



भारत सरकार
Government of India
जल शक्ति मंत्रालय
Ministry of Jal Shakti
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
Department of WR, RD & GR
केन बेतवा लिंक परियोजना प्राधिकरण
Ken Betwa Link Project Authority



No: NWDA/CE(N)LKO/T-16/KBLPA/ 750-74

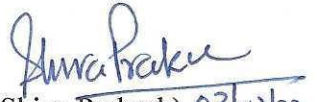
Date: 03.03.2023

Sub: Minutes of 3rd Meeting of Ken Betwa Link Project Authority held on 23.02.2023 at Palika Bhawan, New Delhi

3rd meeting of Ken Betwa Link Project Authority under the Chairmanship of CEO, KBLPA was held on 23.02.2023 at 15:00 hrs. in the Committee hall, NWDA, Palika Bhawan, New Delhi .

Minutes of Meeting duly approved by the Chief Executive Officer, KBLPA are enclosed for kind perusal and further necessary action.

Encl: As above.


(Shiva Prakash) 03/03/23
ACEO (HQ/P), KBLPA

Copy to:

1. The Chief Executive Officer, KBLPA, New Delhi.
2. The Additional Chief Executive Officer (Environment, R&R & LA) LP: Chief Engineer, Rajghat Canal Project, Datia & Project Director, Lower Orr PMU (E-mail: cerajghat@gmail.com)
3. The Additional Chief Executive Officer (Construction); Chief Engineer, Betwa Pariyojana, I&WRD, Jhansi---*Nominated by I&WRD, UP* (E-mail: cebetwaprojidupjh-up@nic.in)
4. The Additional Chief Executive Officer; (Design & Planning); Chief Engineer, Design, I&WRD, Dr. Ram Manohar Lohiya Parikalp Bhawan, Lucknow--- *Nominated by I&WRD, UP.* (E-mail: cedesigniduplu-up@nic.in)
5. The Additional Chief Executive Officer; Chief Engineer, Dhasan Ken Basin, Sagar & Project Director, Bina Project Management Unit ----- *Nominated by WRD, MP.* (E-mail: ce.dkb.wrd.sgr@mp.gov.in, cedkbwrdsgr@gmail.com)
6. The Additional Chief Executive Officer; Chief Engineer, Inter-state Water Agreement Unit, Bhopal -*Nominated by WRD, MP.* (E-mail: ceiswu.encwrdbpl@mp.gov.in, ceisenbpl@gmail.com)
7. The Director, Finance, KBLPA, New Delhi. (E-mail: dirfin-nwda@nic.in)

अतिरिक्त मुख्य कार्यकारी अधिकारी (मु0/यो0).

कैम्प ऑफिस: 4/193 एफ, विशाल खण्ड, गोमती नगर, लखनऊ-226010

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Additional Chief Executive Officer (HQ/P).

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Phone: 0522-4345033, 4235033 Fax: 0522-4345033

Email: aceohq-kblpa@gov.in

Special Invitee:

1. The PCCF (Land Management), Forest Department, Govt. of MP, Bhopal.
2. The Engineer-in-Chief/ HOD, I&WRD, Govt. of UP, Lucknow.
3. The Engineer-in-Chief, WRD, Govt. of MP, Bhopal.
4. The Collector & District Magistrate, Panna.
5. The Collector & District Magistrate, Chhatarpur.
6. The Chief Engineer, Yamuna Basin/ Lower Orr Dam Project, Water Resources Department, Govt. of Madhya Pradesh, Gwalior for Lower Orr Dam project
7. The Chief Executive Director, Environment, Construction Management & Administrations, WAPCOS Limited, Gurugram.
8. The Chief Executive Director, Infrastructure & Legal, WAPCOS Limited, Gurugram.

Copy for information and necessary action to:

1. The Chief Engineer(HQ), NWDA, New Delhi
2. The Director (T), NWDA, New Delhi
3. The Superintending Engineer(N), NWDA, New Delhi
4. The Superintending Engineer, KBLPA, Gwalior.
5. The Executive Engineer, KBLPA, Jhansi.
6. The Executive Engineer, KBLPA, Chhatarpur.
7. The Executive Engineer, KBLPA, Bhopal.

Copy for kind information to: -

1. PPS to the Secretary, DOWR, RD&GR, Ministry of Jal Shakti, New Delhi
2. The Additional Chief Secretary, WRD, Govt. of Madhya Pradesh, Bhopal.
3. The Principal Secretary, I&WRD, Govt. of Uttar Pradesh, Bapu Bhawan, Lucknow.

Minutes of the 3rd meeting of Ken-Betwa Link Project Authority held on 23.02.2023 at 15:00 hrs. in Committee Hall, NWDA, New Delhi

3rd Meeting of the Ken-Betwa Link Project Authority was held under the Chairmanship of Shri Bhopal Singh, DG, NWDA & Chief Executive Officer, KBLPA on 23rd February 2023 at 15:00 hrs. in the Committee Hall, NWDA, Palika Bhawan, New Delhi. The list of participants in the meeting is enclosed as Annex-I.

At the outset, Chairman welcomed all the participants and appreciated the progress of works under KBLPA, especially in the field of land acquisition, hoping that the process of land acquisition of 21+1 villages will be finalized soon. He told that it would be a challenge for the Authority (KBLPA) to utilize the fund of Rs. 3500 crores assigned to the project for the year 2023-24 for which works need to be carried out simultaneously on all the fronts. He also stressed upon the importance of dedicated offices of both the states of MP&UP in implementation of this project. He requested for cooperation of all stakeholders to implement the project and all related works such as ILMP, EMP, etc. in the time bound manner. He also requested the both the states and Authority to formulate a realistic work plan for the coming year and the same shall be discussed in the next meeting.

Thereafter, CEO, KBLPA requested Member Secretary to make the presentation on the agenda items.

1. Confirmation of minutes of the 2nd meeting of Ken-Betwa Link Project Authority held on 13.09.2022

2nd meeting of the Ken Betwa Link Project Authority (KBLPA) was held on 13th September, 2022 at Bhopal. The minutes of the meeting were circulated vide letter dated 23.09.2022. Member Secretary informed the members of Committee that no comments have been received from any members and the minutes of the 2nd meeting of KBLPA may be confirmed as circulated. Accordingly, minutes of the 2nd meeting were approved as circulated.

2. Compliance to decision taken in the 2nd Meeting of KBLPA held on 13.09.2022

i. Land acquisition of 21+1 villages of Panna & Chhatarpur district

The private Revenue land in 21 villages has been notified and published in the Gazette of Madhya Pradesh for both the districts of Panna and Chhatarpur under Section-11 for notification and declaration as part of PTR by Govt. of MP. Further details are furnished under Item 3.4.

ii. Status of Transfer of Govt. Land to PTR

Details furnished under Item 3.5.

iii. Land acquisition for KB link canal

It was decided to initiate the process of land acquisition for link canal after completion of the same for Daudhan dam. Further details are furnished under Item 3.6.

iv. Planning and Implementation of Rehabilitation & Resettlement plan

Details furnished under Item 3.7.

v. Tender Document for Daudhan dam / Timeline

Tender document for Daudhan dam and its appurtenant works is under finalization. Further details are furnished under Item 3.10.

vi. Constitution of GPLC and implementation of ILMP

ACEO, KBLPA intimated the Authority that comments of Govt. of MP and UP were received on the draft GPLC and proposal for constitution of GPLC had been submitted to DoWR, RD&GR. CEO, KBLPA further informed that Ministry of Jal Shakti has accorded approval for constitution of GPLC and the order for the same shall be issued shortly.

vii. Attachment of dedicated offices for KBLPA by MP & UP

Details are furnished under Item 3.15.

viii. Engagement of PMC

ACEO, KBLPA informed the Authority that the EoI for engagement of PMC the EoI had been uploaded in the Central Public Procurement Portal by the Executive Engineer, KBLPA, Jhansi on 17.01.2023 and a Pre-bid meeting was held on 07.02.2023 in Bhopal, for which the minutes of meeting has been circulated on 13.02.2023. EoI is scheduled to be opened on 15.03.2023. He further informed that Executive Engineer, KBLPA, Jhansi has been requested to prepare the draft RFP, in the meantime, in consultation with both the States so that the same may be finalized by the date of opening of EoI.

ix. Progress of works of Phase-II project of MP

Physical and financial progress of the three projects under Phase-II of KBLP is furnished under Item 3.13.

x. Status of DPR of UP

Details are furnished under Item 3.14.

3. Status of compliance of decision taken in 3rd meeting of Steering Committee of KBLPA held on 18.01.2023

i. Finalisation of RRs and engagement of CEO/ACEOs/Dir(F)

ACEO, KBLPA informed the Committee that vacancies were circulated as per the approved RRs and 68 applications have been received for various positions and further necessary action is being taken for their selection. Selection process is likely to be completed by March, 2023.

ii. Finalise Bye laws of authority

ACEO, KBLPA informed that formation of Bye Laws of Authority is under progress.

iii. R&R plan of 21 villages and acquisition of land for transfer to PTR

Chairman of the Committee desired that Govt. of MP may submit detailed timeline plan for land acquisition and R&R as desired by the Chairman of Steering Committee of KBLPA in its 3rd meeting. Further details furnished under Item 3.4 & 3.5.

iv. Finalisation of Integrated Landscape Management Plan and Plan for Implementation of Landscape Management Plan & Environment Management Plan

ILMP has been prepared by WII, Dehradun. Order for the constitution of GPLC shall be issued very shortly.

v. Constitution of a Technical Advisory Group for KBLP (TAG-KBLP)

ACEO, KBLPA informed the Committee that TAG for KBLPA had been constituted on 26.08.2022 and 1st Meeting of TAG is scheduled on 24.02.2023 at New Delhi.

vi. Compliance for 2nd stage forest clearance of Daudhan reservoir

ACEO, KBLPA intimated that request for Limited Area Work Permission has been submitted to PCCF(LM), Forest Department of MP. Action has been started for obtaining 2nd stage forest clearance.

vii. Establishment of offices of KBLPA

Details are furnished under Item 3.16.

viii. Updating of Comprehensive DPR at PL 2020-21

ACEO, KBLPA informed the Committee that observations from both the States on the updated Comprehensive DPR is awaited. Reminder for the same has been sent to the States on 17.02.2023. Representative of the States of MP & UP assured that observations on the DPR will be submitted shortly.

ix. Engagement of Project Management Consultancy

EOI for engagement of PMC was finalised in the third meeting of CEC held on 03.01.2023. EoI was published on CPPP on 17.01.2023 by EE, KBLPA, Jhansi. Pre-bid meeting was held on 07.02.2023 at Bhopal. Dated of opening of EOI is 15.03.2023

x. DPR for two New Barrages and others

Details are furnished under Item 3.14.

xi. Preparation and finalization of the tender document for the works of Daudhan dam and its appurtenant works

Details are furnished under Item 3.10.

xii. Initiating the process for land acquisition for Ken-Betwa link canal

Details are furnished under Item 3.6.

xiii. Finalizing Work Flow and Financial Power for KBLPA

As decided in 2nd Meeting of SC-KBLPA, existing powers to NWDA are being utilised by KBLPA. Action is being taken for the enhancement of powers to the officials of KBLPA.

xiv. Reimbursement to the States on Expenditure made on State Specific Projects/ components

As decided in the 2nd meeting of SC-KBLPA, proposal has been submitted to DoWR,RD&GR. Further, as discussed in the 3rd meeting of SC-KBLPA, proposal has been sent to DoWR,RD&GR for seeking clarification from Ministry of Finance.

