

MINUTES OF THE 42nd MEETING OF RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE ON ENVIRONMENTAL IMPACT ASSESSMENT OF THERMAL POWER AND COAL MINE PROJECTS

The 42nd Meeting of the reconstituted Expert Appraisal Committee (Thermal) was held during **February 6-7, 2012** at Scope Convention Centre, SCOPE Complex, Lodhi Road, New Delhi. The members present were:

1.	Shri V.P. Raja	-	Chairman
2.	Dr. C.R. Babu	-	Vice-Chairman
3.	Shri T.K. Dhar	-	Member
4.	Shri J.L. Mehta	-	Member
5.	Dr. G.S. Roonwal	-	Member
6.	Dr. S.D. Attri	-	Member
7.	Dr. K.K.S. Bhatia	-	Member
8.	Shri M.S. Puri	-	Member
9.	Dr. P.L. Ahujarai	-	Member Secretary

Dr. CBS Dutt, Shri V.B. Mathur and Member Secretary CPCB were absent.

In attendance: Sh. W. Bharat Singh, Deputy Director, MoEF.

The deliberations held and the decisions taken are as under:

DATE: 06.02.2012.

ITEM No.1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING.

The Minutes of the 40th Meeting held during January 9-10, 2011 were confirmed with minor amendments.

ITEM NO. 2.0 CONSIDERATION OF PROJECTS

2.1 1300 MW Combined Cycle Gas Based Thermal Power Plant of M/s DMICDC Vaghel Power Company Ltd. at village Vaghel, in Sami Taluk, in Patan Distt., in Gujarat -reg. Environment Clearance.

M/s DMICDC prior to taking up the present proposal, presented the overall objectives, status and progress of the Delhi-Mumbai Industrial Corridor being undertaken. It was stated that the key principle of the venture is aimed at meeting community needs with transit oriented development focussing on integration with existing villages and thus decentralizing regional development. The necessity to first develop trunk infrastructure prior to development of town, which largely are highly geographic as on date was focussed.

The proposal was for consideration for **environmental clearance**. The project proponent made a presentation along with its consultant M/s Detox Corporation Pvt. Ltd., Surat, Gujarat and provided the following information.

The proposal is for setting up of 1300 MW Combined Cycle Gas Based Thermal Power Plant at village Vaghel, in Sami Taluk, in Patan Distt., in Gujarat. Land requirement will be 226 acres, which is Govt. waste land. Out of the total land required, about 111.36 acres will be used for main power plant; 12.67 acres will be used for Township; and 101.56 acres will be used for green belt area. The co-ordinates of the main plant site are located in between Latitude 23⁰37'28.13" N to 23⁰38'1.61" N and Longitude 71⁰56'15.58" E to 71⁰57'0.39"E. Natural gas requirement would be about 5.0 MMSCMD. Stack height will be 60 m. Water requirement will be 28.234 MLD and will be sourced from the Bolera Branch Canal of Sardar Sarvoar Narmada canal through a pipeline at a distance of about 8.0 km downstream from the project site. Induced draft cooling water system will be installed. There are no National Parks, Wildlife Sanctuaries, Heritage Sites, Tiger/Biosphere Reserves etc. within 10 km of the project site. Public Hearing was held on 15.06.2011. Cost of the project is estimated to be Rs 3800.00 Crores.

The Committee discussed the issues raised in the Public Hearing and the response made by the Project Proponent. The major issues raised were regarding compensation to farmers for land acquired for laying gas pipelines; employment opportunity for locals especially SC/STs which comprises of 70% of total population of villages; historical importance of Vaghel; preservation of village pond of around 500 bigha in Vaghel; land used for grazing by livestock in villages; names of villages where development activities are proposed; provision of drinking water and treatment facilities; management of RO rejects; noise pollution mitigation measures; health care and education; rain water harvesting; migration of villagers due to proposed project etc. The Committee also noted that two written representations received have already been addressed by the project proponent. The project proponent also informed that no litigation is pending / filed pertaining to the power project.

The Committee also observed that water being a scarce resource in the area, the project proponent shall undertake measures to ensure that degraded ponds/ tanks in the area are re-generated.

Based on the information and clarifications provided, the Committee *recommended the project for environmental clearance* subject to stipulation of the following specific conditions:

- i) The project proponent shall initiate a long term study through a reputed institution to assess the cumulative impact of the power plants on the AAQ of the area. The study shall in particular assess the impact of emission of the gas power plant on the chemistry of upper atmosphere and the impact on radiation budget. It shall be ensured that the study takes into account the worst seasonal atmospheric conditions.
- ii) Dry NO_x burners shall be installed to control NO_x emission.
- iii) Height of stack for each module shall not be less than 60 m with flue gas velocity not less than 22 m/s.
- iv) Mass Spectrometer based Helium detector for detection of HC shall be installed.
- v) Concentration for photochemical oxidants shall be monitored along with NO_x and permanent monitoring stations shall be installed. Ambient Air Quality shall be installed in the eastern direction to monitor the air quality and monitored data shall be submitted periodically to the Regional Office of the Ministry.
- vi) Harnessing solar power within the premises of the plant particularly and at available roof tops shall be made and the status of implementation submitted every six months to the Ministry.
- vii) COC of atleast 5.0 shall be adopted.

viii) The project proponent shall regenerate degraded water bodies in the area and shall undertake proactive measures such as rainwater surface runoff harvesting in this regard and status on action taken submitted to the

Ministry from time to time.

ix) 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 be undertaken. The ground water quality shall be monitored continuously to assess the impact on the levels of ground water.

x) Waste water generated from the plant shall be treated before discharge to comply with limits prescribed by the SPCB.

xi) 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. Action plan and road map for implementation shall be submitted to the Ministry **within six months**.

xii) Well designed acoustic enclosures for the DG sets and noise emitting equipments to achieve the desirable insertion loss viz. 25 dB(A) should be provided.

xiii) Additional soil for leveling of the sites should be generated within the site in a way that natural drainage system of the area is protected and improved.

xiv) Village ponds in the study area, especially in the vicinity of the project site shall be regenerated / maintained by the project proponent at its own expenses.

xv) A special scheme for upliftment of SC & ST population in the study area shall be formulated and implemented in a time bound manner. The project proponent shall also identify the rights of Tribals under existing Laws and ensure its protection and implementation thereof.

xvi) In case diversion of grazing land is involved, an equal area of grazing land shall be developed in a time bound manner. The status of implementation thereof shall be submitted to the Regional Office of the Ministry from time to time.

xvii) An amount of Rs. 15.50 Crores as one time investment should be earmarked for activities to be taken up under CSR during the construction phase of the project. Recurring expenditure for CSR shall not be less than Rs. 3.04 Crores per annum till the operation of the plant. Detailed action plan with break-up of activities to be undertaken shall be submitted **within six months** to the Ministry.

xviii) CSR schemes shall be identified based on need based assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting **relevant training and retraining, if necessary, shall also be undertaken.**

xix) It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified is in place and annual social audit shall be got done from a government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time. The project proponent shall also put on the company's website the activities undertaken with budgetary achievements.

xx) The project proponent shall ensure that all possible hazards due to the power plant are contained within the plant premises.

xxi) Three tier Green Belt shall be raised all around the plant site which shall comprise of at least not less than 33% of the total area. The project proponent shall ensure that the density of trees are not less than 2500 per ha and rate of survival of plantation shall be not less than 80%. The selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

xxii) An Environmental Cell including a Sociologist shall be created at the project site itself and shall be headed by qualified officer, who is well versed with the environmental aspects of gas based power plant. It shall be ensured that the Head of the Cell shall directly report to the Head of the Organization.

2.2 Expansion by addition of 2x660 MW Stage-V (Unit -7 & 8) Coal Based Thermal Power Plant of M. P. Rajashtan Rajya Vidyut Utpadan Nigam Ltd. at village Thukrana, in Suratgarh Tehsil, in Sri Ganganagar Distt., in Rajasthan reg. Environmental Clearance.

The proposal was earlier placed in the 28th Meeting of the Committee held during July 4-5, 2011, wherein the Committee noted that no detailed information on forestry and environmental clearance of the coal blocks from where coal is to be sourced was not available. It was then informed that the coal blocks were reported to have been agreed for an in-principle clearance in a public announcement by the then Hon'ble Minister of Environment & Forests. The Committee had in the said meeting also noted that the EIA / EMP Report submitted for appraisal had not addressed adequately the contents of the TOR prescribed such as primary survey of flora and fauna; Hydro-geological study; CSR action plan etc. which were required to be formulated while applying for environmental clearance. The Committee therefore decided that the project proponent may address point wise compliance of the TOR and shall come back with full details. Accordingly the proposal was deferred for re-consideration at a later stage.

On submission of clarification of the earlier observations the matter was placed again for re-consideration.

The proposal was for consideration for **environmental clearance**. The project proponent made a presentation along with its consultant M/s Bharat Heavy Electricals Ltd., Pollution Control Research Institute and provided the following information:

The proposal is for expansion by addition of 2x660 MW Coal Based Thermal Power Plant at village Thukrana, in Suratgarh Tehsil, in Sri Ganganagar Distt., in Rajasthan. The existing plants are of capacity 2x250 MW (Stage-I); 2x250 MW (Stage-II); 1x250 MW (Stage-III); and 1x250 MW (Stage-IV). Land requirement will be 400 hectares, which comprises of 338 ha single crop agricultural land; and 22 ha waste land. Out of total land required, about 360 ha will be used for main plant; and 40 ha will be used for township. The co-ordinates of the site are located in between Latitude 29°08'51.81" N to 29°10'22.65" N and Longitude 74°00'25.93" E to 74°01'34.76"E. Coal requirement will be 6.5 MTPA and both will be domestic and imported. Domestic coal will be obtained from Parsa East & Kante Basan Coal Block for which Environmental clearance has been obtained on 21.12.2011. Domestic coal and imported coal will be blended in a ratio of 70:30 respectively. Ash content in domestic coal will be 25% and in imported coal will be 16%. The sulphur content of domestic coal will be 0.5% and in imported coal will be 0.3%. The nitrogen content of domestic coal will be 0.1% and in imported coal will be 0.1%.

located in between Latitude 29⁰10'1.08"N to 29⁰11'09.39"N and Longitude 73⁰58'14.34"E to 73⁰59'58.40"E. About 1.5236 MTPA fly ash and 0.3809 bottom ash will be generated. Stack height will be 275m. Water requirement will be 121.824 MLD and would be sourced from the Indira Gandhi Nahar Pariyojna through a pipeline at a distance of about 2-3 kms from the project site. There are no National Parks, Wildlife Sanctuaries, Heritage Sites, Tiger/Biosphere Reserves etc. within 10 km of the site. Public Hearing was held on 29.01.2010. Cost of the project will be Rs 7920.00 Crores.

