

**Minutes of the 88<sup>th</sup> Meeting of the Expert Appraisal Committee for River Valley and Hydroelectric Projects held on 26-27<sup>th</sup> October, 2015 at Teesta Meeting Hall, 1<sup>st</sup> Floor, Vayu Wing, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110003.**

The 88<sup>th</sup> Meeting of the Expert Appraisal Committee (EAC) for River Valley and Hydroelectric Projects was held during 26-27<sup>th</sup> October, 2015 at Teesta Meeting Hall, 1<sup>st</sup> Floor, Vayu Wing, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 3. The meeting was chaired by Shri Alok Perti, Chairman. Dr. S. Sathyakumar, Dr. Vijay Kumar, D. K.D. Joshi and Dr. A. Lingaraju, Members could not attend the meeting. The list of EAC members and officials/consultants associated with various projects and who attended the meeting is at Appendix.

The following Agenda items were taken-up in that order for discussions:

**1<sup>st</sup> day (26.10.2015)**

**Agenda Item No.1:** Welcome by Chairman and confirmation of Minutes of the 87<sup>th</sup> EAC held on 23-24<sup>th</sup> September, 2015. The minutes the EAC meetings were confirmed as was circulated.

Thereafter, following agenda items were taken-up:

**Agenda Item 2.1 Shirapur Lift Irrigation Scheme in Solapur District, Maharashtra by M/s. Maharashtra Krishna Valley Development Corporation – For Environmental Clearance.**

The project proponent made a detailed presentation on Shirapur Lift Irrigation Scheme located in Solapur District of Maharashtra. The Shirapur Lift Irrigation was Administratively Approved by MKVDC Pune vide Marathi Ir.No. Shirapur/296/(146/96), PB-2 Dt.10/10/1996 for Rs.9056.63 Lakhs as per sanctioned DSR in the year 1995-96. The revised total project cost is Rs.24779.95 lakhs ( as per report 2010-11).

The 13.6 TMC of water of Bhima project is proposed to be utilized through various lift irrigation schemes. The Shirapur LIS is one of those proposed scheme with water utilization of 1.73 TMC.

**Bhima Sina Link Tunnel**

Bhima storage ( Ujjani ) & Sina river is connected by a Bhima-Sina link tunnel canal of 26.5 km length from Ujjani lake to provide irrigation benefits in Sina valley. In Sina valley there are two schemes to be served through Bhima-Sina link tunnel which are as under -

- A. Bhima-Sina Lift Irrigation Scheme:** by series of KT weirs for both banks of river Sina.
- B. Shirapur Lift Irrigation Scheme:** to serve the area in North Solapur & Mohol taluka. This tunnel will provide required quantum of water from Ujjani Lake to Sina River starting from village Kandar through Shirapur KT weir and ending at K.T. weir at Kave a Sina river. This will provide assured and adequate water supply (1.73 TMC) to the above schemes.

The project envisages providing irrigation facility to 10,000 ha of area in North Solapur, Mohol taluka of Solapur District & Tuljapur taluka of Osmanabad District by lifting water from Shirapur KT weir. The Shirapur KT weir is fed by Bhima Sina link. It is proposed to lift water from river Sina @ Shirapur KT weir near village Shirapur in two stages. This include first lift of water with 4.03 km long rising main from RL 1430' (436m) to 1589' (484.5m) having static head of 159.08' (48.5m). From delivery chamber of 9.63 km long canal is proposed. At the end of main canal i.e. @ 9.63 km stage-II lift is proposed near village Mothewadu. Stage-II includes lifting water by 2.55 km long rising main from RL 1565' (477.1m) to 1650' (503 m) having a static head of 84.95' (25.9 m). After second lift LBC of 16.4 km and RBC of 21 km is proposed.

The gross command area (GCA) is 20,000 ha. The culturable command area (CCA) is 10,000 ha. The command area under this lift scheme is located at a higher elevation of Sina River and lies in villages Vadala to Kedgaon & Mardi and a total of 20 villages from North Solapur and Tuljapur of Osmanabad District will be benefitted. The Great Indian Bustard Sanctuary lies in the command area of Shirapur LIS scheme.

The project proponent also submitted reply on the questions raised by NGO regarding serious violation by commencement of work before obtaining environment clearance. The project was sanctioned by Government of Maharashtra in 1994 and the work commenced in 1998 only. As per EIA notification 1994 the new projects having investment more than 100 Crores and Large Irrigation Projects require environmental clearance. Hence project proponent has not committed any violation. The project proponent has also informed that Ujjani reservoir has been completely filled for 25 years out of 35 years since completion.

The environmental aspects covering catchment area and Project influence area i.e. area within 10 km radius from main project components have been considered. The baseline data has been collected covering physico-chemical aspects, Biological aspects and Socio-economic aspects. The 3 season data has been collected for air, noise, water, soil and ecological aspects. Impacts during construction and operation phases have been assessed and mitigation measures suggested minimizing the anticipated impacts.

Other salient features of the project and EIA/EMP were report as under:

The Scoping/TOR Clearance was accorded on 1.04.2015. The public hearing for the project was conducted on 23/06/2015 at Great Indian Bustard Rest House at Nannaj Tal North Solapur, District Solapur of Maharashtra and about 210 people including DM, affected villagers, political leaders and others attended the public hearing. The main issues raised during the public hearing was job opportunities to PAFs, compensation for land, R&R benefits as per the Right to Fair Compensation. The project proponent has complied all the issues raised by the public pertaining to them.

The EMP has been prepared based on predicted impact, actual requirement with the details as under:-

<b>S.No.</b>	<b>Component</b>	<b>Cost (Rs in lakhs)</b>
1	Lawn and garden	11.10
2	Sanitary Work	15.30
3	Greenbelt development & Plantation	76.30
4	Provision communication service	3.10
5	Environment Monitoring Program	42.00
6	Maldhok Conservation	494.00
	<b>Total</b>	<b>641.80</b>

The committee was informed that the Ministry while granting TOR, clearly mentioned that the project site is within the Great Indian Bustard Wild Life Sanctuary Naanj District Solapur, Maharashtra and therefore MKVDC is required to obtain necessary clearance from NBWL, project proponent informed that NBWL approval has been obtained vide letter no. F No.6-30/2015 WL (33<sup>rd</sup> meeting) dated 10.04.2015.