3.4 Land Acquisition of 21+1 villages of Panna and Chhatarpur

ACEO, KBLPA informed the Committee that private land in 21+1 villages had been notified and published in the Gazette of MP for Panna and Chhatarpur under Section-11 for notification. Public Hearing was held on 03.01.2023 and 04.01.2023.

Gazette Notification for land acquisition of 7 villages of Panna district has been published under section Section-19 on 13.01.2023 and that for 14 villages of Chhatarpur has been signed by Collector, Chhatarpur for notification. Further, ACEO, KBLPA informed that in the meeting taken by Collector, Panna it has been decided to expedite the process of survey and notification for land acquisition of Dodi village.

3.5 Transfer of Government land to PTR:

ACEO, KBLPA informed the Committee that orders for transfer of non-forest Govt. land of about 3562 ha in villages of Panna district to PTR have been issued by Collector Panna on 12.12.2022, 23.12.2022 and 12.01.2023 and proposal for transfer of 272.46 ha Govt. land to PTR in Dodi village shall be issued shortly. Land acquisition of revenue land of Dodi village in Panna has been notified and published in Gazette of MP under section 11(1) on to 02.12.2022. The proposal for transfer of about 1916.289 ha in 7 villages of Chhatarpur district has been submitted to PTR on 20.12.2022. PTR has verified the land of 7 villages of Chhatarpur and intimated to Collector, Chhatarpur vide letter dated: 13.02.2023 that 48.441 ha is Forest Land out of 1916.289 ha.

3.6 Planning for land acquisition under Link Canal

ACEO, KBLPA informed that it is planned to start the work w.e.f. 1st April, 2023 by deploying two teams, one under KBLPA, Bhopal office for the land acquisition in MP and another under KBLPA, Jhansi office for the Land acquisition in UP for Link Canal.

He requested that the Govt. of MP and UP to extend all co-operation to KBLPA. CEO, KBLPA requested the concerned officials of KBLPA, Jhansi and Bhopal to prepare the tentative proposal for notification of land to be acquired under Section-11 and the same shall be discussed in the next meeting of the Authority, probably in the month of April, 2023. He also requested for cooperation from Govt. of UP for the above work.

3.7 Planning and implementation of R&R by WRD, Govt. of MP

ACEO, KBLPA informed the Committee that observations on the draft composition of R&R Committee & its ToR were received from both the States. R&R Monitoring Committee after incorporating the observations of MoTA, States of UP and MP and as discussed in the 3rd meeting of Steering Committee had been submitted to DoWR, RD&GR and the same has been approved by the Ministry. WRD, MP informed that R&R policy made on the basis of RFCTLARR Act, 2013 has been submitted to Collectors of Chhatarpur and Panna for consideration.

3.8 Environmental Clearance of Lower Orr Dam Project

ACEO, KBLPA informed the Committee that Sub-Committee has conducted site visit of Lower Orr Dam Project from 9th-11th November 2022 as per the decision taken in 28th Meeting of EAC (River Valley & Hydroelectric Projects) held on 31.05.2022. The EAC deliberated on the site visit report and observed that the project authorities have violated the provisions of the EIA Notification, 2006 and started the construction work of the project without Environmental Clearance. It was also observed that during construction of the project environmental safeguard conditions suggested by the EAC while recommending the project for grant of Environmental Clearance in its meeting 93rd meeting held on 2nd May, 2016 have not been complied with. Accordingly, EAC has found essential to have an ecological damage assessment study as per laid down procedure of the Ministry so as to suggest the appropriate environmental damage restoration plan in order to develop the project in ecologically sustainable manner.

The EAC after detailed deliberation on the EAC Sub-Committee site visit report recommended that the Ministry may consider for taking necessary action on the violation against the project proponent as per law and the Project Authorities may conduct study as per additional ToR (enclosed as Annexure-III) for assessment of environmental damage caused due to start of construction of project without obtaining prior Environmental Clearance, in terms of Office Memorandum dated 7th July, 2021 and submit revised EIA/EMP report for further consideration of the proposal under the provisions of EIA Notification, 2006, as amended. Project Director, Orr River PMU Bamorekala, WRD, MP vide letter dated 14.02.2023 has requested that the WAPCOS to conduct study as per additional TOR and do a needful action on the observations raised in 38th meeting of EAC.

CEO, KBLPA requested Govt. of MP that an interim reply may be sent to the EAC stating that construction of project was started only after obtaining stage-I forest clearance due to technical time bar and the study, as per the recommendations of the EAC, shall be taken due care by WAPCOS. ACEO, KBLPA further requested WRD, MP that a compliance report depicting actions taken by the proponent for implementation of R&R and measures taken to safeguard environmental damages etc. shall also be submitted.

Shri O P Singh Kushwaha, Expert Consultant, MP assured to provide a draft interim reply in line with the suggestions of CEO, KBLPA and in consultation with PCCF(LM) along with the point-wise compliance to the report of Sub-committee with details.

CEO, KBLPA desired to submit the interim reply by the end of coming week, so that the interim reply can be submitted to the EAC on priority.

3.9 Limited Area Work Permission for Daudhan dam

CEO, KBLPA expressed gratitude for cooperation of Shri Sunil Agarwal, PCCF (Land Management), Forest Department, Govt. of MP in the implementation of KBLP and timely guidance to the Authority. Proposal for obtaining limited area permission has been submitted to the PCCF(LM). CEO, KBLPA requested to expedite limited are work permission and sought advice regarding stage-II forest clearance.

PCCF(LM) informed that process for stage-II forest clearance is online and various data is to be uploaded on the portal. He told the project authorities to collect the kml file/ layers of Govt. land, which has been transferred to PTR for verification and uploading in the portal. Further compliance of Stage-I forest clearance will also be submitted on line. Land transferred can be uploaded in the portal only after mutation in favor of PTR/ Forest Department.

PCCF(LM) further intimated that once the compliance report is uploaded in the portal, proposal for Limited Area Permission can be submitted to MoEF&CC.

CEO, KBLPA requested officials of KBLPA, Bhopal and WRD, MP to provide all necessary documents to PCCF(LM) for the above.

3.10 Tender for Daudhan Dam and Its Appurtenant Works

ACEO, KBLPA informed that it has been decided that in the 3rd meeting of Steering Committee of KBLPA Engineering, Procurement, and Construction (EPC) mode of tendering shall be adopted. Regarding relocation of powerhouses, he informed the Authority that the power component cost is to be borne by the Govt. of MP. Execution of Power houses can be taken up by Govt. of MP. After detailed discussion in 3rd meeting of SC-KBLPA, Govt. of MP suggested to go ahead for Daudhan dam without Power houses, while keeping the requisite embedded structures intact. He asked the Authority members to suggest a suitable date for meeting with the prospective bidders for execution of dam before bidding to know the expectations of bidder at Bhopal. CEO, KBLPA confirmed the decisions taken in the 3rd meeting of Steering Committee and suggested to plan the meeting in 2nd/ 3rd week of March, 2023.

CEO, KBLPA suggested to circulate the Tender Document to all the members of KBLPA for views/suggestions and the same shall be incorporated before the stakeholders meeting.

ACEO, KBLPA informed that the tender document and issues shall be placed before Technical Advisory Group for KBLP (TAG-KBLP) for advice before seeking approval of KBLPA and SC-KBLP.

In this regard CEO, KBLPA suggested that the Tender may be discussed in the 1st meeting of TAG on 24.02.2023. Thereafter the Tender may be circulated to the members of KBLPA. Stakeholders meeting may be held after Holi, 2023 at Bhopal. In the stakeholders meeting all the members of the Authority may also be invited and can be decided by the Authority. After incorporating the suggestions of KBLPA post stakeholders meeting the tender will be modified and placed before Steering Committee for approval.

3.11 Tender Evaluation Committee for Daudhan dam

ACEO, KBLPA requested suggested the Tender Evaluation Committee structure for the various stages of Tendering keeping in view the Manual for Procurement of Works issued by Department of Expenditure, Ministry of Finance. CEO, KBLPA requested the members of the Authority to suggest the composition of the Committee. Shri M.S.Dawar and Shri Sanjay Khanduja presented their views for the composition of the Committee. CEO, KBLPA advised that the Committee shall be chaired by the CEO, KBLPA with E-in-C or his representative, not below the rank of Chief Engineer, from Govt. of MP & UP. Member for finance wing shall be nominated by the Ministry. Also, CE(PAO), CWC may be included in the Committee for advice on financial/appraisal matters. ACEO (Headworks) may be designated as Member-Secretary.

It was also suggested that Tender related works for Daudhan dam may be finalized by ID, KBLPA, Bhopal, while that for KBLP canal may be finalized by ID, KBLPA, Jhansi and Chhatarpur.

As per guidelines no member of TEC should be reporting directly to any other member of the TEC. In the TEC proposed, the ACEO (Headworks) will be reporting to CEO, KBLPA. The Committee may be headed either by DG (NWDA) or Member(D&R), CWC. However, it would be prudent that the TEC is headed by CEO, KBLPA who will be responsible for the implementation of the project. Accordingly following composition is proposed: -

- | | | |
|--|---|------------------|
| 1. CEO(KBLPA) | : | Chairman |
| 2. Engineer-in-Chief, WRD, Govt. of MP or his representative not below the rank of Chief Engineer | : | Member |
| 3. Engineer-in-Chief, I&WRD, Govt. of UP or his representative not below the rank of Chief Engineer | : | Member |
| 4. Chief Engineer, PAO, CWC | : | Member |
| 5. Financial Adviser or his representative | : | Member |
| 6. ACEO (Headworks), KBLPA | : | Member-Secretary |

If required, ACEO (Headworks), KBLPA shall only assist the TEC and may not be part of TEC.

3.12 Financial Powers of KBLPA

ACEO, KBLPA informed that finalization of Work flow and financial powers to KBLPA under the Chairmanship of ACS, WRD, MP with members HoD &E-in-C, I&WRD, UP, ACEO (HQ&P), KBLPA and Director(F), KBLPA is under progress. CEO(KBLPA) stressed to finalise the financial powers at the earliest so as to seek approval of Steering Committee in its next meeting.

3.13 Progress of works of Phase-II projects of Madhya Pradesh

ACEO, KBLPA intimated that the work is in progress in all the three projects of Phase-II. The financial and physical progress of the three projects is enclosed at Annexure-II.

3.14 Status of State specific Projects - Survey & Investigation, Preparation of DPR:

i. DPR for two New Barrages d/s of Bariyarpur PUW

ACEO, KBLPA informed the members of the Authority that preparation of DPR of two new barrages at Banda town and Pailani is under progress. CWC has completed the Design Flood Study. Core deep drilling work at Banda barrage is 60% complete. Drilling work at Pailani Barrage in abutment portion is getting hindered due to standing crops and is expected to be completed by mid of March,2023. Geotechnical Investigation by GSI will follow.

Visit of CWC and CSMRS is awaited for further drilling and investigation works, as issue has been raised by CWC on the proposed axis of Banda Barrage. Geotechnical Investigations are yet to be taken up. Design of the above two barrages is expected to be complete by March, 2023.

