consulting Private Limited.
- 6. Sh. Nilanjan Das, Greencindia Consulting Private Limited.

### 2.2 M/s. Jinbhuvish Power Generations Pvt. Ltd.

- 1. Sh. Ashok Mundara, Sr. Vice President
- 2. Sh. Manish Anand
- 3. Sh. Sunil Ingle
- 4. Dr. C.P. Vibhute

#### 2.3 M/s. Chennai Power Generation Ltd.

- 1. Sh. Justin Paul, President (Tech.)
- 2. Sh. Nishith Gupta, President (Finance)
- 3. Sh. P. Giri, Creative Engineers & Consultants

### 2.4 M/s. Maharashtra State Power Generation Co. Ltd.

- 1. Sh. J.S. Duge, Dy. Chief Engr.
- 2. Sh. Pradeep Salve, Senior Scientist, NEERI

### 2.5 M/s. Chhattisgarh State Electricity Board.

- 1. Sh. P. C. Sharma
- 2. Sh. O.P. Oiha
- 3. Sh. J.R. Verma, Senior Chemist
- 4. Sh. R.K. Shrivas, S.E. (PRG-I)
- 5. Sh. T.K. Netum, SE (HR)
- 6. Sh. R.P. Nigam, S.E (Civil)
- 7. Sh. Apoorv Kurup, Advocate