After detailed examination and discussing adequately the compliance of the committee observations, the EAC recommended for environmental clearance for the project with the following conditions:

- (i) All commitments made during the Public Hearing should be implemented fully by the project proponent
- (ii) 2% of the project cost shall be used for conservation and protection of Wildlife

**Agenda Item 2.2 Mago Chu HEP project (96 MW) in Tawang District of Arunachal Pradesh by M/s. SEW Mago Chu Power Corporation Ltd. - for Reconsideration of Environmental clearance.**

The project proponent made a detailed presentation on the project. Mago Chu project (96 MW) is proposed on Mago Chu river (tributary of Tawang River) in Tawang District of Arunachal Pradesh. The project envisages construction of 20.5 m high barrage at 3.1 km upstream of the confluence of Mago Chu and Nyukcharong Chu. The project is a run-of-the-river scheme. Total land requirement is about 33.24 ha, which is unclassified state forest (USF) land. Total submergence area is 2.42 ha which is river bed. An underground power house is proposed on the right bank of the river with 3 units of 32 MW capacity each. No family is directly affected by this project in terms of private land acquisition and loss of property. Surface land required for the project is 26.71 ha which is unclassified state forest (USF) land belonging to Rho and Yethembu village communities. No family will lose their homestead. There is no wildlife sanctuary, national park, eco sensitive zone within 10km radius study area. The estimated project cost is about Rs. 879.12 Crores and the project is likely to be completed in 42 months.

The project was considered by EAC in its 84<sup>th</sup> meeting held on 3-4<sup>th</sup> June, 2015 & 86<sup>th</sup> meeting of EAC held on 24–25<sup>th</sup> August, 2015. After detailed discussions, the EAC recommended for environmental clearance for the project with three (3) conditions. However, the compliance on the representations from NGO not addressed. Therefore, the committee while considering the projects during 87<sup>th</sup> meeting held on 23-24<sup>th</sup> September, 2015, observed the following for this project:

***“Response of the project proponent on the various issues raised by SANDRP in their representations submitted to the Ministry to be submitted and considered by EAC. The EC to be granted based on the outcome of consideration by the EAC”***

The project proponent was handed over the letters of Smt. Praneeta Dandekar; SANDRP dated 20.4.2015 & 2.6.2015 and asked to submit the response on the points raised in the letters.

The project proponent submitted their response these representations of SANDRP and the same has been presented before EAC on 26.10.2015. The project proponent mentioned that these representations are more or less similar and a common response has been presented. After detailed deliberations and considering the response of project proponent, EAC observed that though many of the points raised by SANDRP in their representations are not relevant to the project, the project proponent has given a reasonable and adequate response. Regarding, public hearing mentioned in the representation of SANDRP, the committee observed the following:

**Public Consultation** - As per EIA Notification, 2006 “Public Consultation” refers to the process by which the concerns of local affected persons and other who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate.

Tawang River Basin Study is a scientific study to collect data on various parameters viz, land, water, air, flora & fauna etc. Therefore, there public consultation is not related issue in this regard. However, Public hearing was conducted for Mago Chu project on 4.2.2015 at Indoor Stadium, Jang, Tawang District of Arunachal Pradesh. About 190 people including ASM, GB Lamas, affected villagers, political leaders and other attended the public hearing. The EAC also noted that the study was conducted with active participation of different stakeholders in Tawang River Basin such as Tawang District Administration, Zilla Parishad, Political Leaders, Village Council headmen and other villagers and knowledge personalities, Officials of Government of Arunachal Pradesh and 3 developers representing 10 proposed hydel power projects {(Ref- Executive Summary of Tawang Basin Report –P(ii)}

The committee reiterated to its earlier decision of 86<sup>th</sup> meeting EAC of held on 24-25<sup>th</sup> August, 2015 and recommended for according Environmental Clearance for the project with an additional condition that the outcome and recommendations of Tawang River Basin Report should be strictly abide by the project proponent.

**Agenda Item 2.3 Nyukcharong Chu HEP project (96 MW) in Tawang District of Arunachal Pradesh by M/s. SEW Nyukcharong Chu Power Corporation Ltd. - for Reconsideration of Environmental clearance.**

The project proponent made a detailed presentation on the project. Nyukcharong Chu project is proposed on Nyukcharong Chu River (tributary of Tawang River) in Tawang District of Arunachal Pradesh. The project envisages construction of 22 m high barrage at 2.3 Km upstream of the confluence of Mago Chu & Nyukcharong Chu. The project is a run-of-the-river scheme. Total land requirement is about 36.83 ha, which is unclassified state forest (USF) Land. Total submergence area is 1.72 ha which is riverbed. An underground powerhouse is proposed on the left bank of the river with 3 units of 32 MW capacity each. No family is directly affected by this project in terms of private land acquisition and loss of property. Surface land required for the project is 29.41 ha which unclassified state forest (USF) land belongs to RHO & Jangada village communities’. No family will lose their homestead land. There is no wild life sanctuary, national park, eco-sensitive zone within 10 Km radius study area. The estimated project cost is about Rs.995.90 cores and the project is likely to be completed in 42 months.

The project was considered by EAC in its 84<sup>th</sup> meeting held on 3-4<sup>th</sup> June, 2015 & 86<sup>th</sup> meeting of EAC held on 24–25<sup>th</sup> August, 2015. After detailed discussions, the EAC recommended for environmental clearance for the project with

three (3) conditions. However, the compliance on the representations from NGO not addressed. Therefore, the committee while considering the projects during 87<sup>th</sup> meeting held on 23-24<sup>th</sup> September, 2015, observed the following for this project:

***“Response of the project proponent on the various issues raised by SANDRP in their representations submitted to the Ministry to be submitted and considered by EAC. The EC to be granted based on the outcome of consideration by the EAC”***

The project proponent was handed over the letters of Smt. Praneeta Dandekar; SANDRP dated 20.4.2015 & 2.6.2015 and asked to submit the response on the points raised in the letters.

The project proponent submitted their response these representations of SANDRP and the same has been presented before EAC on 26.10.2015. The project proponent mentioned that these representations are more or less similar and a common response has been presented. After detailed deliberations and considering the response of project proponent, EAC observed that though many of the points raised by SANDRP in their representations are not relevant to the project the project proponent has given a reasonable and adequate response. Regarding, public hearing mentioned in the representation of SANDRP, the committee observed the following:

**Public Consultation** - As per EIA Notification, 2006 “Public Consultation” refers to the to the process by which the concerns of local affected persons and other who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate.

Tawang River Basin Study is a scientific study to collect data on various parameters viz, land, water, air, flora & fauna etc. Therefore, there public consultation is not related issue in this regard. However, Public hearing was conducted for Mago Chu project on 2.2.2015 at Indoor Stadium, Jang, Tawang District of Arunachal Pradesh. About 151 people including ASM, GB Lamas, affected villagers, political leaders and other attended the public hearing. The EAC also noted that the study was conducted with active participation of different stakeholders in Tawang River Basin such as Tawang District Administration, Zilla Parishad, Political Leaders, Village Council headmen and other villagers and knowledge personalities, Officials of Government of Arunachal Pradesh and 3 developers representing 10 proposed hydel power projects {(Ref- Executive Summary of Tawang Basin Report –P(ii)}

The committee reiterated to its earlier decision of 86<sup>th</sup> meeting EAC of held on 24-25<sup>th</sup> August, 2015 and recommended for according Environmental Clearance for the project with an additional condition that the outcome and recommendations of Tawang River Basin Report should be strictly abide by the project proponent.