DPRs for barrages are planned to be completed by May, 2023. CEO(KBLPA) stressed to stick to the time line.

ii. DPR for Renovation and Modernization of Tanks in Mahoba and Enroute/ Tanks of MP

ACEO, KBLPA intimated that the Topographical survey of 16500 ha submergence area of Mahoba tank and enroute tank of connecting canal/nalla under KBLP Phase-1 has been completed. Draft DPR of Mahoba tanks has been prepared and is under finalization.

DPR is planned to be completed by March, 2023.

ACEO, KBLPA intimated that the DPR of 42 tanks of MP is being prepared by the ID, NWDA, Gwalior. Around 21 tanks are within the Command of KBLP and 21 tanks are outside the command of KBLP. It was further intimated that the tanks outside the command are scattered and some are having high lift. Tanks within the command can be filled by the distribution system of Command Area. Therefore, no separate arrangement may be required for filling of the tanks. Only measures needed to restoration of the capacity to FRL may be included in the DPR of tanks.

iii. DPR for Strengthening/ Repair of Bariyarpur PUW, Parichha Weir, Barwa Sagar Dam and other appurtenant Structures:

ACEO, KBLPA intimated that a joint visit of Expert Group consisting from CWC, GSI, CSMRS, NWDA/ KBLPA and I&WRD, UP to these structures to ascertain their present status was held from 04.01.2013-06.01.23. Major recommendations are as under: -

1. Replacement of Hydro-mechanical System
2. Automation through SCADA
3. Leakages in dam body/inspection galleries shall be grouted using cement mortar grout (both non-shrink types) using low pressure and ensuring proper plugging
4. Repair of Crest of weir
5. Desilting to restore the capacity

DPRs for their renovations on above lines need to be prepared by UP on priority. However, it being a renovation works and highly specialized in nature, the procedure followed in DSARP i.e. preparing a Project Screening Template (PST) and leaving the works of due investigation, designing etc. to the implementing agency, may also be explored in consultation with DSO, CWC.

iv. DPR for Renovation and Modernization of Ken Main Canal

ACEO, KBLPA informed the members of the Authority that KBLPA has received the cost estimate of Rs.455.12 Crore for renovation of Ken Main Canal only without any technical details and comprehensive planning. Govt. of Uttar Pradesh has been requested to submit the DPR as per CWC Guidelines for ERM of Project. State Govt. in 3rd meeting of SC-KBLPA intimated that they will submit it by March,2023.

Shri Rajpal Singh, CE (Pariyojna Betwa) UP, ACEO, Jhansi informed that preparation of DPR of State Components involving pressurized irrigation system has been taken up and shall be finalized shortly.

CEO, KBLPA requested the representatives of States that the DPRs of State components should be made in accordance to the guidelines issued by CWC.

v. DPR for Renovation and Modernization of Bariyarpur Left Main Canal of MP

WRD, MP intimated that the ACS, WRD, Govt. of MP has raised the issue of tanks and Renovation and Modernization of Bariyarpur Left Main Canal of MP in the SC meeting. CEO, KBLPA desired that MP may take up the preparation of the DPR of modernization of Bariyarpur Left Main Canal. WRD desired that the visit of experts may be taken up.

CEO, KBLPA further suggested that additional tanks/ storages may be planned in an integrated way with the distribution system within the command instead of separate transmission system.

3.15 Attachment of Dedicated offices for KBLPA by UP & MP

CEO, KBLPA again requested both the states to earmark dedicated offices for the works of KBLP to be executed by the respective state as lot of preparatory works like survey and investigation,

preparation of DPRs, tender documents etc. are to be carried in a time bound manner. ACEOs as earmarked by both the states for KBLPA shall also be required for the KBLP works on full time basis.

Shri M.S. Dawar, Engineer-in-Chief, WRD, Govt. of Madhya Pradesh stated that one Circle office and two Division offices shall be attached to KBLPA as dedicated offices from Govt. of MP by April, 2023.

Shri Rajpal Singh, Chief Engineer (Betwa Pariyojna), I&WRD, & ACEO (Construction), KBLPA, Jhansi Govt. of Uttar Pradesh informed that earmarking of dedicated offices from Govt. of UP is under process and shall be finalized soon.

3.16 Renovation & Furnishing of KBLPA offices by M/s WAPCOS

ACEO, KBLPA informed that the M/s WAPCOS has issued Tender for renovation of KBLPA (HQ), Bhopal on 07.01.2023 in CPP Portal. Work shall be awarded shortly and team shall be mobilized soon. Bid has been issued for supply of furniture on GeM on 22.02.2023 with opening date as 15.03.2023. WAPCOS has submitted estimate for Jhansi office on 17.02.2023 with estimated cost of Rs. 1.45 Crore. Estimate is under scrutiny and shall be processed shortly.

KBLPA expressed unhappiness over the progress of work by WAPCOS. CEO, KBLPA asked WAPCOS(I) Ltd to expedite the above work and desired that the works of Bhopal office should be completed by March, 2023.

3.17 Activities Planned for year 2023-24

ACEO, KBLPA informed the Authority about the activities planned for 2023-24

- a. Establishing full-fledged offices of KBLPA.
- b. Completing the Land Acquisition and R&R of Daudhan Dam
- c. Taking up the Land Acquisition of Link Canal
- d. Finalization of the tender documents of link canal
- e. Completing the DPRs
- f. Initiate the conservation works under guidance of GPLC.
- g. Engagement of PMC
- h. Floating tender for works of Daudhan dam and its appurtenant works
- i. Completing the ongoing works of Head work and Distribution System for Lower Orr, Bina Complex and Kotha Barrage of Phase-II.
- j. Taking up the work of Barrages, renovation of tanks of UP, Repairing /Strengthening of Bariyarpur PUW, Parichha weir, Barwa Sagar etc.
- k. Budget demand has been kept as 3496.05 crore for the year 2023-24.

CEO, KBLPA requested both the States to submit their detailed Work Plan of 2023-24 indicating the breakup of activities/ month wise to KBLPA.

Meeting ended with vote of thanks to Chair and all the members/invitees present in meeting.

Annex-I

3rd KBLPA meeting held on 23.02.2023 (15:00 hrs) at New Delhi

List of Participants

| S.N. | Name (Shri/Smt.) | Designation | Contact No. |
|------|-----------------------|---------------------------------------|-------------|
| 1. | Bhopal Singh | CEO, KBLPA | 9910301746 |
| 2. | M. S. Dawar | E-in-C, WRD, Bhopal | 9425045822 |
| 3. | Sunil Agarwal | PCCF(LM), Forest Department, MP | (online) |
| 4. | Baleshwar Thakur | Chief Engineer (HQ), NWDA, New Delhi | 9015404275 |
| 5. | S.C. Awasthi | SE(N), NWDA, New Delhi | 9425708459 |
| 6. | Sanjay Khanduja | CE Level-1 D&R, I&WRD, Lucknow, UP | 8726867958 |
| 7. | Shiva Prakash | ACEO (HQ/P), KBLPA | 8005498787 |
| 8. | Rajpal Singh | CE (Pariyojna Betwa) UP, ACEO, Jhansi | 9451662674 |
| 10. | Anil Kumar Niranjana | SE, CDD, UP Irrigation | 9415456917 |
| 11. | D.K. Sharma | Dir (Tech), NWDA | 8511166165 |
| 12. | Subrata Halder | Dir (Fin), NWDA & KBLPA | 9013442960 |
| 13. | M. Farooq Khan | Addl. Chief Engineer, WAPCOS | 7042149961 |
| 14. | R. Vinod Kumar | EE (HQ), NWDA, New Delhi | 9030138973 |
| 15. | Ashish Singh Kushwaha | EE, Jhansi Division, NWDA | 9560579900 |
| 16. | N.P. Sahu | SE, NWDA, Gwalior (I/C) | 8527782652 |
| 17. | Deepti Verma | Deputy Director, CE(N), NWDA | (online) |
| 18. | Hari Om Varshney | Assistant Engineer, NWDA | 9958185511 |
| 19. | Hemsingh Kataria | Liaison Officer, M.P WRD | 9999816529 |
| 20. | Ekta Sharma | Liaison Officer, M.P WRD | 8800778154 |
| 22. | Shubham Biswas | Engineer, WAPCOS Ltd. | 7905286657 |
| 23. | O.P. Singh Kushwaha | Expert Consultant, WRD, MP | 6265854639 |
| 24. | R.K. Kharbanda | Consultant (Tech), NWDA, New Delhi | 9811646335 |
| 25. | Amar Singh Nayak | Consultant, KBLPA, Bhopal | (online) |
| 26. | H K Pandey | Consultant, KBLPA, Bhopal | (online) |

Annexure-II

| S. No. | Name of Project | Cost Approved by Government Of India | Total Expenditure upto 31.01.2023 | | | | Physical Progress upto 31.01.2023 | | | Designed Irrigation (Ha.) |
|--------|-----------------------|--------------------------------------|-----------------------------------|---------|---------------|-------------------|-----------------------------------|----------------|----------------|---------------------------|
| | | | Land Acquisition/ Forest Area | Work | Establishment | Total Expenditure | Head Work (%) | Canal Work (%) | Total Work (%) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Lower Orr Dam Project | 2657.04 | 414.91 | 1349.26 | 11.45 | 1775.62 | 85 | 35 | 61 | 90000 |
| 2 | Kotha Barrage Project | 709.47 | 78.11 | 165.92 | 10.63 | 254.81 | 30 | 52 | 38 | 20000 |
| 3 | Bina Complex Project | 3353.62 | 904.63 | 523.78 | 38.13 | 1466.54 | 81 | 11 | 28.32 | 96000 |
| | Total | 6720.13 | 1397.65 | 2038.96 | 60.21 | 3496.97 | | | | 2,06,000 |

Reimbursement to WRD, MP for LA, R&R, Forest by GOI Rs. 804.30 Crore in 2021-22

MINUTES OF THE 38TH MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR RIVER VALLEY AND HYDROELECTRIC PROJECTS HELD ON 15TH DECEMBER, 2022 FROM 02:30 PM – 05:30 PM THROUGH VIDEO CONFERENCE.

The 38th meeting of the re-constituted EAC for River Valley & Hydroelectric Projects organized by the Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi, was held on 15th December, 2022 through video conference, under the Chairmanship of Dr. A. K. Malhotra. The list of Members present in the meeting is at Annexure.

Agenda Item No. 38.1

Confirmation of the minutes of 36th EAC meeting.

Agenda Item No. 38.2

Singanamala Pumped Storage Project (800 MW), in an area of 480.65 Ha located at Salakam cheruvu Village, Tehsil Singanamala, District Ananthapuramu, (Andhra Pradesh) by M/s New and Renewable Energy Development Corporation of Andhra Pradesh Ltd (NREDCAP) Project – Terms of Reference (TOR) – reg.

[Proposal No. IA/AP/RIV/407154/2022; F. No. J-12011/18/2022-IA.I (R)]

38.2.1: The proposal is for grant of terms of reference to Singanamala Pumped Storage Project of capacity 800 MW in an area of 480.65 Ha located at village Salakam cheruvu, Tehsil Singanamala, District Ananthapuramu (Andhra Pradesh) by M/s New and Renewable Energy Development Corporation of Andhra Pradesh Ltd (NREDCAP).