The Committee discussed point-wise compliance of TOR and the status of compliance of the conditions stipulated in the environmental clearance accorded for the earlier stages. *The Committee observed that the status of compliance for the earlier stages shall be submitted to the Ministry for their record.*

The Committee discussed the Public Hearing issues raised and responses made by the project proponent. The Committee noted that major issues raised were regarding impact on environment due to proposed project; number of trees proposed to be planted in lieu of 1500 trees to be cut; nuisance of sewage from RVUNL township etc. The project proponent also informed that no litigation was pending / filed pertaining to the power project.

The Committee observed that the green belt presently existing in the power station was highly inadequate. The Committee, therefore, decided that the project proponent shall submit detailed plan of action for development of green belt with time bound implementation schedule and financial commitment to the Ministry as also to Dr. C.R. Babu, Vice-Chairman.

The Committee further noted that there appeared to be a symmetry of information for use of coal from the cited coal blocks and directed the project proponent to furnish to MoEF the approval of the Ministry of Coal.

Based on the information and clarifications provided, the Committee *recommended the project for environmental clearance* subject to stipulation of the following specific conditions:

- i) Scheme for implementation for harnessing solar power within the premises of the plant particularly available roof tops shall be prepared and status of implementation shall be submitted to the Ministry.
- ii) The project proponent shall undertake rain water harvesting measures and shall develop water storage for use in operation of the plant. Rain water harvesting system shall be put in place which shall comprise of rain water collection from the built up and open area in the plant premises. Action plan for implementation shall be submitted to the Ministry.
- iii) COC of 5.0 shall be adopted.
- iv) Monitoring 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 be undertaken.
- v) Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB.
- vi) Coal transportation shall be undertaken by rail and no road transportation shall be permitted.
- vii) Fly ash shall be used as per Fly Ash Utilization Notification, 1999 and as amended in 2003 and 2009. The detailed utilization plan may be submitted to the Ministry within next three months time.
- viii) Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall also be undertaken to protect the ash dyke from getting breached. Ash pond water shall be re-circulated and utilized.

- ix) The emission of particulate matter from the proposed thermal power plant shall not exceed 50 mg/Nm³ by installation of ESP.
- x) Village ponds in the study area, especially in the vicinity of the project site shall be regenerated / maintained by the project proponent at its own expenses.
- xi) A special scheme for upliftment of SC & ST population in the study area shall be formulated and implemented in a time bound manner. The project proponent shall also identify the rights of Tribals under existing Laws and ensure its protection and implementation thereof.
- xii) In case diversion of grazing land is involved, an equal area of grazing land shall be developed in a time bound manner. The status of implementation thereof shall be submitted to the Regional Office of the Ministry from time to time.
- xiii) An amount of Rs 31.70 Crores as one time investment shall be earmarked for activities to be taken up during the construction phase of the project under CSR. Recurring expenditure for CSR shall be Rs 6.33 Crores annually till the life of the plant.
- xiv) CSR schemes should address Public Hearing issues and shall be undertaken based on need assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR employment of local youth after imparting relevant training, as may be necessary, shall be undertaken as committed.
- xv) It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified is in place and annual social audit shall be got done from the nearest Government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time besides putting their programs along with budgetary allocation on company's website.
- xvi) Green Belt consisting of 3 tiers of plantations of native species around the plant of at least 50 m width shall be raised (except in areas not feasible). The density of trees shall not be less than 2500 per Ha and rate of survival at least 80%.
- xvii) Additional green belt of appropriate density and width not less than 50 m shall also be developed between the ash pond and the village facing the ash pond.
- xviii) An Environmental Cell including a Sociologist shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the head of the Cell shall directly report to the Head of the organization.

2.3 Expansion by addition of 2x660 MW (Stage-II) Units-5 & 6 Coal Based Thermal Power Plant of M. Rajashtan Rajya Vidyut Utpadan Nigam Ltd. at village Chowki-Motipura, in Chhabra, in Baran Distt., in Rajasthan reg. Environmental Clearance.

The proposal was earlier placed in the 28th Meeting of the Committee held during July 4-5, 2011, wherein the Committee noted that no detailed information on forestry and environmental clearance of the coal blocks from where coal is to be sourced was not available. It was then informed that the coal blocks were reported to have been agreed for an in-principle clearance in a public announcement by the then Hon'ble Minister of Environment & Forests. The Committee had in the said meeting also noted that the EIA / EMP Report submitted for appraisal had not addressed adequately the contents of the TOR prescribed such as primary survey of flora and fauna; Hydro-geological study; CSR action plan etc. which were required to be formulated while applying for environmental clearance. The Committee therefore decided that the project proponent may address point-wise compliance of the TOR and shall revert with full details. Accordingly the proposal was deferred for re-consideration at a later stage.

On submission of clarification of the earlier observations the matter was placed again for re-consideration.

The proposal was for consideration for **environmental clearance**. The project proponent made a presentation along with its consultant M/s Bharat Heavy Electricals Ltd. and Pollution Control Research Institute and provided the following information:

The proposal is for expansion by addition of 2x660 MW Stage-II Units -5 & 6 coal based Thermal Power Plant at village Chowki-Motipura, in Chhabra, in Baran Distt., in Rajasthan. Existing capacity is 1000 MW comprising of 2x250 MW Stage-I (Unit-1 & 2) and 2x250 MW Stage-I (Unit – 3&4). Land requirement will be 213 hectares, which has already been acquired. The co-ordinates of the site are located in between Latitude 24⁰37'42.21" N to 24⁰38'40.83" N and Longitude 77⁰01'48.28" E to 77⁰02'39.33"E. Coal requirement will be about 6.5 MTPA, which will be obtained from Parsa East and Kante Basan Coal blocks and both will be domestic and imported. Domestic coal and imported coal will be blended in a ratio of 70:30 respectively. Ash content in domestic coal will be 35% and imported coal will be 16%. The co-ordinates of the ash pond/dyke site are located in between Latitude 24⁰36'58.27"N to 24⁰37'49.09"N and Longitude 77⁰02'48.18"E to 77⁰03'20.75"E. About 1.5236 MTPA of fly ash and 0.3809 MTPA of bottom ash will be generated. Ash will be supplied to Cement manufacturers. Stack height will be 275m. Water requirement will be 121.824 MLD and will be sourced from the Parwan Dam & Lhasi Dam through a pipeline at a distance of about 65.0 kms and 45.0 kms respectively from the project site. Water linkage has been granted on 11.08.2009 & 22.11.2010 for obtaining water from Lhasi Dam and Parwan dam respectively. There are no National Parks, Wildlife Sanctuaries, Heritage Sites, Tiger/Biosphere Reserves etc. within 10 km of the site. Public Hearing was held on 15.02.2010. Cost of the project will be Rs 7920.00 Crores.

The Committee discussed point-wise TOR compliance and the status of compliance of the conditions stipulated in the environmental clearance accorded for the earlier stages. *The Committee observed that the status of compliance for earlier stages shall be submitted to the Ministry for their record.*

The Committee also discussed the Public Hearing issues raised and responses made by the project proponent. The Committee noted that major issues raised were regarding impact on environment due to proposed expansion, employment of locals; green belt development; civic amenities such as road, drinking water, health care facilities, electricity; impact on agricultural crops etc. The project proponent also informed that no litigation was pending / filed pertaining to the power project.

The Committee observed that water levels in bore wells downstream of the source of tapping need to be continuously monitored and shall construct check dams at appropriate locations of the streams / nallahs in the study area.

The Committee also noted that the green belt presently existing in the power station was highly inadequate. The Committee therefore decided that the project proponent shall submit detailed plan of action for development of green belt with time bound implementation schedule and financial commitment to the Ministry as also to Dr. C.R. Babu, Vice-Chairman.

The Committee further noted that there appeared to be a symmetry of information for use of coal from the cited coal blocks and directed the project proponent to furnish to MoEF the approval of the Ministry of Coal.

The Committee noted that the two coal blocks with its present mining plan could cater to only 3x660 MW, out of which 2x660 MW need to be utilized for Suratgarh project. The Committee therefore decided that even though appraisal is being carried out for both the units of 660 MW in the instant case, the Ministry shall process environmental clearance for only one unit of 660 MW in view of the non availability of firm coal linkage for the other unit.

Based on the information and clarifications provided, the Committee *recommended environmental clearance for only one unit ie 1x660 MW* subject to stipulation of the following specific conditions:

- i) For the second unit of 660 MW environmental clearance shall be granted after the project proponent submit details of firm coal availability.
- ii) Scheme for implementation for harnessing solar power within the premises of the plant particularly available roof tops shall be prepared and status of implementation shall be submitted to the Ministry.
- iii) The project proponent shall undertake rain water harvesting measures and shall develop water storage for use in operation of the plant. Rain water harvesting system shall be put in place which shall comprise of rain water collection from the built up and open area in the plant premises. Action plan for implementation shall be submitted to the Ministry.
- iv) COC of 5.0 shall be adopted.
- v) Monitoring 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 be undertaken.
- vi) Monitoring of water in the bore wells downstream of the point of water source shall also be continuously carried out and check dams built at appropriate locations in the study area in order to conserve water.
- vii) Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB.
- viii) Coal transportation shall be undertaken by rail and no road transportation shall be permitted.
- xix) Fly ash shall be used as per Fly Ash Utilization Notification, 1999 and as amended in 2003 and 2009. The detailed utilization plan may be submitted to the Ministry with in next three months time.
- ix) Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall also be undertaken to protect the ash dyke from getting breached. Ash pond water shall be re-circulated and utilized.
- x) The emission of particulate matter from the proposed thermal power plant shall not exceed 50 mg/Nm³ by installation of ESP.
- xi) Village ponds in the study area, especially in the vicinity of the project site shall be regenerated /

water.