**Agenda Item 2.4 New Melling HEP project (96 MW) in Tawang District of Arunachal Pradesh by M/s. SEW New Melling Power Corporation Ltd. - for Reconsideration of Environmental clearance.**

The project proponent made a detailed presentation on the project The New Melling project is proposed on Mago Chu river (tributary of Tawang River) in Tawang District of Arunachal Pradesh. The project envisages construction of 20.5 m high barrage at 8.23 Km upstream of the confluence of Mago Chu & Nyukcharong Chu. The project is a run-of-the-river scheme. Total land requirement is about 29.34 ha, which is unclassified state forest (USF) land. Total submergence area is 4.56 ha which is riverbed. An underground powerhouse is proposed on the right bank of the river with 3 units of 30 MW capacity each. No family is directly affected by this project in terms of private land acquisition and loss of property. Surface land required for the project is 24.17 ha which unclassified state forest (USF) land belongs to RHO & Yuthembu village communities. No family will lose their homestead. There is no wildlife sanctuary, national park, eco-sensitive zone within 10 Km radius study area. The estimated project cost is about Rs.938.02 cores and the project is likely to be completed in 42 months.

The project was considered by EAC in its 84<sup>th</sup> meeting held on 3-4<sup>th</sup> June, 2015 & 86<sup>th</sup> meeting of EAC held on 24-25<sup>th</sup> August, 2015. After detailed discussions, the EAC recommended for environmental clearance for the project with three (3) conditions. However, the compliance on the representations from NGO not addressed. Therefore, the committee while considering the projects during 87<sup>th</sup> meeting held on 23-24<sup>th</sup> September, 2015, observed the following for this project:

***“Response of the project proponent on the various issues raised by SANDRP in their representations submitted to the Ministry to be submitted and considered by EAC. The EC to be granted based on the outcome of consideration by the EAC”***

The project proponent was handed over the letters of Smt. Praneeta Dandekar; SANDRP dated 20.4.2015 & 2.6.2015 and asked to submit the response on the points raised in the letters.

The project proponent submitted their response these representations of SANDRP and the same has been presented before EAC on 26.10.2015. The project proponent mentioned that these representations are more or less similar and a common response has been presented. After detailed deliberations and considering the response of project proponent, EAC observed that though many of the points raised by SANDRP in their representations are not relevant to the project the project proponent has given a reasonable and adequate response.

The project proponent also mentioned that the installed capacity of the New Melling HEP project is 90 MW and not 96 MW as it was mentioned in the

representation by SANDRP. In the CIA report, it has also been recommended that not to develop any project above 3200 m elevation and projects above 2500 m have to follow strict environmental safeguards. The FRL of New Melling HEP being 2730 m, was recommended for development ( Ref- Final Report of Tawang River Basin - MoEF & CC website)

Regarding, public hearing mentioned in the representation of SANDRP, the committee observed the following:

**Public Consultation** - As per EIA Notification, 2006 “Public Consultation” refers to the process by which the concerns of local affected persons and other who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate.

Tawang River Basin Study is a scientific study to collect data on various parameters viz, land, water, air, flora & fauna etc. Therefore, there public consultation is not related issue in this regard. However, Public hearing was conducted for Mago Chu project on 3.2.2015 at Indoor Stadium, Jang, Tawang District of Arunachal Pradesh. About 190 people including ASM, GB Lamas, affected villagers, political leaders and other attended the public hearing. The EAC also noted that the study was conducted with active participation of different stakeholders in Tawang River Basin such as Tawang District Administration, Zilla Parishad, Political Leaders, Village Council headmen and other villagers and knowledge personalities, Officials of Government of Arunachal Pradesh and 3 developers representing 10 proposed hydel power projects {(Ref- Executive Summary of Tawang Basin Report –P(ii)}

The committee reiterated to its earlier decision of 86<sup>th</sup> meeting EAC of held on 24-25<sup>th</sup> August, 2015 and recommended for according Environmental Clearance for the project with an additional condition that the outcome and recommendations of Tawang River Basin Report should be strictly abide by the project proponent.

**Agenda Item 2.4 A Consideration of Report on 4 HEP Projects in Siang Sub-basin in Arunachal Pradesh in terms of decision taken by EAC during its 75th meeting**

Siang River Basin study has been conducted and final report was discussed with the State Government of Arunachal Pradesh during May 2014 in the presence of EAC members in Itanagar. The final report has been accepted by the Ministry of Environment, Forest & Climate Change in March, 2015. The recommendations have been communicated to M/o. Water Resources, River Development & Ganga Rejuvenation; Ministry of Power; Government of Arunachal Pradesh. The State Government of Arunachal Pradesh has raised objections to certain recommendations of Siang Basin Study report. One of them was that out of 15 projects recommended to be dropped, 4 projects have made progress in terms of preparation and approval of DPR. Palsi HEP had started pre-construction activities. Features of these projects



have also changed from what were considered in the basin study report and therefore requested a review.

The EAC deliberated on the issues in its 75<sup>th</sup> meeting held during July 2014 and concluded with the recommendation of accepting Siang Basin Study report in the present form and also recommended that regarding State Government's contention about dropping of 4 projects, viz. Palsi (24 MW), Kaying HEP (14 MW), Nyikong HEP (13 MW), & Sipit Upper HEP (45 MW) and mentioned that the Consultants may undertake ground verification. The Ministry asked the consultant, to undertake ground verification in collaboration with Government of Arunachal Pradesh and Central Water Commission. The Consultant has completed the work and submitted a detailed report containing findings of ground verification including progress made by these projects and the same has been presented before the EAC on 26.10.2015.

The Consultant explained that as part of the review process, a meeting under the chairmanship of Commissioner (Power) was held at Itanagar on 5.8.2015, where the matter of ground verification was discussed in detail in the presence of four developers whose projects are under review. This was followed by a site visit to four project locations. Documents were reviewed and actual progress made by these projects were recorded. Features and locations of these projects were reviewed with respect to that of considered in the basin study and impacts have been reassessed with respect to revised and final features. Final recommendations were made keeping in view the cumulative impacts of these projects in Siang basin. The Consultant presented that

- Out of 4 projects, Palsi HEP and Nyikong HEP have got their DPRs prepared and approved from AHEC, IIT Roorkee. Other 2 projects viz. Kaying and Sipit Upper HEP have prepared their DPRs, which are under review. Palsi HEP had also started work on ground.
- **Palsi HEP** - Palsi HEP started work on ground. This project was dropped due to its location where catchment area was only 92 Sq. Km and discharge in Palsi river at that location was not adequate to generate 24 MW of power and release of environment flow. The revised downstream location has a catchment area of 222 Sq. Km and approved hydrological data showed adequate discharge in the river. Intermediate stretch of the Palsi river has also reduced from 5.2 Km to 1.5 Km. This is the only project in 22 Km long Palsi river.
- **Nyikong HEP** - was dropped because it was affecting 8.7 Km of the river for 13 MW of power generation and was ranked number one in terms of river length affected per MW. Revised location and features, as per approved DPR, showed that Nyikong is a compact project with intermediate stretch of 2.39 Km and not 8.7 Km. This is the only project in 38 Km long Nyikong river and about 7 Km of free flowing stretch is available downstream of tail water discharge up to confluence with Siang river.