38.2.2 The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

The proposal is for grant of Terms of References (TOR) to Singanamala Pumped Storage Project (800 MW), in an area of 480.65 Ha located at Salakam cheruvu Village, Tehsil Singanamala, District Ananthapuramu, (Andhra Pradesh) by M/s New and Renewable Energy Development Corporation of Andhra Pradesh Ltd (NREDCAP) Project.

38.2.2: The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

- i. **Location:** Salakam cheruvu Village, Tehsil Singanamala, Anantapuram district of Andhra Pradesh. The geographical coordinates of the proposed upper reservoir are at longitude 77°41'40.75"E & latitude is 14°51'10.11"N and that of existing lower reservoir are at 77°43'5.18"E and 14°50'50.03"N. structured newly) and Singanamala PSP Upper Reservoir (to be constructed newly). **The proposed upper reservoir and lower reservoirs are not located on any river course.**

- ii. Singanamala Pumped Storage Project (SPSP) is an Off-Stream Closed Loop Pumped Storage development, proposed with an installed capacity of 800MW/5248 MWH. The Project comprises of development of upper & lower reservoirs with a gross storage capacity of 0.73TMC & 0.59 TMC respectively, out of which upper reservoir to be constructed on the hill top with maximum dam height of 54 m to create the desired storage capacity while the lower reservoir will have maximum height of 34 m constructed at the downhill.
- iii. The Singanamala PSP envisages construction of Upper reservoir which is proposed to be located on hill top. The water from upper reservoir shall be utilized for peaking power generation. After generation, the water from Lower dam shall be pumped back to upper dam during off peak hours through reversible turbines.
- iv. The storage project is proposed with the following major components
 - a. Formation of Upper reservoir
 - b. Upper Intake from Upper reservoir
 - c. A Concrete lined Head Race Tunnel
 - d. Surge Tank & steel lined penstock tunnel/pressure shaft to feed water to generating units
 - e. Concrete Lined Tail Race Tunnel
 - f. Powerhouse, switch yard and other auxiliary units
- v. **Land requirement:** The total land required for construction of project components, reservoir area, muck dumping, construction camps and colony, etc., works out to be 480.65 ha (248.32 forest land & 232.33 Non Forest land).
- vi. The proposed Pumped storage project is a pumped storage project, no consumptive utilisation of water is envisaged, except for recouping the evaporation losses of 0.968 MCum in the upper & lower reservoirs. All the project components of the proposed PSP are within the state of Andhra Pradesh and the submergence due to construction of upper reservoir also lies within the state of Andhra Pradesh. As the Consumptive use of the project is only 0.968 MCum, which is a continuous requirement, is only be applicable for consideration of inter-state aspects. However, the water will be allocated from the states share of water, as such no interstate issue on sharing of water is not envisaged at this stage. All the project components and the submergence due to upper reservoir are completely in the state of Andhra Pradesh. Hence, no Inter-State aspects of territory, property etc. coming under submergence, oustees rehabilitation, compensation etc.
- vii. The project area is located in the Ananthapur district in the Rayalseema region of Andhra Pradesh. As per the seismic map zone of India, the Project area lies in the seismic zone-II. The area has not experienced any major earthquakes so far.
- viii. The proposed project is an off stream closed loop project with an installed capacity of 800MW/5248 MWH. The land required for the proposed upper reservoir and upper intake is 124.98 ha and the land required for the proposed lower reservoir and upper intake is 132.36 ha.
- ix. The total project cost Rs. 456764.71 Lakhs (4567.64 Cr).
- x. The Salient features of the project is as under: -

| NAME OF THE PROJECT | | SINGANAMALA PUMPED STORAGE PROJECT |
|---------------------|---|---------------------------------------|
| 1 | | Type of Project |
| | a | Type |
| | b | Storage Capacity |
| | c | Rating |
| | d | Peak operation duration |
| 2 | | Upper Reservoir (Proposed) |
| | a | Live Storage |
| | b | Dead Storage |
| | c | Gross Storage |
| 3 | | Upper Dam |
| | a | Type of Dam |
| | b | Top of Dam |
| | c | Full Reservoir level (FRL) |
| | d | Minimum Draw Down Level (MDDL) |
| | e | Length of Dam |
| | f | Max Height of Embankment |
| | g | Top Width of Embankment |
| 4 | | Upper Spillway |
| | a | Type of spillway |
| | b | No. of opening |
| | c | Width of opening |
| | d | Crest level |
| | e | Maximum water level (MWL) |
| 5 | | Lower Reservoir (Proposed) |
| | a | Live Storage |
| | b | Dead Storage |

| | | | |
|----------|---|--|--|
| | c | Gross Storage | 0.59 TMC (16.80MCM) |
| 6 | | Lower Dam | |
| | a | Type of Dam | Rock fill & Concrete Spillway |
| | b | Top of Dam | EL +340.000 m |
| | c | Full Reservoir level (FRL) | EL +335.000 m |
| | d | Minimum Draw Down Level (MDDL) | EL +317.000m |
| | e | Length of Dam | 506.0 m |
| | f | Max Height of Dam | 34.0 m (above Lowest NSL) |
| | g | Top Width of Dam | 10.0 m |
| 7 | | Lower Spillway | |
| | a | Type of spillway | Free flow Roller compacted concrete (RCC) spillway |
| | b | No. of opening | 1 No. |
| | c | Width of opening | 50 m |
| | d | Crest level | EL +335.00 m |
| | e | Maximum water level (MWL) | EL +337.00 m |
| 8 | | Intake Structure (Upper Intake) | |
| | a | Type | Diffuser Type |
| | b | Number of Vents | 2 No. |
| | c | Size of Intake | 35.25m (W) x 12.25 m (H) including piers |
| | d | Length of Intake | 71.60 m (covered with RCC slab at top up to Starting of HRT) |
| | e | Elevation of Intake center line | EL +450.00 m |
| | f | Elevation of Intake bottom | EL +445.00 m |
| | g | Design Discharge of Intake (Turbine mode) | 155.33 Cumec for one unit |
| | h | Trash rack type | Vertical with inclination of 15o |
| | i | Size of Trash Rack | 3 nos. Of 9.75m(W) x 12.25m(H) of each intake |
| | j | Velocity through Trash rack | 0.985 m/s |
| | k | Numbers & Size of Intake Service Gate | 2 Nos. - 8.5 m (W) x 10.00 m (H) with |

| | | | |
|----------|-----|--|--|
| | | | Independent Rope Drum Hoist |
| | L | Numbers & Size of Intake Maintenance Gate | 1 No. – 8.5 m (W) x 10.00 m (H) with Common Movable Gantry Crane |
| 9 | | Water Conductor System | |
| | I | Intake Tunnel | |
| | a | Type | Horseshoe Tunnel |
| | b | Number of Tunnels | 2 No. |
| | c | Diameter of Tunnel | 10.0 m dia. |
| | d | Length of Tunnel | 608.50 m |
| | e | Design Discharge of Tunnel | 310.66 Cumec |
| | f | Velocity in the Tunnel | 3.955 m/sec |
| | II | 8.5m dia Penstock | |
| | a | Type | Circular |
| | b | Number of Penstock | 2 Nos |
| | c | Diameter of Penstock | 8.5 m dia. |
| | d | Design Discharge in main penstock | 310.66 Cumec |
| | e | Velocity in the Tunnel | 5.475m/sec |
| | f | Length | 544.90 m for each Tunnel |
| | g | Thickness of Steel Liner | 24 mm to 47mm |
| | h | Grade of Steel Plate | ASTM 517 Grade-F Steel |
| | III | 6.0m dia Pressure Shaft | |
| | a | Type | Steel lined – circular |
| | b | Number of Pressure Shafts | 4 Nos. |
| | c | Diameter of shaft | 6.0 m dia. |
| | d | Length | 92.50 m each |
| | e | Thickness of Steel Liner | 35 mm |
| | f | Grade of Steel Plate | ASTM 517 GRADE-F |
| | IV | Main Inlet Valve (MIV) | |
| | h | Size of MIV | 4.50 m Diameter |

| | | | |
|-----------|---|---------------------------------------|---|
| | V | 20.0 m dia Surge Shaft | |
| | a | Type and Nos. | 2 Nos. restricted orifice type circular surge shaft |
| | b | Diameter | 20.0 m |
| 10 | | Adit Tunnels | |
| | a | Adit to Penstock Bottom | 1210.0 m long 6.5m dia. D Shaped Tunnel |
| | b | Escape Tunnel | 61.0 m long 6.50 m dia. D Shaped Tunnel |
| 11 | | Powerhouse | |
| | a | Type | Surface Powerhouse |
| | b | Center Line of Unit | El. +287.00 m |
| | c | Size of Powerhouse | 118.00 m (L) x 25.50 m (W) x 51.00 m (H) at Generator Floor Level |
| | d | Size of Service bays | 40.0 m (L) x 25.50 m (W) (Left Side Service Bay) |
| | e | Service bay level | El. +303.15 m |
| | f | Crane Beam Level in Powerhouse | El. +315.65m |
| | g | Size of Unloading Bay | 20 m (L) X 25.50 m (W) |
| | h | Unloading Bay Level | El. +327.200m |

38.2.3: The EAC during deliberations noted the following:

The EAC deliberated on the information submitted (Form 1, PFR, kml file, etc.) and as presented in the meeting and observed that the proposal is for grant of Terms of Reference to the project for Singanamala Pumped Storage Project of capacity 800 MW in an area of 480.65 Ha located at village Salakam cheruvu, Tehsil Singanamala, District Ananthapuramu (Andhra Pradesh) by M/s New and Renewable Energy Development Corporation of Andhra Pradesh Ltd (NREDCAP).

38.2.4 The EAC after detailed deliberation on the information submitted and as presented during the meeting *recommended* for grant of Standard ToR for conducting EIA study for Singanamala Pumped Storage Project of capacity 800 MW in an area of 480.65 Ha located at village Salakam cheruvu, Tehsil Singanamala, District Ananthapuramu (Andhra Pradesh) by M/s New and Renewable Energy Development Corporation of Andhra Pradesh Ltd (NREDCAP), under the provisions of EIA Notification, 2006, as amended along with the following additional/specific ToR:

[A] Environmental Management and Biodiversity Conservation:

- i. Alternative site analysis shall be carried out in terms of ecological aspects viz. loss of Forest ecosystem due to diversion of Forest land/ loss of biodiversity and its impacts on productivity of the ecosystem, water availability, eco-sustainability of water source be used for generation of hydro power and Ecological flows in the small stream/ Nallah. Preference shall be given to minimize forest land.
- ii. WRD permission to take water from Chagallu barrage be submitted.
- iii. Approved Hydrological study report, E-flow of Chagallu barrage from CWC be submitted.
- iv. Alternative study carried out for reducing requirement of Forest land for the Construction of proposed project.
- v. Impact zone decided prior to base line data generation and accordingly, sampling location shall be finalized. Baseline data as mentioned in Standard ToR shall be collected for preparation of EIA/EMP report along with soil characteristics which shall be studied at minimum 10 locations. The ground water level at 10 locations shall be measured in project area in all three seasons.
- vi. A study shall be carried out on impact of project activity on the aquatic and terrestrial ecosystem, within project area classifying the impact zones (highly impact/low impact zone) based on seasonal variations and covering the aspects related to impacts on aquatic ecosystem/ primary productivity due to quantity of water to be lifted for power generation and thermal stratification. Accordingly, Environment Management plan shall be prepared.
- vii. Sampling locations be located to cover villages situated near the reservoir and around boundary of forest area for collection of baseline data and data to be incorporated in EIA/ EMP report.
- viii. Possibility impact assessment on the fish diversity based on the hydrological alteration at the water drawing sources (Chagallu Barrage) shall be studied.
- ix. Details about other projects located on the river basin along with their longitudinal distance between two projects be submitted.
- x. Identify the sand mining/ quarrying sites in submergence area and downstream of reservoir.
- xi. Source of construction material and its distance from the project site along with detailed transportation plan for construction material be submitted.
- xii. A detailed reclamation/ restoration plan of quarrying site/sites be incorporated in the EIA/EMP report.
- xiii. Certificate and certified map from Chief Wildlife Warden shall be submitted mentioning that project boundary is located outside from any Eco Sensitive Zone (ESZ) and no Wildlife Sanctuary falls within 10 km of Project site.
- xiv. A detailed wildlife conservation plan for Schedule –I species be prepared duly approved by the Chief Wild Life Warden be submitted.
- xv. In case any Wildlife Corridor is located within 10 km radius of the project site a detailed study shall be conducted to assess the impact of project on safe movement of wild animals.
- xvi. Reservoir/ River banks protection plan all along the submergence need to be prepared and incorporated in EIA/ EMP.