- vi) Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB.
- vii) Coal transportation shall be undertaken by rail and no road transportation shall be permitted.
 - viii) Fly ash shall not be used for mine void filling or for agricultural purpose.
 - ix) Ash pond water shall be re-circulated and utilized.
- x) Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall also be undertaken to protect the ash dyke from getting breached.
- xi) The emission of particulate matter from the proposed thermal power plant shall not exceed 50 mg/Nm³ by installation of ESP.
- xii) Village ponds in the study area, especially in the vicinity of the project site shall be regenerated / maintained by the project proponent at its own expenses.
- xiii) A time bound implementation of issues raised in the Public Hearings conducted and agreed by the project proponent shall be submitted within three months.
- xiv) A special scheme for upliftment of SC & ST population in the study area shall be formulated and implemented in a time bound manner. The project proponent shall also identify the rights of Tribals under existing Laws and ensure its protection and implementation thereof.
- xv) An amount of Rs 1.40 Crores as one time investment shall be earmarked for activities to be taken up during the construction phase of the project under CSR. Recurring expenditure for CSR shall be Rs 0.30 Crores annually till the life of the plant.
- xvi) CSR schemes should address Public Hearing issues and shall be undertaken based on need assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR employment of local youth after imparting relevant training, as may be necessary, shall be undertaken as committed.
- xvii) It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified is in place and annual social audit shall be got done from the nearest Government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time besides putting their programs along with budgetary allocation on company's website.
- xviii) Green Belt consisting of 3 tiers of plantations of native species around the plant of at least 33% of total plant area shall be raised (except in areas not feasible). The density of trees shall not be less than 2500 per

and rate of survival atleast 80%.

xix) Additional green belt of appropriate density and width shall be also developed between the ash pond and the village facing the ash pond.

xx) An Environmental Cell along with a Sociologist shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the head of the Cell shall directly report to the Head of the organization.

2.5 2x800 MW Super Critical Coal Based Thermal Power Plant of M/s TANGEDCO (A subsidiary of TNEB Ltd.) at villages Uppur, Valamavoor and Thiruppalaikudi, in Thiruvadanai Taluk, in Ramanathapuram Distt., in Tamil Nadu -reg. TOR

The proposal was considered for determination of terms of reference for undertaking EIA/EMP study as per the provisions of EIA Notification, 2006. The project proponent gave a presentation and provided the following information:

The proposal is for setting up of 2x800 MW Super Critical Coal Based Thermal Power Plant at villages Uppur, Valamavoor and Thiruppalaikudi, in Thiruvadanai Taluk, in Ramanathapuram Distt., in Tamil Nadu. Land requirement will be 1200 acres, which is mostly barren land. The co-ordinates of the plant site are located in between Latitude 9^o35'N to 9^o37'N and Longitude 78^o54'E to 78^o54"E. Coal will be indigenous and imported. Indigenous and imported coal requirements will be 5.234 MTPA and will be used at a ratio of 30:70 respectively. About 2950 TPD bottom ash and 11800 TPD fly ash will be generated from this project site. Water requirement will be about 2,40,150 m³/hr using through Once Cooling System or 22,650 m³/hr with closed cycle cooling system NDCT and will be sourced from the Sea. There are no National Parks, Wildlife Sanctuaries, Tiger/Biosphere Reserves etc. within 10 km of the site.

The Committee observed that the project proponents has not identified other environmentally acceptable alternative sites as required and have come up with the present site only. The Committee also noted that toposheet of the site or satellite imagery of appropriate resolution was not made available.

In view of the above, the proposal was deferred for re-consideration at a later stage.

2.6 30 MW Bagasse and Biomass Based Thermal Power Plant of M/s Lokmangal Mauli Industries Ltd. at village Khed, in Lohara Taluk, in Osmanabad Distt., in Maharashtra - reg. TOR

The proposal was considered for determination of terms of reference for undertaking EIA/EMP study as per the provisions of EIA Notification, 2006. The project proponent along with its consultant M/s Avant-Garde Engineers and consultancy Pvt. Ltd., Chennai gave a presentation and provided the following information:

environment

The proposal is for setting up of 30 MW Bagasse and Biomass Based Co-Generation Thermal Power Plant at village Khed, in Lohara Taluk, in Osmanabad Distt., in Maharashtra. The Co-Generation plant will be installed within the proposed Sugar Plant (6000 TCD). Proposal for Sugar Plant is pending with the SEIAA, Maharashtra.

The Land requirement will be 50 ha (for both sugar and Co-Generation plants). The land comprises of 2.0 ha double crop agricultural; 12 ha single crop agricultural land; 31 ha is waste land; 5.0 ha is grazing land. Out of total land required, 15 acres will be used for Cogeneration project and 17 ha for green belt. The co-ordinates of the plant site are located in between Latitude 17⁰59'23"N to Longitude 76⁰22'23"E. Bagasse and Biomass fuel requirements will be 3,53,000 MT. 5200 MT ash and 1800 MT bottom ash will be generated from this project site. Dense phase ash handling system will be adopted. Stack height will be 85 m. Water requirement will be about 5.75 MLD and will be sourced from the Makani Dam nearby to the Terna River through jack wells pipeline at a distance of 4.0 kms from project site. There are no National Parks, Wildlife Sanctuaries, Tiger/Biosphere Reserves etc. within 10 km of the site.

Based on the information provided and presentation made, the Committee prescribed the following specific TOR over and above the standard TORs as at **Annexure-A1** for undertaking detailed EIA study and preparation of EMP.

- i) Grazing land shall be avoided and in case the same is unavoidable an equal area of grazing land shall be developed and concrete action plan shall be prepared with time bound implementation schedule and financial allocation.
 - ii) In case coal as fuel is proposed to be used within the restricted 15% as per MNRE norms, the details shall be provided.
 - iii) Bagasse ash should not be mixed with fly ash (in case coal is used at any point of time) and shall be used for fertilizers and accordingly mechanism for marketing / details of prospective end users shall be identified.

2.7 2x660 (Phase-I) Coal Based and 2x660 MW(Phase-II) Coal Based Thermal Power Plant of M/s SPR Infrastructure (India) Ltd. at Village Savarimangalam, in Thutookudi Distt., in Tamil Nadu - reg. TOR.

Neither the project proponent nor its representative were present and no information for their inability to be present was also received. The Committee also noted that the proposal was earlier placed in the 34th Meeting held during October 10-11, 2011, wherein the project proponent was absent without any intimation. *The Committee therefore recommended that the proposal may be de-listed from the pending list.*

2.8 2x800 MW Super Critical Coal Based Thermal Power Plant of M/s Gagan Power Ltd. near village Barghata, in Raneshwar Taluk, in Dumka Distt., in Jharkhand - reg. TOR.

The proposal was considered for determination of terms of reference for undertaking EIA/EMP study as per the provisions of EIA Notification, 2006. The project proponent along with its consultant M/s EMTRC Consultants Pvt. Ltd., Delhi gave a presentation and provided the following information:

Earlier TOR was obtained for a site on 11.02.2010 vide MoEF letter no. J-13012/108/2009-IA-II(T). The project proponent have decided to drop the site, as they were facing enormous hurdles in the acquisition of land.

The present proposal is for setting up of 2x800 MW Super Critical Coal Based Thermal Power Plant near village Barghata, in Raneshwar Taluk, in Dumka Distt., in Jharkhand. Land requirement will be 1590.23 acres. Out of which, 1132.58 acres is single crop agricultural land; 270.46 acres is waste land and 187.19 acres is govt. land. Out of this total land required, about 592.82 acres is proposed for water reservoir. The co-ordinates of the plant site are located in between Latitude 24⁰03'3.57" N to 24⁰04'21.18" N and Longitude 87⁰28'0.8" E to 87⁰28'53.4"E. Coal will be domestic. Coal requirement will be about 9.4 MTPA and will be obtained from Amarkonda-Murgadangal Captive Coal Block Jharkhand by conveyor. The co-ordinates of the Ash dyke site are

The co-ordinates of the Water Reservoir site are located in between Latitude 24⁰04'29.31" N to 24⁰05'26.88" N and Longitude 87⁰28'17.66" E to 87⁰29'27.75"E. The co-ordinates of the Colony 2 site are located in between Latitude 24⁰01'53.40" N to 24⁰02'10.30" N and Longitude 87⁰26'27.50" E to 87⁰26'42.80"E. The co-ordinates of the Colony 1 site are located in between Latitude 24⁰01'00" N to 24⁰01'15.60" N and Longitude 87⁰27'44.50" E to 87⁰28'12.76"E. Area requirement for ash pond/dyke will be 298.57 acres. Water requirement will be about 46 MCM and will be sourced from the Brahmani River through a pipeline at a distance of 25.0 Kms from the project site. There are no National Parks, Wildlife Sanctuaries, Heritage Sites, Tiger/Biosphere Reserves etc. within 10 km of the site. About 30 homestead oustees and 1500 land oustees will be affected from this project site. Total cost of the project is Rs. 9600 Crores.

The Committee noted the information provided by the project proponent in respect of the new site and decided that the TOR given for the previous site be cancelled under intimation to the State Govt..

Based on the information provided and presentation made, the Committee prescribed the following specific TOR over and above the standard TORs as at **Annexure-A1** for undertaking detailed EIA study and preparation of EMP.