- **Sipit Upper HEP** - was dropped due to its location in area with rich biodiversity, where large-scale development is proposed on Siang river. Revised features and locations showed that project has become inter-basin transfer where diversion is on Sipit river and powerhouse is proposed on left bank of Siang river. In the Siang basin study report, total river length affected by Sipit Upper HEP was considered as 1.5 Km, whereas in revised layout it has become 8.67 Km. The State Government has also not approved the revised layout and capacity as the transfer of water from Sipit river will affect the downstream Sipit HEP (2 MW), which was constructed more than 10 years ago, however, could not made operational.
- **Kaying HEP** - was dropped as for 14 MW installed capacity, 5.7 Km of river length was getting affected and project falls in eco-sensitive zone i.e. within 10 km radius of Yordi Rabe Sups Wildlife sanctuary. Revised features showed that this project is also planned as interbasin transfer project where water of Pitgong river will be drained into Siyom after power generation. River length affected is 4.55 Km.

Based on the above assessment, it was recommended that Palsi and Nyikong HEPs should be allowed to go ahead for development as the revised project configurations of these two projects will not have impacts as were assessed in the Siang Basin Study Report. Other two projects viz. Sipit Upper and Kaying should remain precluded.

EAC inquired about the timing of the revision of the project features and why such revisions were not addressed at the time of the basin study report. EAC also inquired if the Palsi has started work on site, why this was not recorded during the site visit made during the basin study. Consultant explained that basin study was initiated during December 2011 and site visits were made during first 9 months of 2012. These projects are self identified schemes and only basic PFRs were made available by State Government. Developers have been contacted but latest information/changes in project features were only made available after the finalization of the basin study report. Further, Palsi started, construction of road and staff quarters only after land acquisition during 2013; by that time Siang report was completed. EAC discussed that allowing projects to develop due to change in location/features, which were dropped in the basin study, should not become a practice and such matter should be limited to these four projects only as they were discussed earlier in 75<sup>th</sup> EAC meeting. However, EAC further observed that to take a decision on this matter, it is important to understand the chronology of the events that have taken place in these 2 projects while finalising the Siang River Basin Report. Therefore, the EAC sought chronology of events of these projects and asked consultant to submit the same for detailed discussion during the next meeting for reconsideration.

**Agenda Item 2.4 B      Papu HEP project (90 MW) in East Kameng District of Arunachal Pradesh by M/s. CESC Ltd. - for extension of validity of TOR.**

The project proponent made a detailed presentation on the project. The project is proposed on Papu River in East Kameng District of Arunachal Pradesh. The project envisages construction of 16.5 m high barrage across Papu River to generate 90 MW of hydropower. This is a run-of-the river scheme. The total land requirement for the project is 77 ha. Out of which 35.5 ha is forest land. The total submergence area is about 6.01 ha. A surface powerhouse is proposed on the right bank of river with 3 units of 30 MW each. The Pakke Tiger Reserve is close to project but all project components fall outside protected boundary. Total cost of the project is about Rs. 857.51 Crores.

The Scoping/TOR clearance for this project was accorded on 27.8.2013 for a period of 2 years and validity ended on 27.8.2015.

The project proponent requested extension of the validity of TOR for 2 years on the following ground:

- i. 3 season baseline study has been completed including biodiversity study.
- ii. Application for Stage-I FC has been submitted to State Government and same will be obtained after detailed survey of land.
- iii. Social impact study as per new Lan Acquisition Act, 2013 is to be conducted by District Authority. The results of the study have to be incorporated in EIA/EMP report.
- iv. Project is within 10 km radius of the Pakke Tiger Reserve. State Government approved the proposal on 10.9.2015 for sending the proposal to NBWL. Detailed survey & investigation works will commence only after clearance from Standing Committee of NBWL and will take time.
- v. Thereafter, finalization of EIA/EMP report and conducting public hearing by State Pollution Control Board and submission of final EIA/EMP to Ministry for consideration.

Keeping in view of the project progress and no significant change in any of the project parameters, EAC recommended extending the validity of Scoping Clearance for 1 year i.e. from 27.8.2015 to 26.8.2017 to complete all the remaining works within the extended period of validity of TOR.

**Agenda Item 2.5      Kalisindh Major Multipurpose project in Jhalawar District of Rajasthan by M/s. Water Resources Department, Government of Rajasthan. - for TOR.**

The project proponent made a detailed presentation on the project. The project is planned across river Kalisindh river in Jhalawar District of Rajasthan. The project is an extension of Kalisindh dam Project (Phase-I) in which a concrete gravity dam was built to store water up-to El 316.00 m so as to provide water to Kalisindh Thermal Power Plant at Jhalawar. Water is impounded in dam during monsoon 2014 & is being provided to Kalisindh Thermal Power Plant Jhalawar for operating their Units-I & II (2X600=1200 MW). As Phase-I of the project was an integral part of Kalisindh Thermal Power Project Jhalawar, the environmental clearance of Phase-I of project had been included in environmental clearance for 2X600 MW Kalisindh Coal based Thermal Power Plant in Jhalawar District Rajasthan (MoEF & CC issued vide letter No. J-13011/80/2007-IA.II (T) dated 26.2.2009). It was also informed that total 29.962 ha forest land was affected under Phase-I of the project and final clearance for diversion of forest land was issued vide letter no. F 8 B/Raj/08/06/2009/FC/1731 dt. 24.2.2012.

The project proponent intimated that entire construction of Dam including its foundation, embedded parts etc during Phase-I have been executed in such way that during Phase-II, skin plate of 3.25 m height are to be added over existing radial gates & thus water can be stored up-to El 319.25 m & storage of 148.11 M m<sup>3</sup> can be achieved. The hydrology of entire project has been vetted by CWC. The estimated yield at 75% dependability has been worked out as 139 M m<sup>3</sup> and accordingly water use planning has been made for 139 M m<sup>3</sup>. The catchment area of Kalisindh river up-to project site is 7547 Sq.km out of which 6685 Sq.km catchment area lies in Madhya Pradesh & remaining 862 Sq.km lies in Rajasthan. The Interstate clearance/consent of Madhya Pradesh has already been accorded vide MP Govt. Letter. 22A/MPS/31/812 Bhopal dt. 2.4.2007. The project aims for Culturable Command Area (CCA) generation in about 14,250 ha area. The command area of the project is more than 10,000 ha and thus, the project is treated as Category "A". Hence, the proposed project is submitted to this Ministry for consideration.