- xvii. Scope of watershed development in the 10 km radius of the project shall be studied in consultation with Govt. institutions/ Indian Council of Agriculture Research (ICAR) and accordingly a detailed Water Shed Development Plan shall be prepared and incorporated in EIA/ EMP report.
- xviii. MoU for water uses for the project shall be signed and approved by concerned authority.
- xix. Environmental matrix during construction and operational phase needs to be submitted.
- xx. Matrix formulated on the basis of detailed study and field survey of flora and Fauna methodology used shall be mentioned in the EIA report.
- xxi. Endemic plant and animal species found in the area concerned shall be provided instead listing entire endemic species found in the State.
- xxii. Details of Flora and Fauna reported in submergence area, Nos. of tree along with their density and nomenclature required to be cut for reservoir creation and other project component.
- xxiii. Project impact on avi-fauna shall be studied and incorporated in EIA/ EMP report.
- xxiv. Impact assessment on the fish diversity based on the hydrological alteration at the water drawing sources shall be studied.
- xxv. Stage-1 Forest Clearance shall be obtained.

[B] Socio-economic Study

- xxvi. Declaration by the project proponent by way of affidavit that "No" Inter-state issue/ policies issue is involved with any state in the project. Consent from other state for drawing of water from Narmada River, if required.
- xxvii. All the tasks including conducting public hearing shall be done as per the provisions of EIA Notification, 2006 and as amended from time to time. Public hearing issues raised and compliance of the same shall be incorporated in the EIA/ EMP report in the relevant chapter.
- xxviii. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the Ministry's OM F. No. 22- 65/2017-IA.III dated 30th September, 2020 shall be submitted.
- xxix. Tentative no. of project affected families shall be identified and accordingly appropriate Rehabilitation & Resettlement plan shall be prepared.

[C] Muck Management/ Disaster Management

- xxx. Details of quantity of muck generation component wise and disposal site along with transportation plan and its monitoring to be provided.
- xxxi. Details of Muck Management plan prepared along with estimated cost incorporated in EIA/ EMP report.
- xxxii. Techno-economic viability of the project must be recommended from CEA/ CWC

[D] Miscellaneous.

- xxxiii. Pre-DPR Chapters viz., Hydrology, Layout Map and Power Potential Studies duly approved by CWC I CEA shall be submitted.

- xxxiv. Undertaking need to submitted on affidavit that regarding no activities has been yet on the project site and water allocated to this scheme shall not be diverted to other purpose.
- xxxv. Both capital and recurring expenditure under EMP shall be submitted.
- xxxvi. The photograph should bear the date, time, latitude & longitude of the monitoring station/ sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyse the samples.
- xxxvii. Arial view video of project site shall be recorded and to be submit.
- xxxviii. The PP has to obtain clearance from inter-state aspect from the designated authorities as per procedure.

Agenda Item No. 38.3

Warsgaon Warangi Pumped Storage Project (1200 MW) in an area of 169 Ha located at Village Teckpole and Warangi, Tehsil Velhe and Mahad, District Pune and Raigad (Maharashtra) by M/s Adani Green Energy Limited – Terms of Reference (TOR) - reg.

[Proposal No. IA/MH/RIV/407676/2022; F. No. J-12011/19/2022-IA.I (R)]

38.3.1: The proposal is for grant of terms of reference to Warsgaon Warangi Pumped Storage Project of capacity 1200 MW in an area of 169 ha at Village Teckpole and Warangi, Tehsil Velhe and Mahad, District Pune and Raigad (Maharashtra) by M/s Adani Green Energy Limited.

38.3.2: The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

- i. The proposal is for grant of terms of reference to the project for Warsgaon Warangi Pumped Storage Project of capacity 1200 MW in an area of 169 ha at Village Teckpole and Warangi, Tehsil Velhe and Mahad, District Pune and Raigad (Maharashtra) by M/s Adani Green Energy Limited.
- ii. The proposed project Warasgaon Warangi Pumped Storage Project (“Project”) is an Off-River PSP scheme with an installed capacity of 1200 MW (5 x 240 MW) with both upper and lower reservoirs located across minor nallahs in their initial reaches, wherein the flows are only seasonal during monsoon. The project area is in the Sahyadri ranges of the Western Ghats of Maharashtra State in the area bordering Pune and Raigad districts.
- iii. The upper dam is located on a rocky ridge near Teckpole village in Velhe Taluka, Pune district of Maharashtra state having a geographical latitude 18° 18' 20.3" N and longitude 73° 27' 47.42" E. The lower dam is located on a rocky ridge near Warangi village in Mahad Taluka, Raigad district of Maharashtra state having a geographical latitude 18° 16' 16.79" N and longitude 73° 27' 57.93" E.
- iv. Upper dam is proposed to be located across a minor nallah draining into Panshet Dam which is located on the Ambi river. Ambi river is a tributary of the Mutha River. Panshet Dam is located about 50 km south-west of Pune city in western India. **Both**

Ambi and Mutha river originate from the Western Ghats and flow eastward until it merges with the Mula River near Pune city. After merging with the Mula river, it called as Mula-Mutha River which further joins the Bhima River. The Bhima River is a major river in Western India and South India.

- v. Lower dam is proposed to be located across a minor nallah draining into Kal river which is a tributary of the Savitri River. The Kal River is one of the West Flowing Rivers in Maharashtra. Kal river is a major tributary of Savitri River. The project area is in the Sahyadri ranges of the Western Ghats
- vi. **Land requirement:** The total land required for the project components and related works has been estimated to be about 169 ha out of which 24.50 ha is forest land and 144.50 ha is non forest/private land.
- vii. The cost of the project is Rs. 4872 Crore at 2022-23 price level including Interest During Construction (IDC) of Rs. 528 Crore. As a preliminary estimate, a construction period of 5 years (60 months) from the date of award of civil works package has been estimated for this project.
- viii. Proposed project is located about 9.2 km away from boundary of Tamhini Wildlife Sanctuary. The final notification for ESZ of Tamhini Wildlife Sanctuary published by MOEF vide notification dated 25th February, 2021 and proposed project is located about 6.6 km away from final ESZ boundary of Tamhini Wildlife Sanctuary. Further, proposed project is falling under ESA of Western Ghat as per MOEF draft ESA notification dated 6th July 2022. However, Hydropower Projects are permitted in ESA of Western Ghats as per MOEF notification dated 20th December 2013. Location of reservoirs is on seasonal minor nallahs with very small catchment areas i.e. of the order of 2.5 km² and 14.8 km² for upper and lower reservoir respectively. Rainfall in the catchment will be able to meet the recuperating losses.
- ix. The proposed Warasgaon Warangi PSP (5 x 240 MW) envisages following major civil structures:

| S. No. | Project Component | Details |
|--------|--------------------------|---|
| 1. | Upper Dam (Concrete Dam) | Crest length 490 m, maximum height 57 m above the deepest riverbed level. Gross storage capacity of Upper reservoir is 8.96 Mm ³ |
| 2. | Lower Dam (Concrete Dam) | Crest length 820 m, maximum height 51 m above the deepest river bed level. Gross storage capacity of Lower reservoir is 12.28 Mm ³ . |
| 3. | Upper Intake/Outlet | Horizontal pit type intake, 4 nos. of trash rack bays, each with a size of 8.5 m (W) x 12.0 m (H). |
| 4. | Lower Intake/Outlet | Horizontal pit type intake, 4 nos. of trash rack bays, each with a size of 7.5 m (W) x 12.0 m (H) |
| 5. | Headrace Tunnel | 1385 m (length), 9.0 m (dia.), horse-shoe shaped, concrete lined |

| | | |
|-----|--------------------|--|
| 6. | Surge Shaft | Restricted orifice type, 15 m dia., 95 m high, circular, concrete lined |
| 7. | Pressure Shaft | 1500 m (length), 7.0 m (diameter), steel lined and branching near powerhouse, each with 3.2 m diameter |
| 8. | Surface Powerhouse | 166 m (L) x 24 m (W) x 39m (H) |
| 9. | Tailrace Tunnel | 132 m (length), 8.0 m (diameter), horse-shoe shaped, concrete lined. |
| 10. | Approach road | Strengthening of existing roads - 10 km Construction of new road - 15 km |
| 11. | Adit | Adit to bottom horizontal pressure shaft- 1.5 km |

x. **Project benefit:**

- a) Warasgaon Warangi PSP has been designed to meet the peaking requirement daily in the southern region grid and the state of Maharashtra for a duration of about seven (7) hours.
- b) The energy output of the project with an installed capacity of 1200 MW has been estimated as 2913 MU annually.

xi. **R & R details:**

Based on the preliminary layout formulated for proposed Warasgaon Warangi PSP, the project prima-facie does not involve submergence of large habitations or large area of agricultural lands and R & R issue are minimal. Upper reservoir area is completely non-forest land, however, no habitation is there. Lower reservoir area has a forest patch, however, it is largely non-forest land where few houses and agricultural land is observed. In addition to the above land under submergence, additional land is required for construction of civil structures and other project components, which will be located on non-forest land. Based on the above, 144.5 ha has been identified as non-forest land requirement for the project.

In view of the above, private land is proposed to be purchased through private negotiations, as it is within the specified limits by the relevant rules notified by the State Government, related to rehabilitation and resettlement under RFCTLARR, 2013.

The detailed requirements for the R&R plan, if applicable, will be based on the social-economic survey and land utilization for the project. Due consideration ought to be given to the societal requirements in developing the R&R plan as a part of EIA/EMP studies.

38.3.3: The EAC during deliberations noted the following:

The EAC deliberated on the information submitted (Form 1, PFR, kml file, etc.) and as presented in the meeting and observed that the proposal is for grant of terms of reference to the project for Warsgaon Warangi Pumped Storage Project of capacity 1200 MW in an area of 169 ha at Village Teckpole and Warangi, Tehsil Velhe and Mahad, District Pune and Raigad (Maharashtra) by M/s Adani Green Energy Limited.