- i) Detailed information on competing sources of water downstream of the project site shall be furnished;
- ii) Volume of water flow in Brahmani River during different seasons (particularly during lean season) shall be furnished;
- iii) Study on the impact on ecology (including stress on population dependent on the same source of water due to drawl of water, downstream of the project site shall be furnished;
- iv) Total volume of water proposed to be stored in the water reservoir and co-ordinates of the reservoir shall be provided;

2.9 45 MW Bagasse and Coal Based Thermal Power Plant of M/s EID Parry (India) Ltd. at village Nellikuppam, in Panruti Taluk, in Cuddalore Distt., in Tamil Nadu -reg. TOR

The proposal was considered for determination of terms of reference for undertaking EIA/EMP study as per the provisions of EIA Notification, 2006. The project proponent along with its consultant M/s Team Labs and Consultants gave a presentation and provided the following information:

The proposal is for replacement of existing 23 MW Co-Generation Plant by setting up of 1x45 MW Bagasse and Imported Coal Based Thermal Power Plant at village Nellikuppam, in Panruti Taluk, in Cuddalore Distt., in Tamil Nadu. Land requirement will be 7.18 acres. The co-ordinates of the plant site are located in between Latitude 11⁰46'00.79"N to 11⁰46'22.58"N and Longitude 79⁰39'39.42"E to 79⁰40'17.67"E. Bagasse requirement will be 59520 MTPM and Imported coal requirement will be 19750 MTPM. Air cooled condensers will be installed. Water requirement will be about 1286 KLD and will be sourced from the bore well inside the plant through a pipeline. This water requirement is same as for the existing 23 MW. There are no National Park Wildlife Sanctuaries, Tiger/Biosphere Reserves etc. within 10 km of the site. Pennaiyar River is located at a distance of 4.0 Km.

The Committee noted that the area is water stressed and the ground water status is classified as semi-critical by the CGWB. It was therefore decided that no new bore well shall be drilled and massive ground water recharge and water conservation measures shall be adopted.

environment *The Committee also noted that only 10 MW is to be used in-house and the balance power is to be sold to the State Government.*

Based on the information provided and presentation made, the Committee prescribed the following specific TORs over and above the standard TORs as at **Annexure-A1** for undertaking detailed EIA study and preparation of EMP.

- i) Details of water conservation measures shall be prepared examining the possibility of replacing use of ground water with water conserved.
- ii) In case coal as fuel is proposed to be used within the restricted 15% as per MNRE norms, the details shall be provided.
- iii) Bagasse ash should not be mixed with fly ash (in case coal is used at any point of time) and shall be used for fertilizers and accordingly mechanism for marketing / details of prospective end users shall be identified.

DATE: 07.02.2012

2.10 Expansion by addition of 50 TPH FBC Boiler and 8 MW Steam Turbine Captive Power Plant of M/s Pasupati Acrylon Ltd. at village Mohammad Ganj, at Thakurdwara Taluk, Moradabad Distt., in Uttar Pradesh-reg. Environmental Clearance.

The proposal was placed for consideration for environmental clearance. The project proponent made a presentation along with its consultant M/s Eqms India Pvt. Ltd., Delhi and provided the following information:

This is a 'B' category project. As the project is located within 10 km of inter - state boundary, proposal has been considered by the Expert Appraisal Committee in the Ministry due to General condition of EIA Notification, 2006.

The proposal is for modernization by installation of 50 TPH CFBC Boiler and 8 MW Steam turbine Captive Power Plant at village Mohammad Ganj, in Thakurdwara Taluk, in Moradabad Distt., in Uttar Pradesh. The proposed activity is to be carried out within the existing working on premises of Acrylic Staple Fibre (ASF) unit. The existing power plant is an old and archaic technology plant and was installed in 1990. Existing Boiler is of capacity 3x18 TPH and the existing steam turbine is 6.5 MW. It is now proposed to modernize the power plant by replacing the boiler with 1x50 TPH capacity and Steam Turbine of 8.0 MW. CFBC technology Boiler with multi fuel injection is proposed to be installed. Land requirement will be 0.12 hectares. The co-ordinates of the site are at Latitude 29⁰11'50" N to Longitude 78⁰52'41" E. Coal requirement will be 295 MT/day and Pet Coke requirement will be 170 MT/day. Coal will be obtained from ECL. Pet Coke will be obtained from Mathura/Jamnagar Refinery. About 70-75 Tonnes/day Ash pond/dyke will be generated. It is proposed to convert into gas based once gas pipe lines come in the area. A stack of 60 m is proposed. Water requirement will be 250 KLD, which will be obtained from ground water. There are no National Parks, Wildlife Sanctuaries, Tiger/Biosphere Reserves etc. within 10 km of the site.

The Committee was earlier informed during 10th Meeting held in March 14-15, 2011, while recommending of TOR that in the instant case, power generation through steam turbine is based on extraction-cum-condensing turbine by having a pressure drop from 67 kg/cm² to 12 kg/cm².

The Committee had in the 10th Meeting considering that the proposed modernization entails no additional land and consumption of fuel agreed to categorize the case as 'B2' and accordingly exempted the proposal from undergoing Public Hearing. The Committee however informed the project proponent that fuel option shall be finalized before applying for environmental clearance and accordingly concrete proposal shall be submitted. The Committee noted that the project proponent have come up with three options viz. 100% coal; 100% pet coke; and 50% coal and 50% rice husk. The Committee also noted that cumulative impact assessment has not been carried out and neither the existing nor the proposed sources of emissions were clearly presented.

environment *The Committee decided that following information is required for reconsideration of proposal:*

- ii. *Distance from the Jimcorbet National Park.*
- iii. *Cumulative impact of the existing and proposed expansion.*

The Committee also decided that the project proponent shall come with specific TOR point-wise compliance when they come for re-consideration.

2.11 2x660 MW Super Critical Domestic and Imported Coal Based Thermal Power Plant of M/s Pat Energy Ltd. at villages Lunsapur/Lothpur, at Jafrabad Taluk, in Amreli Distt., in Gujarat -reg Environmental Clearance.

The proposal was earlier placed in the 38th Meeting held during December 12-13, 2011, wherein, the project proponent made a presentation along with its consultant M/s Vimta Labs Ltd., Hyderabad and provided the following information:

The proposal is for setting up of 2x660 MW Super Critical Imported Coal Based Thermal Power Plant at Villages Lunsapur/Lothpur, at Jafrabad Taluk, in Amreli Distt., in Gujarat. Land requirement will be 820 acres, out of which 762.20 acres is single crop agricultural land; 20.5 acres is waste land and 37.3 acres is Govt. land. The co-ordinates of the site are located between Latitude 20°55'44.43"N to 20°57'6.72"N and Longitude 71°25'42.16" E to 71°26'53.42" E. The co-ordinates of the ash pond/dyke site are located in between Latitude 20°56'14"N to Longitude 71°26'46"E. Area requirement for ash pond/dyke will be 120 acres. Coal requirement will be 5.9 MTPA of which 4.27 MTPA will be the imported coal and 1.65 MTPA indigenous coal. LoA from M/s SECL for 1x500 MW capacity with coal allocation of 2.08 MTPA was obtained on 12.07.2010. Sulphur and ash contents in blended coal will be about 0.38% and 13.75% respectively. About 0.650 MTPA fly ash and 0.16 MTPA of bottom ash respectively will be generated. Fly ash will be supplied to M/s Ultratech Cement Ltd. twin flue of 275 m stack height will be installed. Water requirement will be 297 MLD and will be sourced from the Sea through a pipeline at a distance of 8km from project site. Natural draft cooling system will be adopted. CRZ clearance for permissible activities is yet to be obtained. There are no National Parks, Wildlife Sanctuaries, Heritage sites, Tiger/Biosphere Reserves etc. within 10 km of the site. Public Hearing was held on 28.09.2011. Cost of the project will be Rs 7100.0 Crores. About Rs 48.45 Crores has been earmarked towards environmental protection measures.

The Committee in the said 38th Meeting had noted that the project entails acquisition of about 25.5 acres of grazing land which should be avoided. It was committed by the project proponent that in case acquisition of the 20.5 acres of grazing land cannot be avoided, equal area of alternative grazing land shall be first identified and developed before acquisition process is undertaken. The Committee in the said meeting also noted that LoA furnished pertains to 1x500 MW TPP located at Bhavnagar; whereas, the present proposal is to be located at Amreli District. The Committee therefore sought clarification / validation/ endorsement of the Ministry of Coal in this regard. It was also noted that balance coal for catering to 2x660 MW is through imported coal from Indonesia.

The Committee in the said 38th Meeting also observed that the project proponent had not carried out cumulative impact assessment while carrying out the prediction on ambient air quality. It was, therefore, decided that the project proponent shall spell out the names of all industries/ TPPs proposed in and around the study area and also carry out their impact and revise its EIA / EMP Report accordingly.

The Committee while deliberating the responses and the issues raised in the Public Hearing proceedings also felt that information on various aspects were required. It was therefore decided that the project proponent shall submit the following documents / information /study report before the proposal is re-considered at a later stage

environment

- i) *Geological map of the TPP area to be got verified from the Geological survey of India.*

- ii) *Revised plant layout indicating common property resources (such as grazing land), green belt and TP including its ancillary units;*
- iii) *In case acquisition of grazing land is unavoidable, Action Plan for identification and development of alternative grazing land in consultation with local administration / Gram Sabhas shall be provided;*
- iv) *Cumulative assessment on ambient air quality due to existing and proposed sources of emissions (any) or within 10km radius of the project.*
- v) *CRZ Clearance shall be obtained and submitted along with demarcation of HTL and LTL w.r.t the project site.*
- vi) *Clarification on the indescrpancy in the LoA issued by M/s SECL as this appears to have been issued for the plant at Bhavnagar. Distance of SECL mines from the plant should be indicated as well.*
- vii) *Design of boiler should be based on varying ash contents of coal.*
- viii) *Authenticated list of flora / fauna from the State Forest Department and details regarding migratory path of the birds.*
- ix) *Action Plan for implementation of issues raised in Public Hearing pertinent to the project including identification and eventual employment of local youth along with detailed response on the written objection received against the setting up of the power project furnished by the State pollution Control Board;*
- x) *Details of coastal forests regeneration/ preservation;*
- xi) *Direct or indirect impact on traditional livelihood of the local people specially Fishermen community due to proposed TPP;*
- xii) *MoU of fly ash utilization shall be submitted; and*
- xiii) *CSR Study report with details on budget allocation both capital and Revenue and activities identified therein to be taken up.*

On submission of the clarifications the matter was again taken up for re-consideration for consideration for environmental clearance.