The water use planning from the Project (Phase-I & II) includes:

1	CWC vetted 75% dependable yield	139 M m <sup>3</sup>
	<b>Water use Planning</b>	
2	Kalisindh Thermal Project Phase-I (2X600=1200 MW)	34 M m <sup>3</sup>
3	Kalisindh Thermal Project Phase-II (2X660=1320 MW)	37.38 M m <sup>3</sup>
4	Provision for Drinking water for Jhalawar & Jhalrapatan Towns	10 M m <sup>3</sup>
5	Provision for Irrigation	38.295 M m <sup>3</sup>
6	Centre of Excellence (Horticulture & Forestry College Jhalawar)	0.255 M m <sup>3</sup>
7	Agro food park & Industrial Development for Jhalawar	1.0 M m <sup>3</sup>

8	Water losses (evaporation & other losses 13%)	18.07 M m <sup>3</sup>
9	Balance Water	0
	<b>Total water Use Planning</b>	<b>139 M m<sup>3</sup></b>
10	Proposed CCA	14, 250 ha

The project will enable:

- Generation of 2520 MW power generation from Kalisindh Thermal Power Plants
- Creation of irrigation potential in 14250 Ha area
- Drinking water availability for Jhalawar & Jhalarpatan towns & adjoining rural areas
- Availability of water for Horticulture & Forestry College Jhalawar
- Availability of water for Industrial & Agro-food Park development of Jhalawar

It was further appraised that the submergence area will be increased from 1834 ha (Phase-I) to 4052 ha (Phase-II). About 67 ha forest land will be affected by the project Phase-II. A total of 6 villages will be affected by submergence of the project.

After detailed deliberations, the EAC recommended for scoping clearance for the project with the following additional TORs to be followed in the EIA study.

- (i) A rain gauge station should be installed at the project site for continuous water measurements in the project. Information on the 10-daily flow basis for the 75% dependable year the flow intercepted at the barrage, the environmental flow and other flow releases at downstream of the dam and spillway shall be included in the EIA report.
- (ii) Hydrological studies/data as approved by CWC shall be utilized in the preparation of EIA/EMP report. Actual hydrological annual yield may also be given in the report.
- (iii) Project Proponent will perform skill mapping for the services required for construction, operation & maintenance of the project based on the estimated workforce. The same should be included in R&R Plan. Based on skill mapping provisions for in situ development of the talent of the Project Affected Families should be incorporated so that local talent of PAF's can be utilized at project itself.
- (iv) Suitable Provisions for health care services should be incorporated in R&R Plan.
- (v) R&R Plan is to be formulated as per new Act, 2013 which came into force w.e.f. 1.1.2014. Plan will also incorporate community development strategies.

- (vi) FC application form has to be submitted by an early date to appropriate authority but not later than 6 months from the date of issue of the TOR for this project. IA Division of MoEF &CC shall be informed when such Application is submitted.
- (vii) Biodiversity study shall be carried-out by associating a reputed organization as recommended by WII, Dehradun or by ICFRE, Dehradun. The list of Institutes is available on MoEF & CC portal.
- (viii) The LMC-2 (Length of Main Canal) canal is proposed at the boundary line of Mukundra National Park. Therefore, Water Resources Department, Kalisindh Project, Government of Maharashtra should obtain from the PCCF, Government of Rajasthan along with clearance from the Standing Committee of NBWL, if required.

**Agenda Item 2.6 Sirkari Bhyol Rupsiabagar HEP project (168 MW) in Pithorgarh District of Uttarakhand by M/s. Uttarakhand Jal Vidyut Nigam Corporation Ltd. - for TOR.**

The project proponent made a detailed presentation on the project. The project is proposed on Goriganga River near village Lilam, District Pithorgarh of Uttarakhand. This is a run-of-the river scheme. The project envisages construction of 103 m concrete gravity dam across river Goriganga, tributary of river Kali (Sarda) to generate 210 MW hydropower. The total land requirement for the project is about 350 ha. The underground powerhouse is proposed on the right bank of the river with 2 units of 85 MW each. No National Parks/Wildlife Sanctuaries/Biosphere Reserve/Historical Monuments are in the project area. The total project cost is about Rs. 753 Crores and project likely to be completed in 69 months.

This project was accorded Scoping/TOR clearance on 17.8.2009 for 210 MW capacity.

The project proponent informed that after the devastating flood of June, 2013, topographical changes necessitated realignment of project site and the project layout was reviewed on geological aspect, requirement of free riverine stretch between 2 cascading projects and considerable e-flow releases, the capacity of the project has been reduced to 168 MW (4 x 42 MW). The proposal along with revised FRL/TWL has been approved by Government of Uttarakhand (Vide letter no. 1298/1/2014-04(08)/44/2005 dated 3.12.2014). The revised project is about Rs. 1233.79 Crores and likely to be completed in 54 months.

The EAC was informed that Hon'ble Supreme Court in its order dated 13.8.2013 imposed ban on hydropower project and also has inter-alia, directed Ministry of Environment, Forest & Climate and Government of Uttarakhand not to take-up any new project for environmental and forest clearances in Uttarakhand till further orders. However, Hon'ble Supreme Court in its order dated 12.10.2015 imposed ban on hydropower projects has been lifted other than those of 24

hydropower projects mentioned in the report of Wildlife Institute of India, Dehradun. Therefore, the project has been submitted for consideration for Scoping/TOR clearance.

Now, the revised project details are as follows:

The project is proposed on Goriganga River, 470 m downstream of confluence of Jaulchidda Gad with Goriganga River in District Pithorgarh of Uttarakhand. This is a run-of-the river scheme. The project envisages construction of 12 m high barrage across river Goriganga, tributary of river Kali (Sarda) to generate 168 MW hydropower. Total catchment area at project site is 957 Sq.km (snow fed – 526.48 Sq.km + rain fed – 430.52 Sq.km). The total land requirement for the project is about 30 ha. Total submergence area is 0.03 ha. The underground powerhouse is proposed with 4 units of 42 MW each. No National Parks/Wildlife Sanctuaries/Biosphere Reserve/Historical Monuments are in the project area. The total project cost is about Rs.1233.79 Crores and project likely to be completed in 54 months.

The committee inquired about the river basin study. The project proponent informed that cumulative impact assessment & carrying capacity study (CIA & CCS) has been given to National Institute of Hydrology, Roorkee. The outcome & recommendations of the study should be binding on the project proponent.

After detailed deliberations, the EAC recommended for scoping clearance for the project with the following additional TORs to be followed in the EIA study.

- (i) A rain gauge station should be installed at the project site for continuous water measurements in the project. Information on the 10-daily flow basis for the 90% dependable year the flow intercepted at the barrage, the environmental flow and other flow releases at downstream of the barrage and spillway shall be included in the EIA report.
- (ii) Hydrological studies/data as approved by CWC shall be utilized in the preparation of EIA/EMP report. Actual hydrological annual yield may also be given in the report.
- (iii) Project Proponent will perform skill mapping for the services required for construction, operation & maintenance of the project based on the estimated workforce. The same should be included in R&R Plan.
- (iv) Suitable Provisions for health care services should be incorporated in R&R Plan.
- (v) R&R Plan is to be formulated as per new Act, 2013 which came into force w.e.f. 1.1.2014. Plan will also incorporate community development strategies.