The project/activity is covered under category A of item 1 (c) 'River Valley projects' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at Central level by the sectoral EAC in the Ministry.

The proposed project comes under ESA of Western Ghats (Maharashtra) and as per O.M dated 20th December, 2013, hydro power projects are allowed in Western Ghats ESA.

38.3.4 The EAC after detailed deliberation on the information submitted and as presented during the meeting *recommended* for grant of Standard ToR for conducting EIA study for Warsgaon Warangi Pumped Storage Project of capacity 1200 MW in an area of 169 ha at Village Teckpole and Warangi, Tehsil Velhe and Mahad, District Pune and Raigad (Maharashtra) by M/s Adani Green Energy Limited, under the provisions of EIA Notification, 2006, as amended along with the following additional/specific ToR:

[A] Environmental Management and Biodiversity Conservation:

- i. Tentative estimation of muck generation with their disposal sites along with protection.
- ii. Cumulative Impact of project on carrying capacity and sustainability of Kali river/nalahs of catchment area / due to tapping of water for filling reservoir.
- iii. Impact zone decided prior to base line data generation and accordingly, sampling location shall be finalized. Baseline data as mentioned in Standard ToR shall be collected for preparation of EIA/ EMP report along with soil characteristics which shall be studied at minimum 10 locations. The ground water level at 10 locations shall be measured in project area in all three seasons.
- iv. A study shall be carried out on impact of project activity on the aquatic and terrestrial ecosystem, within project area classifying the impact zones (highly impact/low impact zone) based on seasonal variations and covering the aspects related to impacts on aquatic ecosystem/ primary productivity due to quantity of water to be lifted for power generation and thermal stratification. Accordingly, Environment Management plan shall be prepared.
- v. Sampling locations be located to cover villages situated near the reservoir and around boundary of forest area for collection of baseline data and data to be incorporated in EIA/ EMP report.
- vi. The study shall be conducted and approved by CWC regarding assessment of E-Flow of water in the river in terms of draft notification S.O. 3072(E) dated 6th July, 2022 issued by the Ministry for Western Ghats.
- vii. Details about other projects located on the river basin of river Kali along with their longitudinal distance between two projects be submitted. In case of more than one project a detailed Cumulative Impact Assessment and Carrying Capacity study covering aspects related to impact of each project on the flow pattern of the rivers and forest and biodiversity shall be conducted through a reputed Government institute having expertise in the area.
- viii. Identify the sand mining/ quarrying sites in submergence area and downstream of reservoir.

- ix. Source of construction material and its distance from the project site along with detailed transportation plan for construction material in view of the project site location in Western Ghats be submitted.
- x. A detailed reclamation/ restoration plan of quarrying site/sites be incorporated in the EIA/EMP report.
- xi. Certificate and certified map from Chief Wildlife Warden shall be submitted mentioning that project boundary is located outside the Eco Sensitive Zone (ESZ) and no Wildlife Sanctuary falls within 10 km of Project site.
- xii. A detailed wildlife conservation plan for Schedule –I species be prepared duly approved by the Chief Wild Life Warden be submitted.
- xiii. In case any Wildlife Corridor is located within 10 km radius of the project site a detailed study shall be conducted to assess the impact of project on safe movement of wild animals.
- xiv. Reservoir/ River banks protection plan all along the submergence need to be prepared and incorporated in EIA/ EMP.
- xv. Scope of watershed development in the 10 km radius of the project shall be studied in consultation with Govt. institutions/ Indian Council of Agriculture Research (ICAR)and accordingly a detailed Water Shed Development Plan shall be prepared and incorporated in EIA/ EMP report.
- xvi. MoU for water uses for the project shall be signed and approved by concerned authority.
- xvii. Environmental matrix during construction and operational phase needs to be submitted.
- xviii. Matrix formulated on the basis of detailed study and field survey of flora and Fauna methodology used shall be mentioned in the EIA report.
- xix. Endemic plant and animal species found in the area concerned shall be provided instead listing entire endemic species found in the State.
- xx. Details of Flora and Fauna reported in submergence area, Nos. of tree along with their density and nomenclature required to be cut for reservoir creation and other project component.
- xxi. Project impact on avi-fauna shall be studied and incorporated in EIA/ EMP report.
- xxii. Impact assessment on the fish diversity based on the hydrological alteration at the water drawing sources shall be studied.
- xxiii. Stage-I Forest Clearance shall be obtained.
- xxiv. Cumulative impact assessment study shall be carried out.
- xxv. Study report on impact on River Rejuvenation shall be submitted.

[B] Socio-economic Study

- xxvi. Declaration by the project proponent by way of affidavit that "No" Inter-state issue/ policies issue is involved with any state in the project. Consent from other state for drawing of water from Narmada River, if required.
- xxvii. All the tasks including conducting public hearing shall be done as per the provisions of EIA Notification, 2006 and as amended from time to time. Public hearing issues raised and compliance of the same shall be incorporated in the EIA/ EMP report in the relevant chapter.

- xxviii. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the Ministry's OM F.No.22- 65/2017-IA.III dated 30th September, 2020 shall be submitted.
- xxix. Tentative no. of project affected families shall be identified and accordingly appropriate Rehabilitation & Resettlement plan shall be prepared.
- xxx. Details of settlement in 10 km area shall be submitted.

[C] Muck Management/ Disaster Management

- xxxi. Details of quantity of muck generation component wise and disposal site along with transportation plan and its monitoring to be provided.
- xxxii. Details of Muck Management plan prepared along with estimated cost incorporated in EIA/ EMP report.
- xxxiii. Techno-economic viability of the project must be recommended from CEA/ CWC

[D] Miscellaneous.

- xxxiv. Pre-DPR Chapters viz., Hydrology, Layout Map and Power Potential Studies duly approved by CWC I CEA shall be submitted.
- xxxv. Undertaking need to submitted on affidavit that regarding no activities has been yet on the project site and water allocated to this scheme shall not be diverted to other purpose.
- xxxvi. Both capital and recurring expenditure under EMP shall be submitted.
- xxxvii. The photograph should bear the date, time, latitude & longitude of the monitoring station/ sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyse the samples.
- xxxviii. Arial view video of project site shall be recorded and to be submitted.
- xxxix. The PP has to obtain clearance from inter-state aspect from the designated authorities as per procedure.

Agenda Item No. 38.4

Damanganga (Ekdare) - Godavari intrastate link project at Village Ekdare, Tehsil Peint, District Nashik (Maharashtra) by M/s National Water Development Agency- Terms of Reference (TOR) -reg.

[Proposal No. IA/MH/RIV/88394/2018; F. No. J-12011/03/2019-IA-1 (R)]

38.4.1: The proposal is for grant of terms of reference to the project for Damanganga (Ekdare) - Godavari intrastate link project at Village Ekdare, Tehsil Peint, District Nashik (Maharashtra) by M/s National Water Development Agency.

38.4.2 The proposal was earlier considered by the EAC in its 26th meeting held on 20.08.2019, wherein the EAC deferred the proposal with the opined that the PP shall have to come prepared

with a detailed presentation about the scheme and the other sites / alternates so as to reduce the static head and requirement of power’.

38.4.3: The details of the project submitted by project proponent and ascertained from the document submitted are mentioned below:

- i. The project will divert surplus water available in Damanganga basin (Ekdare Dam - proposed) to Upper Godavari sub-basin (Waghad Dam - existing) in Godavari river basin.
- ii. The Damanganga (Ekdare) - Godavari (Waghad) link project envisages diversion of about 138.6 MCM of surplus water available in the catchment of Damanganga basin up to proposed Ekdare dam site to existing Waghad reservoir in Godavari valley, by lift in three stages at Ekdare, Nirgude & at the proposed Circular sump with a total static lift of 327.40m.
- iii. The total conveyance system of 13.62 km comprises a pipe line of 10.42 km (rising main) by lift up to Jharlipada Diversion scheme and 3.20 km by gravity (1.30 km ridge cut between Damanganga to Godavari basins) & 1.90 km of natural stream of Kadwa river up to Waghad Reservoir.
- iv. The structural component of the link system consists of one proposed Ekdare dam, conveyance system of 13.62 km length, two proposed weirs, i.e. Hatti & Nirgude, Intermediate Circular sump and underground RCC pipe line between the proposed Hatti & Nirgude weirs. The available waters will be lifted by the 3 Pump houses at Ekdare, Nirgude & Circular Pump by the rising mains to divert in to the existing Jharlipada Diversion scheme.
- v. **Submergence area:** The submergence area at FRL is 247.4 ha. Out of which about 53.40 ha is river course, 41.91 ha is forest area and 152.09 ha Govt. land & private land. No villages are coming under submergence.
- vi. **Use of Water:** The proposed utilization from the Ekdare reservoir is fixed at 143 MCM out of which, 4.4 MCM is kept reserved for local use and remaining 138.6 MCM is proposed for lifting to Waghad dam. The link project will benefit a total area of 18404 ha irrigation out of which 687 ha will be benefitted in command areas within Damanganga basin for local use in Nasik district and the remaining 17717 ha will be benefitted in Upper Godavari sub-basin in the command of existing Jayakwadi project in Marathwada region.
- vii. **Land requirement:** The total land requirement for the proposed Damanganga (Ekdare)-Godavari (Waghad) link project is **261.99 ha**, out of which **44.76 ha** is forest land, for which forest clearance to be obtained under Forest Conservation Act.
- viii. **Ecological Sensitive Area, if any within 10km of project site:** No Protected area falls within 10 km of project area. Distance of Tana Wildlife Sanctuary is about 49.70 km from the proposed submergence area of Ekdare dam. Therefore, Wildlife Clearance is not applicable.
- ix. As per the recommendations of the CWC during field visit, it is proposed to construct the Ekdare as Roller Compacted Concrete dam (69.50 m height 302.00 m long) across Damanganga river near Ekdare village of Peint taluk, Nasik district in Maharashtra. The

FRL and MDDL of Ekdare reservoir would be 374.00 m, 345 m respectively and the corresponding storages are 36.41 MCM and 7.04 MCM respectively.

38.4.3: The EAC during deliberations noted the following:

The proposal is for grant of terms of reference to the project for Damanganga (Ekdare) - Godavari intrastate link project at Village Ekdare, Tehsil Peint, District Nashik (Maharashtra) by M/s National Water Development Agency.

Damanganga (Ekdare)-Godavari intra-state link project, envisages diversion of 143 million m³ of water from the Damanganga basin to the water short Gangapur Reservoir of Nashik District in the Godavari Basin. Ekdare Dam is proposed to store water in monsoon. Ekdare Dam project is located in the Peint tehsils of Nashik District. The Catchment area at the proposed site is 200 km² and the proposed submergence area is 620 ha. At 75% dependable. Annual yield is 199.10 MCM, while 143 MCM is the proposed diversion.

The EAC after detailed deliberation **recommended** the proposal for grant of applicable Standard TOR along with following addition TOR for conducting EIA study:

- i. Study on costal impact due to diversion of water from Damanganga to Godavari River.
- ii. E- flows study required for sustainability of aquatic ecosystem of both rivers i.e Damanganga and Godavari River.
- iii. If water diverted one basin to other basin, the impact of the aquatic ecosystem and quality of water needs to be studied.
- iv. The quantity of water goes into Arabian sea from Damanganga needs to be studied.
- v. The study on impact of diversion of water from Damanganga river particularly in the stretch of river between diversion point to confluence with Arabian sea.