The Committee further observed that even though the project proponent stated that there are no migratory bird habitats and presence /sighting of Coastal Lions in the study area, the possibility especially with regard to migratory birds, could not be ruled out. The Committee therefore desired that the project proponent shall take up the matter with the Office of the Chief Wildlife Warden and initiate action plan and programme for conservation of migratory birds and coastal lions.

The Committee also felt that the area being scarce in fresh water resource and therefore check dams at appropriate locations in the study area need to be built.

It was also noted that there are grazing lands in the area which need to be restored. The Committee agreed that the project proponent shall identify grazing land and take restoration measures in a time bound manner.

The Committee observed that the domestic coal as claimed to be available is only 2 MTPA and as such no firm coal linkage could be attributed to be available. The project proponent responded that the balance coal will be met through imported coal for which adequate quantity is available through an agreement/ MoU already signed.

The Committee further noted that LoA amendment, as earlier discussed in the last appraisal, still need to be addressed and is reported to be pending with the Ministry of Coal for action.

The Committee also desired that guard pond shall be developed to discharge hot water at almost ambient temperature to the sea, to which the project proponent agreed.

The Committee ultimately decided that after amendment of LoA and incorporations of the above, the matter shall be further referred to the Committee for its final decision based on documents made available. Accordingly the proposal was deferred.

Environmental Clearance.

The proposal was earlier placed for consideration for environmental clearance in the 34th Meeting held during October 10-11, 2011, wherein the Committee noted that domestic coal for catering to about only 500 MW (1.8 MTPA) was presently available and the project proponent had not provided details of availability of coal falling short for the remaining 100 MW of Phase-I and 1x660 MW for Phase-II. PP was therefore informed that coal linkages (domestic or imported) for the balance need to be submitted.

The Committee also noted that the ash pond area was close to a water body (against the specific TOR requirement) and was required to be shifted and decided that revised layout including contour map of ash pond site w.r.t. the water body shall be submitted. It was also suggested that a thick green belt of about 100 m (three tier) shall be raised around proposed ash pond. It was also noted that land use details of the core area need to be submitted. The drainage pattern on the topo-sheet with respect to ash pond and contour map of the entire area shall be submitted.

With regard to ambient air quality data presented, the Committee had observed that baseline data has been collected for a period which is less than one complete season and therefore decided that a complete baseline data for the period from November – December, 2011 shall be collected and a critical analysis made.

With regard to transportation of coal the project proponent informed that a new rail linking Wardha to Nanded is under progress and a new railway station at about 12 Km from the site is coming up. The PP was informed that coal transportation shall be by rail and the request of the project proponent for allowing road transportation can be agreed for a period of three years until the railway network is in place. Further the project proponent should take up the matter with the Railways immediately for hastening up the matter.

With regard to water availability especially during lean season, the Committee observed that complete details of water availability study carried out for the project shall be submitted.

The Committee further noted that the CSR action plan needed to be revised and a detailed plan submitted with budgetary details.

*In view of the above the proposal was **deferred** in the said 34th Meeting for reconsideration at a later stage.*

On submission of clarification on the above, the matter was again placed for re-consideration.

The project proponent informed that they have now decided to drop the Phase-II i.e. 1x660 MW and shall proceed only with Phase-I i.e. 2x300 MW. The project proponent also informed that coal shortage required is proposed to be met from imported Indonesian Coal and MoU for 0.8 MTPA has been subsequently submitted. The average ash and sulphur contents in the imported coal will be 8 % and 0.6% respectively. A presentation was also made by the project proponent along with its consultant M/s Yogiraja Industrial Consultant, Pune and provided the following information:

The present proposal now is for setting up of 2x300 MW (Phase-I) Coal Based Thermal Power Plant at villages Ghanmukh (Bijora), in Mahagaon Taluk, in Yavatamal Distt., in Maharashtra. Land requirement will be 995 acres. Out of which, 50% land is single crop agricultural land and 50% land is waste land. Out of total land required, about 325 acres has already been purchased and remaining is in the process of acquisition. The co-ordinates of the site are at Latitude 19⁰42'23.58" N to 19⁰42'55.42" N and Longitude 77⁰43'57.8" E to 77⁰44'37.55"E. Coal requirement will be 2.49 MTPA for Phase-I. A letter of assurance dated 08.06.2010 issued by M/s Western Coalfields Ltd for providing coal requirement for 500 MW TPP is available. The co-ordinates of the ash pond/dyke site will be between Latitude 19⁰39'26.74" N to 19⁰39'47.18" N and Longitude 77⁰48'07.42" E to 77⁰49'11.75" E. About 0.95 MTPA fly ash will be generated. Bottom ash generation will be 0.24 MTPA. Ash and sulphur contents in coal will be 35 - 40% and 03-0.5% respectively. Fly ash will be

requirement will be restricted to 15 MCM for 2x300 MW, which will be sourced from the Penganaa River through a pipeline about a distance of 15-16 km from project site. Water allocation has been obtained on 08.04.2011 from Water Resource Dept., Govt. of Maharashtra. Induced Draft cooling towers will be installed for Phase-I. There are no National Parks, Wildlife sanctuaries, Heritage Sites, Tiger/Biosphere Reserves etc. within 10 km of the site. Public Hearing was held on 24.03.2011. Cost of the project would be Rs 3189.00 Crores for Phase-I.

The Committee also discussed the issues raised in the Public Hearing proceedings and the responses made by the project proponent. The major issues raised were regarding details of fly ash disposal and monitoring locations of water quality, ambient air quality, noise and soil; flora and fauna of the region; development schemes and fund allocation; noise levels during construction and mitigation measures; quality of coal; details at coal handling plant; employment of locals; compensation and commitment for jobs in lieu of land acquired by M/s Chintamar Arotech Pvt. Ltd. and now land taken over by M/s Jinbhuvish Power Generations Pvt. Ltd.; impact on residents of Bijora and Ghanmukh villages due to proposed power plant etc. The project proponent also informed that no litigation / court cases are pending pertaining to the proposed power project.

Regarding ash pond area being proposed close to water body, the project proponent clarified the average MSL of the new site at 11 Km from project site and revised layout submitted. Three tier Green Belt of 100 m width was proposed to be raised around the ash pond.

The project proponent provided additional AAQ data collected during November and December, 2011.

With regard to water availability during lean season, the project proponent provided details on source of supply and planned storage capacities at different weirs/barrages.

Details CSR budget and break-up was also provided.

Regarding coal transportation, the project proponent informed that a new rail line between Wardha to Nanded is under progress and a new railway station at about 12 Km from the site is coming up.

In view of the above, the project proponent requested that they may be allowed road transportation until the railway network is in place. *The Committee deliberated on the issue and decided that the request can be considered for a limited period of **three years** only after commissioning of the plant and no further extension beyond the three year period shall be taken up by the Ministry, considering the fact that the road prima facie seem to pass through thick forests area and coal transportation by road has a major environmental impact. The Committee further elaborated that the road transportation shall be only through closed containers (capacity no less than 20 Tonnes) and method of covering using tarpaulin covers etc. cannot be permitted. The Project proponent also informed that conveyor belt system is being explored alternatively. **The Committee finally decided that the project proponent shall first submit LoA amendment and any other information pertinent to railway line from the Ministry of Railways to the Ministry before any action is taken on file pertaining to the present proposal.***

*The Committee noted that land was partly acquired and partly taken / bought from another company who had acquired long back (about 8 years). Now in the Public Hearing proceedings there are serious allegations and asymmetry of information that commitments made during that time have never been implemented. The Committee considering that public feelings for injustices, if any, need to be adequately first addressed so that people are partners in the development process. **The Committee decided that the project proponent shall first submit documentary evidence regarding the possession of land in the name of company. A confirmation in this regard from the State Govt. shall be obtained before any action is taken on the file pertaining to the project.***

- i) Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation shall be submitted periodically.
- ii) A stack of 275 m height shall be provided with continuous online monitoring equipments for SO_x, NO_x and PM_{2.5} & PM₁₀. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.
- iii) Provision for installation of FGD shall be made in the layout for future use.
- iv) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³. 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.
- v) It shall be ensured that natural drainage in the region is not disturbed due to activities associated with operation of the plant.
- vi) The project proponent shall regenerate degraded water body (if any) located nearby within 5.0 km atleast.
- vii) COC of 5.0 shall be adopted and report submitted within 3 months of operation of the plant. Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB.
- viii) 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 be undertaken.
 - ix) The leveling in plant area should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek/nallah etc. Major canals should not be altered but their bunds should be strengthened and desilted.
 - x) Additional soil for levelling of the sites should be generated within the sites in a way that natural drainage system of the area is protected and improved.
- xi) Well designed acoustic enclosures for the DG sets and noise emitting equipments to achieve the desirable insertion loss viz. 25 dB(A) should be provided.
- xii) 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. Action plan and road map for implementation shall be submitted to the Ministry **within six months**.
- xiii) Road transportation until the railway network is in place shall be only for a limited period of **three years** after commissioning of the plant and no further extension beyond the three year period shall be taken up by the Ministry, considering the fact that the road prima facie seem to pass through thick forests area and road transportation by road has a major environmental impact. Road transportation shall be only through closed containers (capacity not less than 20 Tonnes) and method of covering using tarpaulin covers etc. cannot be permitted.

- xiv) 100 % fly ash disposal shall be ensured from **4th year** of operation of the plant and action plan in this regard including the utilization of fly ash in the cement and brick manufacturing shall be submitted to the Ministry within **six months**.
- xv) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.
- xvi) Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
- xvii) A time bound implementation of the CSR shall be formulated within **six months** and submitted to the Ministry. It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified and R&R are in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.
- xviii) CSR schemes identified based on need based assessment shall be immediately implemented in consultation with the village Panchayat and the District Administration. 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.
- xix) At least three nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre, primary school etc shall be developed in co-ordination with the district administration.
- xx) Special package with implementation schedule for providing free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.
- xxi) An amount of Rs 13.0 Crores as one time investment shall be earmarked for activities to be taken up during the construction phase of the project under CSR. Recurring expenditure for CSR shall be Rs 2.6 Crores per annum till the life of the plant. Social Audit by a reputed University or an Institute shall be carried out annually and submitted its details to the Ministry.
- xxii) An Environmental Cell comprising of at least one expert in environmental science / engineering, occupational health and social scientist, shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.