- (vi) Biodiversity study shall be carried-out by associating a reputed organization as recommended by WII, Dehradun or by ICFRE, Dehradun. The list of Institutes is available on MoEF & CC portal.
- (vii) The scoping/TOR clearance is being considered by MoEF & CC subject to the outcome of the court order and the project proponent shall bound by the decision of the MoEF & CC arising out of such outcome of court order.

**Agenda Item 2.7 Purthi HEP project (210 MW) in Lahaul & Spiti and Chamba Districts of Himachal Pradesh by M/s. Purthi Hydro Power Ltd. - for TOR**

The project proponent made a detailed presentation on the project. The Purthi HEP (300 MW) Project proposed in Lahaul & Spiti and Chamba Districts of Himachal Pradesh by M/s. Purthi Hydro Power Pvt. Ltd for Scoping/TOR clearance.

The EAC noted that the project is conceived as an extension of Reoli-Dugli HEP on Chenab River by utilizing the tail water discharge of Reoli-Dugli HEP. The project being an extension of Reolo-Dugli HEP, there is no land requirement for submergence area. The land requirement for project components, infrastructure & facilities is 72 ha. The estimated cost of the project is Rs.2535.92 Crores and will be completed in 90 months.

The project was earlier considered by the EAC in its meeting held on **23-24<sup>th</sup> November, 2012**. The committee after critically examining the environmental issues associated both with the instant project and its upstream/downstream project was of the following opinion/view:

- The Committee while considering the other projects on Chenab was not told about this project at any point of time. Thus, Purthi HEP has been introduced by Govt. of Himachal Pradesh as an afterthought and extension of Reoli Dugli HEP. The Committee regretted this communication gap. Because, the guidelines of the EAC for maintaining free flow stretch between two projects have been violated as a result of introduction of the project along with its distinct engineering features.
- The proposed tunneling will deprive release of TRT water of Reoli-Dugli back into Chenab, which will virtually dry-up the flow in 23.32 km long continuous river stretch. This, if this project is allowed to come up, may invite wide spread resentment among the public and various stakeholders as it may substantially damage the ecological health and integrity of Chenab river.
- The Committee further noted that the TWL of Purthi HEP is matching with the FRL of the downstream project Sach-Khas, which was already approved by Government of Himachal Pradesh, and thereby leaving no free flow stretch, which is unacceptable from environmental point of view.



- The Committee concluded that the project proponent and Govt. of Himachal Pradesh may review and revise the proposal in the light of the above observations for reconsideration

In view of this, the Committee did not find the Purthi HEP (300 MW) project, in its form and shape fit to be awarded scoping clearance. Accordingly, the MoEF rejected the proposal for scoping/TOR clearance on 28.3.2013.

Thereafter, the Government of Himachal Pradesh & project proponent submitted a proposal for reconsideration. The proposal was considered by EAC in its meeting held on 26-27<sup>th</sup> February, 2015. The Government of Himachal Pradesh presented that though there is no free flowing stretch of river, there is no habitation in the area and the river flows in deep gauges which do not permit for any habitation and even animals can go in that deep gauges. The project was planned earlier with the reason that there is no separate dam/barrage construction involved and only diversion of water involved. There are perennial streams downstream of Reoli-Dugli HEP which flow and contribute to the river and do not affect the river. However, the EAC reiterated the previous committee's observation and concluded that the project in its present shape & form not acceptable. An alternate proposal, if found techno-economically and environmentally sound, may be accordingly submitted through a detailed comparison of the present and new proposal.

The project proponent submitted a revised proposal of Purthi HEP for 210 MW capacity. The project proponent informed the committee that

- i. the entire tail water of the upstream Reoli-Dugli HEP project should not be utilized for generation and a part of flow should be released untapped to augment the river flow
- ii. in view of the present norms, 20% of the inflows into Purthi project shall be released into the river untapped
- iii. The tail water level (TWL) of Purthi project is being raised to create 1 km free river stretch between the tail water discharge of Purthi and the tip of the reservoir of the downstream Sach-Khas project

Now, the present project details are as follows:

The project is extension of the upstream Reoli-Dugli HEP utilizing the tail water discharge from Reoli-Dugli HEP. The power flow available at TRT outfall of Reoli-Dugli in 90% dependable year ( as approved by CEA) has been considered as the basic input for preliminary power potential study of Purthi HEP. A provision of 20% flow available at Reoli-Dugli HEP's TRT has been made towards mandatory e-flow release to ensure sufficient water in the river downstream of Purthi HEP's intake. Optimum installed capacity for the project has been determined based on CEA guidelines for power potential studies and installed capacity. Based upon the 90% dependable year (DY) flows available at TRT outfall of upstream Reoli-Dugli HEP annual energy is

calculated and from the incremental energy consideration for 90 DY, the installed capacity for Purthi HEP 210 MW has been determined.

On the right bank hill of Chenab River, an underground tail pool will be constructed at TRT outfall of Reoli-Dugli HEP. The headrace tunnel (HRT) is 7.972 km with 9 m diameters is now proposed. The design discharge is 266.83 cumec. An underground powerhouse is proposed with 4 units of 52.5 MW each. Total land requirements is about 72 ha. Out of which 52 ha is forest land.

After detailed deliberations, the EAC recommended for scoping clearance for the project with the following additional TORs to be followed in the EIA study.

- (i) Information on the 10-daily flow basis for the 90% dependable year the flow at TRT outfall of Reoli-Dugli, the environmental flow and other flow releases at downstream of the project and spillway shall be included in the EIA report.
- (ii) Hydrological studies/data as approved by CWC shall be utilized in the preparation of EIA/EMP report. Actual hydrological annual yield may also be given in the report.
- (iii) Project Proponent will perform skill mapping for the services required for construction, operation & maintenance of the project based on the estimated workforce. The same should be included in R&R Plan.
- (iv) Suitable Provisions for health care services should be incorporated in R&R Plan.
- (v) R&R Plan is to be formulated as per new Act, 2013 which came into force w.e.f. 1.1.2014. Plan will also incorporate community development strategies.
- (vi) Biodiversity study shall be carried-out by associating a reputed organization as recommended by WII, Dehradun or by ICFRE, Dehradun. The list of Institutes is available on MoEF & CC portal.
- (vii) The outcome and recommendations of Chenab River Basin Report should be strictly abide by the project proponent.
- (viii) The boundary of the Sechu Tuan Nala Wildlife Sanctuary is at an aerial distance of is more than 12 km from the nearest project component. Therefore, a map depicting the wildlife sanctuary from the project components and distance should be confirmed by Chief Wildlife Warden and submitted.