Agenda Item No. 38.5

Additional Agenda item:

Lower Orr Dam project under Ken-Betwa Link Project Phase II (90000 CCA) in an area of 3007.2 ha at Village Didoni, Tehsil Chanderi, District Ashoknagar, Madhya Pradesh by M/s National Water Development Agency – Site visit report – reg.

[Proposal No. IA/MP/RIV/255619/2013; F. No. J-12011/31/2011-IA.I]

38.5.1: The Member Secretary informed to the EAC that in compliance of recommendations of the EAC (RVHEP) during its 28th meeting held on 31st May, 2022. The sub-committee comprising 4 EAC members namely Dr. A. K. Malhotra, Shri K. Gowarppan, Shri Ashok Kharya, Dr. J. A. Johnson and Shri Yogendra Pal Singh (Member Secretary, EAC) visited the project site during 9th -11th November, 2022. The Sub-committee has submitted its report for consideration of the EAC on 13th December, 2022. The site visit report is annexed at Annexure-II.

The Sub-Committee visited the following areas:

- 1) Pipe factory where the PP has given a presentation about the overview of the project
- 2) Operators barracks,
- 3) site office complex,
- 4) earthen dam,
- 5) the concrete weir area
- 6) quarrying sites

The Sub-Committee during site visit observed the following:

- i. Lower Orr major irrigation project is one of the project under Ken-Betwa Link Project, Phase-II for providing irrigation in water deprived area (90000 Ha) of Bundelkhand region in Shivpuri and Datia district of M.P. The project has been conceived for providing assured irrigation facility to 90000 ha area in water deprived Shivpuri and Datia districts during Rabi season with 100% intensity of irrigation by pressurized distribution network.
- ii. Provision of 6 MCM of water has been kept for providing drinking water facility to 1.65 lakh population in the area.
- iii. The Cost Estimate of Lower Orr major irrigation project has been finalized by CWC, Govt. of India for Rs. 2657.03 Cr based on MP Unified Schedule of Rates 2017-18. Revised cost at price level 2020-21 is 3101.41 cr.
- iv. Total affected land - 3020.49 ha. (Forest Land - 991.79Ha.). Stage-I & Stage-II FC has been issued by the Ministry on 12th February, 2019 and 06th May, 2021 respectively for diversion of 968.24 ha. Forest land.
- v. The contract was awarded for construction of dam on 23rd February, 2018 after obtaining administrative approval of govt. of M. P. construction work was initiated on non-forest land.
- vi. The project construction work is in progress and the construction work has attained overall progress more than 60% (Dam construction-82%, Canal Network 33.50%).
- vii. The Project Proponent has started construction work of the project after recommendation of the EAC, no Environmental Clearance has been issued by the Ministry till date.
- viii. No Consent to establish/Consent to operate was obtained by the Project Proponent before starting the construction work.
- ix. Status of implementation of Catchment Area Treatment Plan and R&R has to be submitted by the project proponent.
- x. No plantation /afforestation has commenced so far excepting some few in the office complex.
- xi. Barrack area was not in order.
- xii. The muck management was very poor and no reclamation activity has commenced.
- xiii. The workmanship of slope, pitching and dam top were not up to the mark.
- xiv. Most of the trees have not been removed before the onset of submersion in the reservoir area.

The EAC Sub-Committee has recommended for submission of information so that ecological damage caused due to start of construction of project without environmental clearance can be assessed. After calculation of damage cost the EAC may suggest ecological restoration plan to be implemented by the project authorities.

38.5.2: The EAC during deliberations noted the following:

The EAC deliberated on the site visit report and observed that the project authorities have violated the provisions of the EIA Notification, 2006 and started the construction work of the project without Environmental Clearance. It was also observed that during construction of the project environmental safeguard conditions suggested by the EAC while recommending the project for grant of Environmental Clearance in its meeting 93rd meeting held on 2nd May, 2016 have not been complied with. Accordingly, it is essential to have an ecological damage assessment study as per laid down procedure of the Ministry so as to suggest the appropriate environmental damage restoration plan in order to develop the project in ecologically sustainable manner.

38.5.3: The EAC after detailed deliberation on the EAC Sub- Committee site visit report recommended that the Ministry may consider for taking necessary action on the violation against the project proponent as per law. The Project Authorities may conduct study as per following additional ToR for assessment of environmental damage caused due to start of construction of project without obtaining prior Environmental Clearance, in terms of Office Memorandum dated 7th July, 2021 and submit revised EIA/EMP report for further consideration of the proposal under the provisions of EIA Notification, 2006, as amended:

- i. Assessment of ecological damage with respect to air, water, land and other environmental attributes shall be carried out by the accredited consultant of the PP. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.*
- ii. Environmental Cost Benefit Analysis shall be done in terms of loss of Forest ecosystem due to diversion of Forest land/loss of biodiversity.*
- iii. Environmental matrix during construction and operational phase needs to be submitted. Matrix formulated on the basis of detailed study and field survey of flora and Fauna methodology used shall be mentioned in the EIA report.*
- iv. Status of implementation of Rehabilitation and Resettlement Plan with details about socio-economic status of Rehabilitated families, indicating their present settlement and its distance from the project cover area be provided.*
- v. Both capital and recurring expenditure incurred under EMP till date along with total budget outlay on EMP shall be submitted.*
- vi. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.*

- vii. *The State Government / SPCB to ensure that the case shall be filed against the project proponent for violation of the EP Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted EC.*
- viii. *The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.*
- ix. *Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation to be done.*
- x. *The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.*

The meeting ended with vote of thanks to the Chair.

ATTENDANCE LIST

| Sr. No. | Name & Address | Role | Attendance |
|----------------|---------------------------|---|-------------------|
| 1. | Dr. A. K. Malhotra | Chairman | P |
| 2. | Dr. N. Lakshman | Member | P |
| 3. | Dr. Mukesh Sharma | Member | P |
| 4. | Dr. Uday Kumar R. Y. | Member | P |
| 5. | Shri Ashok Kharya | Representative of CWC | P |
| 6. | Shri Sharvan Kumar | Representative of Central Electricity Authority (CEA) | P |
| 7. | Dr. Amiya Sahoo | Member | P |
| 8. | Shri Yogendra Pal Singh | Member Secretary | P |

Site Visit Report the EAC (Sub-Committee) Visit of Lower Orr Dam project under Ken-Betwa Link Project Phase II (90000 CCA) in an area of 3007.2 ha at Village Didoni, Tehsil Chanderi, District Ashoknagar, Madhya Pradesh by M/s National Water Development Agency - Environmental Clearance from 9th - 11th October, 2022 -

Background

1. The proposal is for grant of Environmental Clearance to the project for Lower Orr Dam project under Ken-Betwa Link Project Phase II (90000 CCA) in an area of 3007.2 ha at Village Didoni, Tehsil Chanderi, District Ashoknagar, Madhya Pradesh by M/s National Water Development Agency.

2. Earlier, the EAC in its 93rd meeting held on 2nd May, 2016 has recommended the proposal for grant of Environmental clearance subject to the submission of Stage - I forest clearance of proposed project. The recommendation of the EAC were communicated to PP vide Ministry's letter dated 29th July, 2016.

3. Thereafter, the project proponent submitted the Stage-I Forest Clearance (issued by the MoEF&CC on 12th February, 2019) after almost 31 months (submitted on PARIVESH on 16th October, 2020). Accordingly, the proposal was again referred to EAC in terms of the provisions of the MoEF&CC O.M. dated 19th June, 2014. The EAC considered the proposal in its meeting held on 29th October, 2020, 14th March 2022 and 31st May, 2022. The EAC noted that PP has started the construction work without getting Environmental Clearance.

4. The EAC after deliberations decided to conduct site visit before making any recommendations on proposal. Earlier, the site visit was scheduled during 8th - 10th September, 2022; however, as per request received from the Project Proponent, the same was postponed. The rescheduled site visit was done by the Sub Committee during 9th -11th November, 2022. Following expert members of the EAC have visited the Lower Orr project site:

1. Dr. A.K. Malhotra
2. Shri Ashok Kumar Kharya
3. Shri K. Gowarappan
4. Dr. J.A. Johnson
5. Shri Yogendra Pal Singh

5. The Sub-Committee visited the following areas:

- i. Pipe factory where the PP has given a presentation about the overview of the project
- ii. Operators barracks,
- iii. site office complex,
- iv. earthen dam,
- v. the concrete weir area
- vi. quarrying sites