2.13 1300 MW (Stage-II) Kawas Gas Based Combined Cycle Power Plant of M/s NTPC Ltd. at village Mora, in Surat Distt, in Gujarat - reg. Extension of period of validity of environmental clearance.

M/s NTPC Ltd. was accorded environmental clearance for its 1300 (Stage-II) Kawas Gas Based power on 30.05.2005. They have requested the Ministry for extension of validity period for two years for the environmental clearance of the said 1300 MW (Stage-II) Kawas Gas Based Combined Cycle Power Plant at Mora, in Surat Distt., in Gujarat. M/s NTPC Ltd. have submitted to the Ministry that they had issued LOI for sourcing Gas for the power plant to M/s Reliance Industries Ltd. (M/s RIL) and also finalized main plant turnkey package. However, the tender for main plant was annulled due to dispute on gas supply contract with M/s RIL. M/s NTPC has also informed the Ministry that in view of the recent developments in respect of domestic gas allocation to power sector and the decision taken by the Apex Court of the country they now intend to take up the project immediately. M/s NTPC further informed that during these intervening period they have completed all studies/ investigation and International Competitive Bids are being issued shortly.

2. Clarification was sought by the Ministry on the physical and financial status of implementation of the project for which extension of validity of EC has been requested, which was subsequently submitted.

3. The clarification furnished stated that Kawas Gas Based CCGT Stage-II is an expansion project to be commissioned within the existing premises of the existing Stage-I CC Gas Based Plant. That the site was already developed during Stage-I and no major activities related to site development were to be undertaken except site leveling. The activities related to award of Main Plant package for Stage-II was in full swing.

4. M/s NTPC Ltd. had further informed the Ministry that the project could not be awarded as the issue of supply of gas to the project by M/S RIL became sub-judice in Mumbai High court. That in view of the recent developments in respect of domestic gas allocation to Power Sector, they have been given to understand that the allocation of gas for the project is under active consideration of Empowered Group of Ministries (EGOM) and that such allocation is expected shortly, notwithstanding the legal dispute between M/s NTPC & M/s RIL. M/s NTPC therefore now intends to take up implementation of Kawas GBCCPP, Stage-II immediately, for which extension of validity of EC is sought.

5. M/s NTPC Ltd. also stated that the delay in implementation of the project is due to “Force Majeure” beyond the control of NTPC, and therefore has requested that the validity of the environmental clearance for Kawas GBCCPP, Stage-II may be extended for a period of five years.

The request of M/s NTPC Ltd. was placed before the Committee for its views.

The Committee noted that EC to project was accorded prior to EIA Notification, 2006. The proponent should present the compliance status of earlier EC including Public Hearing issues. The EAC further desired that legal position for extending the validity further by five years be examined both in the Ministry as also by the Power Proponents and the same put up to EAC for further consideration. The matter was accordingly deferred.

2.14 1300 MW (Stage-II) Combined Cycle Gas Based Jhanor Gandhar Power Plant of M/s NTPC Ltd. at village Jhanor Gandhar, in Bharuch Distt., in Gujarat. -reg. Extension of Period of validity of EC.

M/s NTPC Ltd. was accorded environmental clearance for its 1300 (Stage-II) Gandhar Gas Based power on 10.06.2005. They have requested the Ministry for extension of validity period for two years for the environmental clearance of the said 1300 MW (Stage-II) Kawas Gas Based Combined Cycle Power Plant at Mora, in Surat Distt., in Gujarat. M/s NTPC Ltd. have submitted to the Ministry that they had issued LOI for sourcing Gas for the power plant to M/s Reliance Industries Ltd. (M/s RIL) and also finalized main plant turnkey package. However, the tender for main plant was annulled due to dispute on gas supply contract with M/s RIL. M/s NTPC has also informed the Ministry that in view of the recent developments in respect of domestic gas allocation to power sector and the decision taken by the Apex Court of the country they now intend to take up

the project immediately. M/s NTPC further informed that during these intervening period they have completed all studies/ investigation and International Competitive Bids are being issued shortly.

2. Clarification was sought by the Ministry on the physical and financial status of implementation of the project for which extension of validity of EC has been requested, which was subsequently submitted.

3. The clarification furnished stated that Gandhar Gas Based CCPP Stage-II is an expansion project to be commissioned within the existing premises of the existing Stage-I CC Gas Based Plant. That the site was already developed during Stage-I and no major activities related to site development were to be undertaken except site leveling. The activities related to award of Main Plant package for Stage-II was in full swing.

4. M/s NTPC Ltd. had further informed the Ministry that the project could not be awarded as the issue of supply of gas to the project by M/S RIL became sub-judice in Mumbai High court. That in view of the recent developments in respect of domestic gas allocation to power sector, they have been made to understand that the allocation of gas for the project is under active consideration of Empowered Group of Ministries (EGOM) and that such allocation is expected shortly, notwithstanding the legal dispute between M/s NTPC & M/s RIL. M/s NTPC therefore now intends to take up implementation of Gandhar GBCCPP, Stage-II immediately, for which extension of validity of EC is sought.

5. M/s NTPC Ltd. also stated that the delay in implementation of the project is due to "Force Majeure" beyond the control of NTPC, and therefore has requested that the validity of the environmental clearance for Gandhar GBCCPP, Stage-II may be extended for a period of five years.

The request of M/s NTPC Ltd. was placed before the Committee for its views.

The Committee noted that EC to project was accorded prior to EIA Notification, 2006. The proponent should present the compliance status of earlier EC including Public Hearing issues. The EAC further desired that legal position for extending the validity further by five years be examined both in the Ministry as also by the Power Proponents and the same put up to EAC for further consideration. The matter was accordingly deferred.

2.15 1082 MW Combined Cycle Gas Turbine Thermal Power Projects of M/s ONGC Tripura Power Company Ltd. at village Palatana, in Udaipur, Tripura. - reg. Change in name and extension of period of validity of environmental clearance.

M/s ONGC Tripura Power Company Ltd. (earlier M/s ONGC Tripura Power (P) Ltd.) was accorded environmental clearance for its 1082 ME (3x360.80 MW) Gas Based Combined Cycle Power Plant at village Palatana, in South Tripura Distt., in Tripura on 07.02.2007. The validity of the environmental clearance expires on 06.02.2012.

M/s ONGC Tripura Power Company Ltd. has now informed that the power project is under implementation in full swing and the commissioning of the two units would be progressively from May 2012 onwards.

M/s ONGC Tripura Power Company Ltd. has informed and requested extension of validity period for further period of five years and amendment of the environmental clearance incorporating the following:

- i) That they have now finalized the unit size as 2x363.30 MW (1082 MW) in lieu of 3x360.80 MW (1090 MW) and therefore requested for concurrence of the change in configuration;
- ii) Increase in land requirement from 79.89 ha to 90.19 Ha, as during construction phase it has come to notice that land requirement for ROW for river water intake system outside the plant boundary would be 7.6 acres and for alignment of boundary wall would be 1.39 acres of private land and 0.82 acres of forests land (for which clearance has been obtained); and land for construction of colony 15 acres, which were not envisaged earlier.
- iii) Extension of validity period of the environmental clearance; and
- iv) Change in name from M/s ONGC Tripura Power Company (P) Ltd. to M/s ONGC Tripura Power

The matter was placed for the views of the Committee.

The Committee noted that the change in unit configuration can be agreed as these are engineering requirements and 10% increase or decrease is a normal practice.

With regard to allowing increase in land area, the Committee observed that forest land of 0.82 acres even though reported to be acquired already shall not be utilized unless the same is in patches and unavoidable. The land shall be further regenerated from its existing state.

Regarding change in name of the company, the Committee felt that the same can be agreed as the matter prima facie seems to be only change from private limited to limited company for which proper papers need only to be submitted to the Ministry.

The Committee finally observed that the extension of validity period of environmental clearance for a further period of five years can be agreed in accordance with the provisions prescribed in the EIA notification, 2006.

2.16 4x150 MW Coal Washery Reject Based Surguja Thermal Power Plant of M/s Adani Mining Pvt. Ltd. at village Parsa, in Udaypur Taluk, in Surguja Distt., in Chhattisgarh - reg. TOR.

The proposal was earlier considered for determination of terms of reference for undertaking EIA/EMP study as per provisions of EIA Notification, 2006, in the 38th Meeting of the Committee held during December 12-13, 2011, wherein, the project proponent along with its consultant M/s GIS enabled Environment & Neo-Graphic Centre, Ghaziabad gave a presentation and provided the following information:

The proposal is for setting up of 4x150 MW Coal and Washery Based Surguja Thermal Power Plant at village Parsa, in Udaypur Taluk, in Surguja Distt., in Chhattisgarh. Coal will be 22% and washery rejects will be 78%. Land requirement will be 75.514 ha, out of which, 34.180 ha is forest land and 41.334 is single crop agricultural land. The co-ordinates of the site are located in between Latitude 22°50'11"N to 22°50'24"N and Longitude 82°48'46" E to 82°49'22" E. Coal requirement will be 0.88 MTPA and washery rejects requirement will be 3.1 MTPA. Washery rejects and coal in the ratio 78:22 will be used as fuel. CFBC Boilers will be installed. Water requirement will be 15.8 MCM/annum and will be sourced from the Rehar River. There are no National Parks, Wildlife Sanctuaries, Heritage sites, tiger/Biosphere reserves etc. within 10 km of the site. Hasdeo Arand Reserve Forests is located at 2.0 km from the project site. About 50 Land oustees will be involved due to the project site.

The Committee in the said 38th Meeting noted that M/s Adani Mining Pvt. Ltd. is a joint venture company of M/s Rajasthan Rajya Vidyut Urja Nigam Ltd. (M/s RRVUNL) and M/s Adani Enterprises Ltd. The Committee therefore desired to know the check and balances of the joint venture partner i.e. M/s RRVUNL so that any potential conflict of interest which may surface at a later stage are addressed. It was also noted that in the absence of check and balance by the joint partner the possibility of diverting coal as rejects may arise,

In view of the above the Committee had agreed that details of joint venture w.r.t handling / implementation of the present proposal shall be submitted keeping the above in view. The Committee also decided that appropriate Board Resolutions to this effect shall be submitted.