**Agenda item 2.7A Ashti Lift Irrigation Scheme-III in Beed District of Maharashtra by M/s. Godavari Marathwada Irrigation Development Corporation – for TOR**

The project proponent made a detailed presentation on the project. The project is proposed to utilize 23.66 TMC of water from available Krishna sub-basin to provide irrigation facility in 87,188 ha of area in Osmanabad District of Maharashtra. The project is proposed in 2 parts viz. Lift Irrigation Scheme-I (LIS-I) and Lift Irrigation Scheme-II (LIS-II). Administrative approval for the scheme is given by Government of Maharashtra vide letter no.2004/1413(385/04) dated 23.8.2007 for 2382.50 crores for 19 TMC of surplus water for 87,188 ha in Osmanabad District. The project is subsequently, revised and approved by Government of Maharashtra vide letter dated 27.8.2009 amounting to 4845.05 crores for utilization of 23.66 TMC of water and the project was planned for 114731 ha in Osmanabad and Beed Districts by 3 lift irrigation schemes. The Lift Irrigation Scheme - LIS-I and LIS-II as Krishna Marathwada Lift Irrigation Scheme has been granted environmental clearance vide letter no. J- 12011/58/2008-IA-I dated 24.6.2015.

The instant scheme is Ashti LIS-III proposing to utilizing 5.68 TMC of water from Ujani reservoir in 5 stages for providing irrigation facility to 27,543 ha in drought prone area in Beed District of Maharashtra. The gross command area is 52,662 ha, culturable command area is 35,647 ha and irrigable command area is 27,543 ha. The project envisages construction of 39.50 m high and 1410 m long earthen dam on river Mehekari. Total land requirement is about 1749.2 ha. There is no national park/wildlife sanctuary/biosphere reserve/ historical monuments in the project area. Total estimated cost of the project is about Rs. 1046 Crores.

This project was considered by EAC, in its meeting held on 20-21<sup>st</sup> July, 2015. During the discussions, the Committee observed that the construction works has already been started on the project. The project proponent mentioned that as the project was originally approved by the Government of Maharashtra as LIS-III of the Krishna Marathwada Project, the construction works started. The works were stopped long back. This project was separated as LIS-III and hence separate application has been submitted by Government of Maharashtra for scoping clearance as a separate project.

The committee noted that a violation has occurred in the project and EAC mentioned that the extant procedure may be followed in the Ministry to deal with/examine such cases at the first instance. EAC was further informed that such cases are to be dealt in terms with the MoEF OM No. J-11013/41/2006-IA.II (I) dated 12.12.2012 & 27.6.2013.

The project proponent submitted vide letter no. O.No.CE(WR) Abad/T-6/Camp/Delhi dated 27.10.2015 and also mentioned that Ashti LIS-III was part of Krishna Marathwada Irrigation project at that time, the work of Ashti LIS-III was also stopped along with LIS-I & LIS-II of Osmanabd District. The required undertaking,

Affidavit and resolution no 54/3 dt. 13/6/2014 of Godavari Marathwada Irrigation Development Corporation Aurangabd was resolved that violation shall not be repeated in future. Based on MoEF & CC directions, Department of Environment, Government of Maharashtra wrote to Maharashtra Pollution Control Board to take legal action against Godavari Marathwada Irrigation Development Corporation. Accordingly criminal case has been filed (RCC 21/2015) against proponent.

The Project proponent also submitted reply on the questions raised by SANDRAP regarding serious violation by commencement of work before obtaining environment clearance.

It was also informed that the baseline data has been collected for 2 seasons .i.e Summer (Mar to May 2015) and Rainy season (July to September 15). The data collection for post monsoon season (Nov. to Dec. 15 and Jan 16) shall be collected.

The committee was informed that the NGT order on violation committed/occurred in the project has been stayed by Hon'ble Supreme Court in September, 2015. Hence this project has been considered. The EAC after critically examining all environmental issues, recommended clearance for pre-construction activities with the following additional TORs:

- (i) Information on the 10-daily flow basis for the 75% dependable year the flow intercepted at the barrage, the environmental flow and other flow releases at downstream of the barrage and spillway shall be included in the EIA report.
- (ii) Hydrological studies/data as approved by CWC shall be utilized in the preparation of EIA/EMP report. Actual hydrological annual yield may also be given in the report.
- (iii) R&R Plan is to be formulated as per new Act, 2013 which came into force w.e.f. 1.1.2014. Plan will also incorporate community development strategies.
- (iv) Public Hearing needs to be conducted in Beed District as per the provisions of EIA Notification, 2006.
- (v) Biodiversity study shall be carried-out by associating a reputed organization as recommended by WII, Dehradun or by ICFRE, Dehradun. The list of Institutes is available on MoEF & CC portal.
- (vi) The data collected may be utilised in preparation of EIA/EMP reports

The committee also mentioned that the latest status of the project along with the letters of State Government/undertakings submitted earlier may be submitted to Ministry before issue of TOR for this project.

**Agenda Item 2.8 Morand-Ganjal Irrigation project in Hosangabad District of Madhya Pradesh by M/s. Narmada Valley Development Authority - for extension of validity of TOR.**

The project proponent made a detailed presentation on the project. It is noted that two dams are proposed namely Morand and Ganjal on Morand & Ganjal Rivers (a tributaries of Narmada River) respectively in Hoshingabad District of Madhya Pradesh to provide irrigation facility to 52,205 ha & drinking water for 192 villages. The project envisages construction of 56.24 m high concrete dam across Morand River and 32.42 m high concrete dam across Ganjal River near to provide irrigation facility to 52,205 ha of irrigable command area (ICA). The CCA is 58,052 ha and GCA is 66,101 ha. The total land requirement for the project is 6825 ha., out of which 2692 ha is forest land. Total submergence area is 3328 ha. No National Park/Wildlife Sanctuary/Biosphere Reserve exists within 10 km radius of the project. A total of 11 villages consisting of 651 families are likely to be affected due to this proposed project. Total cost of the project is about Rs.1434 Crores.

The Scoping/TOR clearance for this project was accorded on 17.10.2012 for a period of 2 years and validity ended on 16.10.2014. Thereafter, the Ministry vide letter dated 11.2.2015 accorded 1 year extension of Validity of TOR from 17.10.2014 to 16.10.2015.

The project proponent requested extension of the validity of TOR for further 1 year on the ground that the EIA/EMP reports were prepared and submitted to MP Pollution Control Board for conduction public hearing. However, these reports were based on R&R Policy, 2008 of NVDA, Madhya Pradesh. Due to latest “the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013”, the provisions were revised. Therefore, the delay occurred in finalization of EIA/EMP reports. The case for land for compensatory afforestation is now in the final phase of decision & Stage-I FC will be obtained early.

Keeping in view of the project progress and no significant change in any of the project parameters, EAC recommended extending the validity of Scoping Clearance for 1 year i.e. from 17.10.2015 to 16.10.2016 to complete all the remaining works within the extended period of validity of TOR.