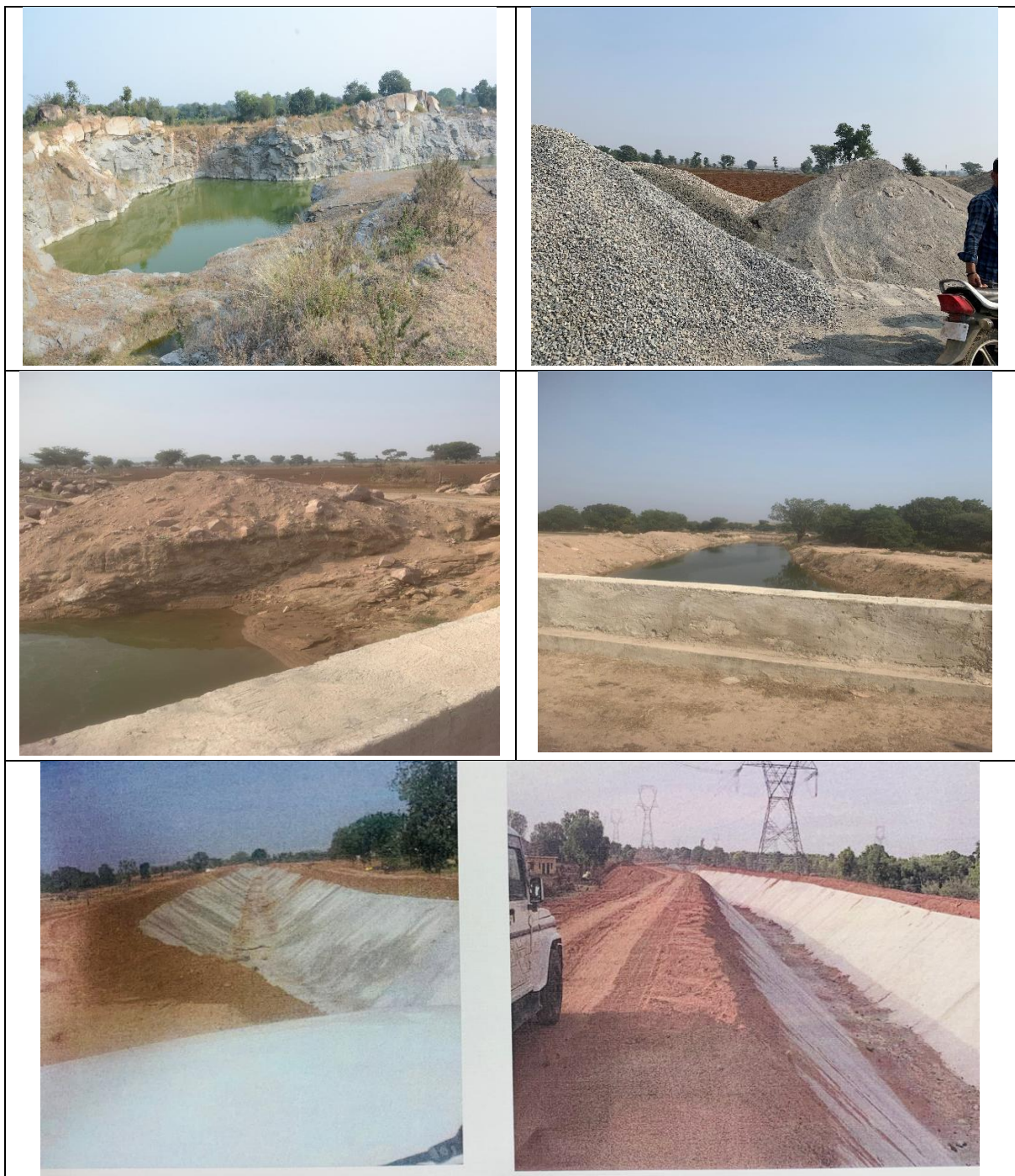
6. The Sub-Committee during site visit observed the following:
- i. Lower Orr major irrigation project is one of the project under Ken-Betwa Link Project, Phase-II for providing irrigation in water deprived area (90000 Ha) of Bundelkhand region in Shivpuri and Datia district of M.P. The project has been conceived for providing assured irrigation facility to 90000 ha area in water deprived Shivpuri and Datia districts during Rabi season with 100% intensity of irrigation by pressurized distribution network.
 - ii. Provision of 6 MCM of water has been kept for providing drinking water facility to 1.65 lakh population in the area.
 - iii. The Cost Estimate of Lower Orr major irrigation project has been finalized by CWC, Govt. of India for Rs. 2657.03 Cr based on MP Unified Schedule of Rates 2017-18. Revised cost at price level 2020-21 is 3101.41 cr.
 - iv. Total affected land - 3020.49 ha. (Forest Land - 991.79Ha.). Stage-I & Stage-II FC has been issued by the Ministry on 12.02.2019 and 06.05.2021 respectively for diversion of 968.24 ha. Forest land.
 - v. The contract was awarded for construction of dam on 23.02.2018 after obtaining administrative approval of govt. of M. P. construction work was initiated on non-forest land.
 - vi. The project construction work is in progress and the construction work has attained overall progress more than 60% (**Dam construction-82%, Canal Network 33.50%**).
 - vii. The Project Proponent has started construction work of the project after recommendation of the EAC, no Environmental Clearance has been issued by the Ministry till date.
 - viii. No Consent to establish/Consent to operate was obtained by the Project Proponent before starting the construction work.
 - ix. Status of implementation of Catchment Area Treatment Plan and R&R has to be submitted by the project proponent.
 - x. No plantation /afforestation has commenced so far excepting some few in the office complex.
 - xi. Barrack area was not in order.
 - xii. The muck management was very poor and no reclamation activity has commenced.
 - xiii. The workmanship of slope, pitching and dam top were not up to the mark.
 - xiv. Most of the trees have not been removed before the onset of submersion in the reservoir area.
7. Regularization of violation cases involves two components (As per S.O.P vide O.M. dated 07th July, 2021):

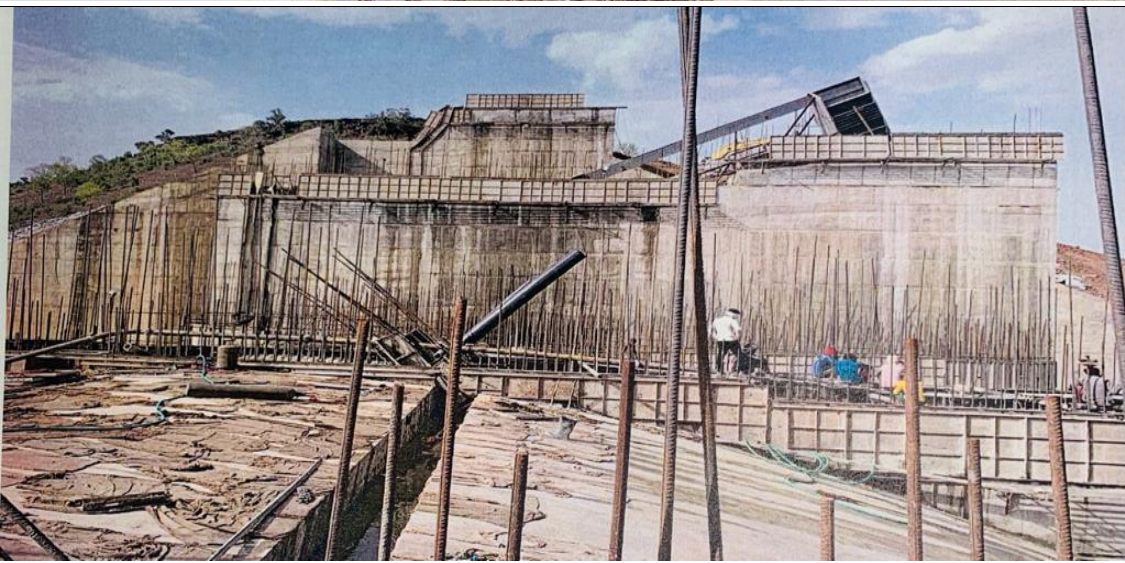
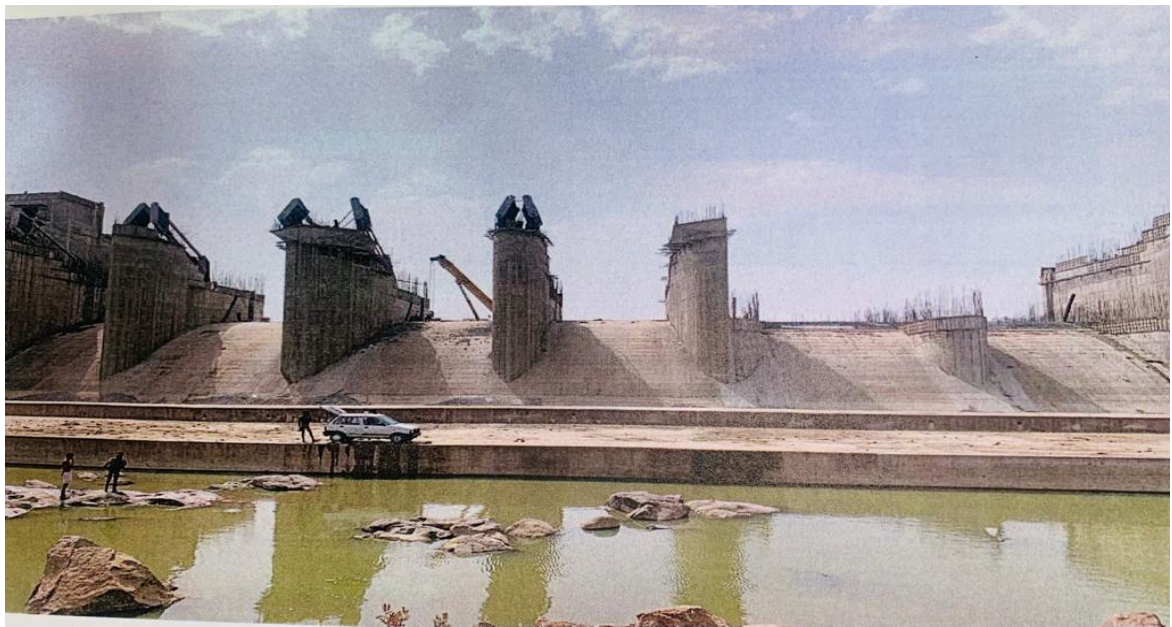
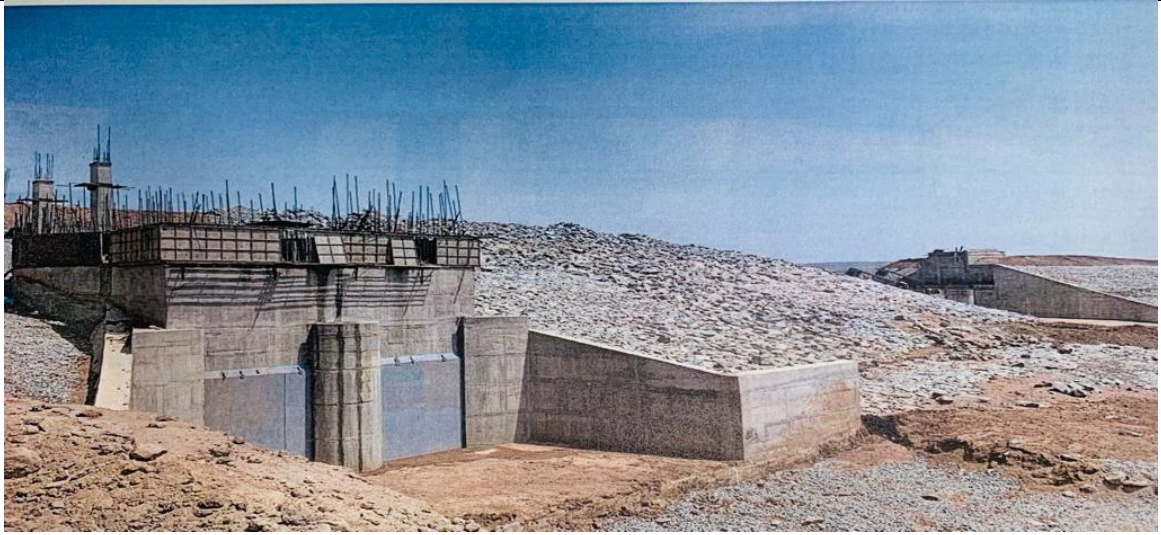
[I] Ecological Damage assessment and restoration: Assessment of environmental / ecological damage with respect to air, water, noise, soil/land, flora & fauna, occupation health and other environmental attributes and preparation of Remediation plan.

[II] Penalty on the basis of Polluter Pay Principle:

- i. **Where operation has not commenced:** 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report; [Ex: Rs.1 lakh for project cost of Rs. 1 Cr]
 - ii. **Where operations have commenced without EC:** 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report PLUS 0.25% of the total turnover during the period of violation. [Ex: For Rs.100 Cr project cost and Rs.100 Cr total turnover, the penalty shall be Rs.1 Cr + Rs. 0.25 Cr = Rs. 1.25 Cr]
8. The EAC Sub Committee has recommended for submission of information so that ecological damage caused due to start of construction of project without environmental clearance can be assessed. After calculation of damage cost the EAC may suggest ecological restoration plan to be implemented by the project authorities.

Figures: Construction work of main Dam, quarrying sites and dumping of construction material





APPROVAL OF THE CHAIRMAN

From: ajitkumarmalhotra463@gmail.com
To: "Yogendra Pal Singh" <yogendra78@nic.in>
Sent: Thursday, January 5, 2023 10:51:30 AM
Subject: Re: Draft MOM of the 38th EAC (RV&HEP) meeting held on 15.12.2022 - reg.

The minutes are in order and I agree with them. Stand approved.

On Thu, 5 Jan 2023, 10:45 Yogendra Pal Singh, <yogendra78@nic.in> wrote:

Dear Sir,

please see the trailing emails and comments from respected EAC members. It is reputed to approve the draft MoM of the EAC meeting held on 15/12/2022, so that the same can be uploaded on the PARIVESH portal of the Ministry.