It was also decided that authorization for use of coal and washery rejects need to be furnished from concerned partner i.e. M/s RRVUNL.

The Committee also had noted that the region being a coal bearing area, it is also pertinent that the proposed project site shall be first assessed for coal deposit (if any) through a competent agency.

On the issue of environment sensitivity the Committee observed that the area not only has dense forests but may also not be far off from Elephant Corridor. The Committee therefore decided that primary survey of flora and fauna and implementation of wildlife conservation plan need be carry out in case the present proposal seem to demand merit for recommendation of TOR.

In view of the observations as noted in preceding paras above, the Committee in the 38th Meeting decided that the project proponent shall furnish the details sought before their case is considered for recommendation of TOR. Accordingly the proposal was deferred for reconsideration at a later stage.

The matter was placed again for re-consideration on the request of the project proponent.

The project proponent provided the following information:

The Board of Directors of RRVUNL, during its 125th Meeting on 21st July 2007, passed the Resolution of the Board for following approval:

- Formation of Joint Venture Company with M/s Adani Enterprises Ltd for an effective arrangement for mining of coal from the Parsa East and KantaBasan Coal Blocks, its transportation and delivery at RVUN's Power Stations. Approval of Draft Joint Venture Agreement.
- Chairman & MD, RVUN or his nominated officer is authorized to sign and execute the JV Agreement.
- The Board of Directors of RRVUNL, during its 141st Meeting on 4th July 2008, approved the final Draft of Coal Mining & Delivery Agreement (CMDA) to be executed between RRVUNL and ParsaKente Collieries LTD (PKCL), the JV Company.
- The approval CMDA has following clauses on Coal Washery Rejects and Coal Security

That the Clause 3.2.3 of the Board's approval read as under:

“The Company shall:

a) Establish a Coal washery and deliver Coal of the required specifications in accordance with the terms and conditions of this Agreement. The Reject remaining after washing shall be the property of the JV Company and shall be disposed off by the Company as decided by its Board of Directors keeping the right of RVUN reserved as contained in clause No. 4.8 (Coal security) of this agreement. However the company shall observe all rules and regulations of Govt. of India/State Govt./Local Authorities for timely disposal of rejects and its removal and will be responsible for any consequences for non-adherence of any rules & regulations. Further, if sales tax is imposed on rejects the same shall be borne by JV Company and not by RVUN. RVUN reserves the right to arrange for sampling and analysis of coal before washing/before direct dispatch to RVUN TPS. RVUNL also reserves the right to sample rejects after washing, by engaging third party or by establishing won laboratory for analysis of samples at mines. In case of any dispute, CMD (RVUN) will have the power to take appropriate decision.

b) Coal Security: To ensure proper security of coal mined from the coal blocks through the Company and to ensure that the same is supplied to RVUNL's Thermal Power Stations only, RVUNL shall have the right to depute its officials and /or appoint a third party agency at the mining area and /or the railways loadings points. RVUNL officer's shall also have the right to observe the beneficiation process, handling of Coal and disposal of the Rejects. RVUNL shall have right to witness at the time of determination of grade(s) of coal during exploration & also the rejects generated.

c) The Board of Directors of PKCL, during its Meeting on 30 the March, 2009 resolved that the contract be awarded to Adani Mining Pvt. Ltd.

d) The Board also resolved that copy of the final subcontract/agreement finalised and signed with Adani Mining Pvt. Ltd. Shall be placed before the board.

e) The subcontract was signed on 29th July, 2009.

f) The Board in its Meeting on 28th Aug, 2009, approved the Coal mining services agreement signed between PKCL and AMPL

g) The Coal Mining Services agreement, signed on 29th July 2009 between PKCL and AMPL has following clauses on Coal Washery Rejects and Coal Security:

Clause 1.1 Definitions

“Rejects” The waste remaining after washing of coal mined from the Coal Mines shall be the rejects.

Clause 3.2.3 Establishment of Coal washery

a) Establish a Coal washery and deliver Coal of the required specifications in accordance with the terms and conditions of this agreement. The Rejects remaining after washing shall be the property of the Contractor. The Contractor shall observe all rules and regulations of Govt. of India/State Govt./ Local Authorities for timely disposal of rejects and its removal and will be responsible for any consequences for non-adherence of any rules & regulations. Further, if sales tax is imposed on rejects the same shall be borne by the Contractor.

b) The Board of AMPL on 1st Feb, 2012, resolved to transfer the washery rejects to be generated during washing of coal mined in Parsa East and KenteBasan Coal Block to Surguja Power Pvt. Ltd. For utilisation in reject based Power Plant.

c) As per the Coal Mining and Delivery Agreement (CMDA), approved by the Board of Directors of RRVUNL and signed between RRVUNL and PKCL, the washery rejects are the property of PKCL, with safeguards such as Coal Security.

d) Further as per the Coal Mining Services Agreement, Approved by the Board of Directors of PKCL and signed between PKCL and Adani Mining Pvt. Ltd., the washery rejects are the property of Adani Mining Pvt. Ltd.

e) Surguja Power Pvt. Ltd is a 100% subsidiary of Adani Mining Pvt. Ltd. Formed as an SPV for implementing and operating the Thermal Power Projects.

f) Adani Mining pvt. Ltd. Has transferred the washery rejects to Surguja Power Pvt. Ltd. For utilisation in

g) The Divisional Forest Officer, South Surguja Division, has certified that there are no wildlife Sanctuaries and Elephant Corridor within 10 km of the proposed site at Parsa Village, Forest Range- Udaypur, Tehsil Udaypur, District- Surguja.

h) Primary Survey of flora and fauna and preparation of wildlife conservation plan will be undertaken along with EIA study.

i) Primary study of Flora and Fauna for Thermal Power plant is under progress.

j) Wildlife Conservation Plan already prepared for the linked coal mine and approved by Chief wildlife warden Chhattisgarh.

k) The budget for wildlife Conservation plan is INR 22.00 Crores.

l) Additional Conservation plan will be prepared accordingly additional budget will be allocated for proposed power plant.

The Committee observed that the Board's Resolution of RRVNL and papers submitted appeared to be vague and the potential conflict of interest as earlier cited by the Committee remain still unaddressed with the information now provided.

The Committee therefore decided that Board member of RRVNL be invited to attend or approval from RRVNL be obtained to remove the apprehensions felt by the Committee. The Committee also decided that final agreement between joint venture company with the approval of RRVNL shall be submitted first before re-consideration of the proposal. A certificate from the GSI should be obtained as the testimony to the fact that the site is not a coal bearing area. Accordingly the proposal was deferred for re-consideration at a later stage.

2.17 2x250 MW Coal Based Dahanu Thermal Power Stations of M/s Reliance Infrastructures Ltd. Dahanu Taluk, in Thane Distt., in Maharashtra. - Permission for the Installation of Closed Pipe Conveyer System - regarding.

M/s Reliance Infrastructure Ltd. is operating a 2x250 MW Coal Based Dahanu Thermal Power Station at Dahanu Taluk, in Thane Distt., in Maharashtra since 1995. The plant is located in an ecologically fragile area, declared by the Ministry as "Eco-sensitive area".

Domestic coal for the power station is received by rail, while imported coal is received by ship at a jetty operated by Maharashtra Maritime Board on Savata Creek. The imported coal is received at the jetty in small barges and is then transported to coal storage area of the power station by road.

To ease the transportation of imported coal and to minimize use of road transportation and for better management of environment M/s Reliance Infrastructure Ltd. now desires to install closed pipe conveyer system from the jetty to the coal yard at the power station. The land required for the system falls within the power

The Committee deliberated the request made and agreed in principle that the proposed pipe conveyor belt system will reduce pollution load resulting from road transportation and is more environment friendly. The Committee however observed that the proposed installation may attract the provisions of CRZ notification and therefore first need to be studied from CRZ angle. The Committee therefore decided that recommendation of the State Coastal Zone Management Authority, as may be necessary, shall be first obtained and requisite procedural requirement in accordance with CRZ regulations need to be first followed before a recommendation is made. The matter was accordingly deferred.

2.18 Change in unit configuration from 1x330 to 1x300 MW Coal Based Thermal Power Plant of M/s Emco Energy Ltd. at Distt., Warora, in Maharashtra - regarding.

M/s Emco Energy Ltd. (a group company of M/s GMR Energy Ltd.) was accorded environmental clearance for 1x330 MW (Phase-I) Coal Based TPP vide File No. J-13011/2/2008-IA.II(T) on 04.08.2009 and for 1x300 MW (Phase-II) Coal Based TPP vide J-13011/75/2008-IA.II(T) on 25.05.2010.

M/s Emco Energy Ltd. informed that while appraisal of their Phase-I, it was informed to the Committee that they may go for 300 MW \pm 10% as BTG supplier was then not finalized and flexibility by \pm 10% would enable them to include more suppliers for accepting bidding.

M/s Emco Energy Ltd. have now informed that in line with Phase-I, they would like to go for 1x300 MW instead of 1x330 MW for better synchronization and therefore requested for amendment of environmental clearance by change of the configuration.

The matter was placed before the Committee for its views.

The Committee observed that the request has merits and can be agreed to and therefore recommended that the Ministry may carry out the necessary amendment. The Committee however also decided that CSR should be revised and an amount of Rs 13.6 Crores as one time investment (for both phases) to be spent during construction phase and Rs 2.72 Crores per annum as recurring expenditure till the life of the plant shall be spent and accordingly revised break-up of activities shall be submitted to the Ministry.

2.19 Expansion of 2x300 MW by addition of 1x660 MW Coal Based Power Plant of M/s Haryana Power Generation Company Ltd in Yamuna Nagar Distt., in Haryana – Extension of period of validity of TOR regarding.

M/s Haryana Power Generation Company Ltd. (M/s HPGCL) was issued TOR for expansion of 2x300 MW by addition of 1x660 MW at its Coal Based TPP in Yamuna Nagar Distt., in Haryana on 06.04.2010.