**Agenda Item 2.9 Lara Sumta HEP project (104 MW) in Lahaul & Spiti District of Himachal Pradesh by M/s. Lara Sumta Kothang Hydro Power Pvt. Ltd. - for extension of validity of TOR.**

The project proponent made a detailed presentation on the project. The project is proposed on Spiti River in Lahaul & Spiti District of Himachal Pradesh. The project envisages construction of 22 m high barrage across Spiti River near Tobo Village to generate 104 MW of hydropower. This is a run-of-the river scheme. The total land requirement for the project is 97.75 ha. Out of which 79.50 ha is forest land. The total submergence area is about 26.30 ha. An underground powerhouse is

proposed on the right bank of river near Tipta Village with 2 units of 52 MW each. Total cost of the project is about Rs. 898.41 Crores.

The Scoping/TOR clearance for this project was accorded on 31.12.2012 for a period of 2 years and validity ended on 30.12.2014.

The project proponent requested extension of the validity of TOR for 1 year on the ground that as per the provisions of OM No.J-11013/41/2006-IA-II (I) (Part) dated 22.8.2014, the TORs prescribed for a period for a project/activity will be valid for 2 years for submission of EIA/EMP report, except for River Valley & HEP projects, where the validity of TORs will be for 3 years.

The EAC observed that the TOR was granted on 31.12.2012 for a period of 2 years and validity ended on 30.12.2014. The validity of extension for a project should have to be submitted within the completion of validity period. In the instant case, the application is submitted almost 10 months after validity period. Hence, the OM is not applicable. Therefore, the EAC mentioned that a fresh application for Scoping/TOR clearance will have to be submitted for TOR.

**Agenda Item 2.10 Sumte Kothang HEP project (130 MW) in Lahaul & Spiti District of Himachal Pradesh by M/s. Sumte Kothang Hydro Power Pvt. Ltd. - for extension of validity of TOR.**

The project proponent made a detailed presentation on the project. The project is proposed on Spiti River in Lahaul & Spiti District of Himachal Pradesh. The project envisages construction of 22 m high barrage across Spiti River near Hurling Village to generate 130 MW of hydropower. This is a run-of-the river scheme. The total land requirement for the project is 110 ha. Out of which 87 ha is forest land. The total submergence area is about 32.20 ha. An underground powerhouse is proposed on the right bank of river near Chango Village with 2 units of 65 MW each. Total cost of the project is about Rs. 1162.05 Crores.

The Scoping/TOR clearance for this project was accorded on 31.12.2012 for a period of 2 years and validity ended on 30.12.2014.

The project proponent requested extension of the validity of TOR for 1 year on the ground that as per the provisions of OM No.J-11013/41/2006-IA-II (I) (Part) dated 22.8.2014, the TORs prescribed for a period for a project/activity will be valid for 2 years for submission of EIA/EMP report, except for River Valley & HEP projects, where the validity of TORs will be for 3 years.

The EAC observed that the TOR was granted on 31.12.2012 for a period of 2 years and validity ended on 30.12.2014. The validity of extension for a project should have to be submitted within the completion of validity period. In the instant case, the application is submitted almost 10 months after validity period. Hence, the OM is not applicable. Therefore, the EAC mentioned that a fresh application for Scoping/TOR clearance will have to be submitted for TOR.

**Agenda Item 2.11 Ken Betwa Link Project Phase-I in Districts Panna & Chhatarpur, Madhya Pradesh by M/s. Water Resources Department, Government of Madhya Pradesh & M/s National Water Development Agency (NWDA), Government of India – for reconsideration of Environmental Clearance.**

The project proponent made a detailed presentation on the project. It is noted that the project envisages construction of 77 m high and 2031 m long composite dam across river Ken near village Daudhan in the District Chhatarpur in Madhya Pradesh to irrigate 6.35 lakh ha area of land, drinking water purposes and generation of 78 MW hydropower. The project comprises of two powerhouse of 2 x 30 MW & 3x6 MW each, two tunnels of 1.9 Km long upper level, 1.1 Km long tunnel lower level &. A 221 Km long Ken-Betwa link canal has been proposed on the left bank of the river. The CCA is 5,15,215 ha. Total submergence area is 9000 ha out of which 5258 ha is forest land (includes 4141 ha Panna Tiger Reserve). A total of 10 villages consisting of 1585 families are likely to be affected by this project. Panna Tiger Reserve falls within 10 Km radius of the project. The total cost of the project is about Rs. 9393 Crores and likely to be completed in 9 years.

The project was considered earlier by EAC in its meeting held on 24-25<sup>th</sup> August, 2015. The environmental aspects covering catchment area, Submergence area and Project influence area i.e. area within 10 km radius from main project components have been considered. The baseline data has been collected covering physico-chemical aspects, Biological aspects and Socio-economic aspects. Three season data has been collected for air, noise, water, soil and ecological aspects. Impacts during construction and operation phases have been assessed and mitigation measures suggested minimizing the anticipated impacts.

After detailed deliberations, EAC sought clarification/additional information on the following:

- (i) Status of NBWL clearance and as to whether the application has been forwarded from State Government. What are the recommendations of NTCA/Chief Wildlife Warden, Government of Madhya Pradesh. Detailed Wildlife Conservation & Management Plan proposed for Panna Tiger Reserve/ Ghariyal Sanctuary.
- (ii) Impact due to habitat change having effect like corridor loss and loss of migratory path for wildlife including bird and impact on the breeding grounds of species and on access of animals to food and shelter
- (iii) Impact on animal distribution specially on tigers.
- (iv) A proper mechanism/feature is to be provided in the planning and design of dam to ensure a longitudinal connectivity for non-disruptive biota movement and sediment transportation. This is to be explained.

- (v) Plan for greenbelt development & reservoir rim treatment plan has to be furnished
- (vi) Status of submission of Stage-I forest clearance application for the project.
- (vii) Since, the submergence area is very large (about 9000 ha), the micro climatic change conditions in project be brought-out clearly.
- (viii) There are about 7 representations received from various NGO Groups with respect to Ken-Betwa project. Project Proponent was handed over representations from these NGOs, and were asked to submit a detailed response to the same to various clarifications sought in the said representations.

The project proponent along with Former Additional PCCF who is assisting in the project have presented the case and mentioned that the issue of impact of project on Panna Tiger Reserve (PTR) has been considered by State Wildlife Board (SWLB), Government of Madhya Pradesh on 22.9.2015. The outcome and recommendations are under finalization. However, it was informed that the State Wildlife Board (SWLB), Government of Madhya Pradesh has decided to recommend the proposal to NBWL for wildlife clearance. also presented the matter. The matter of preparation of Landscape Management Plan (LMP) by WII, Dehradun and its implementation & monitoring has been considered by State Wildlife Board (SWLB), Government of Madhya Pradesh on 22.9.2015 and also approved by NTCA of MoEF & CC.

The committee also mentioned several representations including that of Former Secretary, Government of India Sh. EAS Sarma have been received regarding this project and compliance to these representations should be submitted by the project proponent

The EAC has observed that the landscape plan is being prepared by WII, Dehradun. In the absence of a plan, the committee cannot examine the proposal. The EAC mentioned, after completion of the plan, obtaining a second opinion on the LSMP from an external expert the project will be desirable & reviewed and will be reconsidered again for Environmental Clearance.

The meeting ended with vote of thanks to Chair

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