M/s HPGCL have now informed that due to non availability of coal they are unable to proceed further with the power project and has therefore requested for extension of validity period of TOR for one more year.

The request of M/s HPGCL was discussed.

The Committee noted that being a State Government undertaking, the procedural requirements are large and the request for extension can be agreed. The Committee therefore recommended that the request can be agreed and the Ministry may carry out the needful.

2.20 1x7.2 MW Gas Based Captive Thermal Power Plant of M/s Raymond Ltd. at village Khadki, Pardi Taluk, in Valsad Distt., in Gujarat - Amendment of stack height - regarding..

M/s Raymond Ltd. was accorded environmental clearance for 1x7.2 MW Gas Based Captive Thermal Power Plant of M/s Raymond Ltd. at village Khadki, in Pardi Taluk, in Valsad Distt., in Gujarat. The environmental clearance at specific condition no.(xiv) prescribes as under:

“Stacks of 40 m shall be provided with continuous online monitoring equipments. Exit velocity of flue gas shall not be less than 22 m/sec”.

The project proponent informed that they had mentioned stack height as 30.5 m in the EIA Report and presentations made while appraisal of the case and therefore requested that the same may be corrected in the clearance letter.

The matter was deliberated by the Committee. The Ministry representative informed the Committee that even for a back-up power such as those run on commercial diesel the minimum stack height is 30 m. That in the absence of a regulation of stack height for gas based power project, the project proponent appears to have taken the liberty in proposing a stack height which indicate no scientific analysis of impact of NOx. The Ministry representative also stated that the 40 m stack height was deliberately prescribed accordingly considering that higher stack and dilution is the only remedy available as NOx is a critical environmental pollutant.

The Committee decided that the proponent shall discuss the matter with Shri M.S. Puri from CEA and Dr. S.D. Atri. Based on their recommendation, the Committee would take decision regarding change in the stack height from 40 m to 30.5 m.

2.21 2x660 MW Udupi Power Project of M/s Udupi Power Corporation Ltd. at Yelluru village, in Udipi Distt., in Karnataka- reg.

M/s Udupi Power Corpn Ltd. was issued a comprehensive environmental clearance on 01.09.2011, wherein Specific Condition no. (ix) prescribes as under:

“The transportation of dry fly ash to the ash disposal area through closed bulkers shall be allowed till 30.03.2012 till the Cement Grinding Unit of M/s ACC Ltd. is set up”.

M/s Udupi Power Corpn Ltd. has now informed that M/s ACC had planned to commission the 1st Phase of project i.e. setting up of blending unit by March, 2012 and paralelly acquire land for second phase of setting up grinding unit.

That M/s ACC Ltd. had applied to Govt. of Karnataka for allocation of land. The Govt. of Karnataka has accordingly sanctioned allocation of 120.54 acres on 03.04.2010. That payment of land was also made to KIADB, Mangalore by M/s ACC Ltd. and land earlier allotted to M/s NTPC has been identified. However possession of land has been delayed and M/s ACC has therefore now communicated its inability to meet the targeted date of March, 2012.

That M/s UPCL has agreed to provide 2.5 acres of land to M/s ACC Ltd. for the blending unit now and the blending unit is expected to be commissioned by first quarter of 2013.

That in the meantime M/s ACC Ltd. will continue to lift fly ash to their other plants through bulkers beyond March, 2012 till commissioning of the blending unit.

M/s UPCL therefore have requested that the Ministry may permit transportation of dry fly ash to ash disposal area by closed bulkers till M/s ACC plant is commissioned i.e. March, 2013.

The Committee noted the information provided by M/s UPCL and observed that the case is in the National Green Tribunal (NGT) and the existing High Court case is still pending for disposal. The Committee therefore desired that a running summary of facts of the case and critical issues flagged be first prepared (including violation issues if any) before the matter is further deliberated on merit. Accordingly the matter was deferred.

There being no agenda item left the meeting ended with thanks to the Chair. It was also decided that the next meeting of the Committee will be held during March 5-6, 2012 at New Delhi.

ANNEXURE- A

Terms of Reference (TOR) :

- i) Vision document specifying prospective long term plan of the site, if any, shall be formulated and submitted.
- ii) Status of compliance to the conditions stipulated for environmental and CRZ clearances of the previous phase(s), as applicable, shall be submitted.
- iii) Executive summary of the project indicating relevant details along with recent photographs of the approved site shall be provided. Response to the issues raised during Public Hearing and to 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.
- iv) Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and status of implementation shall be submitted to the Ministry.
- v) The coordinates of the approved site including location of ash pond shall be submitted along with topo sheet (1:50,000 scale) and confirmed GPS readings of plant boundary and NRS satellite map of the area shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/river shall be specified, if the site is located in proximity to them.
- vi) Layout plan indicating break-up of plant area, ash pond, area for green belt, infrastructure, roads etc. shall be provided.
- vii) 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 and revised layout (as modified by the EAC) shall be provided.
- viii) Present land use as per the revenue records (free of all encumbrances of the proposed site, shall be furnished. Information on land to be acquired) if any, for coal transportation system as well as for laying of pipeline including ROW shall be specifically stated.
- ix) The issues relating to land acquisition and R&R scheme with a time bound Action Plan should be formulated and clearly spelt out in the EIA report.
- x) Satellite imagery or authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest villages, creeks, mangroves, river reservoirs etc. in the study area shall be provided.
- xi) 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 Office of the Chief Wildlife Warden of the area concerned.
- xii) 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 fill material required; its source, transportation etc. shall be submitted.
- xiii) 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 to be acquired is developed alternatively and details plan shall be submitted.

- xiv) A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on economically feasible mineable mineral deposit shall be submitted.
- xv) Details of 100% fly ash utilization plan as per 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.
- xvi) Water requirement, calculated as per norms stipulated by CEA from time to time, shall be submitted along with water balance diagram. Details of water balance calculated shall take into account reuse and recirculation of effluents which shall be explicitly specified.
- xvii) Water body/nallah (if any) passing across the site should not be disturbed as far as possible. In case any nallah / drain has to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of diversion required shall be furnished which shall be duly approved by the concerned department.
- xviii) It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of the river system / streams etc.
- xix) Hydro-geological study of the area shall be carried out through an institute/ organisation 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.
- xx) 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/creek/ sea etc shall be carried out and submitted alongwith 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.
- xxi) 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. Commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter document stating firm allocation of water.
- xxii) Detailed plan for carrying out rainwater harvesting and its proposed utilisation in the plant shall be furnished.
- xxiii) Feasibility of zero discharge concept shall be critically examined and its details submitted.
- xxiv) Optimization of COC along with other water conservation measures in the project shall be specified.
- xxv) Plan for recirculation of ash pond water and its implementation shall be submitted.
- xxvi) 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 parameters to be monitored also include heavy metals.
- xxvii) Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out by a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of local communities.
- xxviii) 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 and operation phases of the Project.
- xxix) 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.
- xxx) 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. Sustainable income generating measures which can help in upliftment of poor 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.
- xxxi) 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.

xxxii) 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.

xxxiii) Assessment of occupational health as endemic diseases of environmental origin shall be carried out and Action Plan to mitigate the same shall be prepared.

xxxiv) 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 years shall be conducted with an excellent follow up plan of action wherever required.

xxxv) One complete season site specific meteorological and AAQ data (except monsoon season) as per MoEF Notification dated 16.11.2009 shall be collected and the dates of monitoring recorded. The parameters to be covered for AAQ shall include SPM, RSPM (PM10, PM2.5), SO₂, NO_x, Hg and O₃ (ground level). The location of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone, villages in the vicinity and sensitive receptors including reserved forests. 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.

xxxvi) A list of industries existing and proposed in the study area shall be furnished.

xxxvii) Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby and sensitive receptors, if any. The wind roses should also be shown on the location map as well.

xxxviii) Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.

xxxix) Fuel analysis shall be provided. Details of auxillary fuel, if any, including its quantity, quality, storage etc should also be furnished.

xl) Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished.

xli) 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 shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.

xlii) For proposals based on imported coal, inland transportation and port handling and rolling stocks / rail movement bottle necks shall be critically examined and details furnished.

xliii) 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.

xliv) EMP to mitigate the adverse impacts due to the project along with item - wise cost of implementation in a time bound manner shall be specified.

xlv) 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.

xlvi) The DMP so formulated shall include measures against likely Tsunami/Cyclones/Storm Surges/Earthquakes etc, as applicable. It shall be ensured that DMP consists of both on-site and off-site plan complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan shall be prepared both in English and local languages.

xlvi) Detailed plan for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary (except in areas not possible) with tree density of 2000 to 2500 trees per ha with a good survival rate of about 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports.

xlvi) Over and above the green belt, as carbon sink, additional plantation shall be carried out in identified 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.

xlix) 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 system of reporting of non compliances / violations of environmental norms to 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

l) Details of litigation pending or otherwise with respect to project in any court, tribunal etc. shall invariably be furnished.

ANNEXURE- A

Additional TOR for Coastal Based TPPs:

Over and above the TOR mentioned in **Annexure- A1**, the following shall be strictly followed (as applicable):

a) Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.

b) If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agency shall be submitted.

c) The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their bunds should be strengthened and desilted.

d) Additional soil for leveling of the sites should be generated as far as possible within the sites, in a way that natural drainage system of the area is protected and improved

- f) No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. The outfall should be first treated in a guard pond (wherever feasible) and then discharged into deep sea (10 to 15 m depth). Similarly, the intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from desalinization plants (if any) should not be discharged into sea without adequate dilution.
- g) Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in study area.
- h) A common **Green Endowment Fund** should be created by the project proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.
- i) Impact on fisheries at various socio economic level shall be assessed.
- j) An endowment of **Fishermen Welfare Fund** should be created out of CSR grants not only to enhance their quality of life through creation of facilities for fish landing platforms / fishing harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.
- k) Tsunami Emergency Management Plan shall be prepared and plan submitted prior to the commencement of construction work.
- l) There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipeline such as lining of guard pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries is fertile agricultural land used for paddy cultivation.
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