Annex - VI

CWC ID No. 11/200/2018-PA(S)/ 2956 - 70 Dated: 5.11.2018

भारत सरकार/ **Govt. of India**
केन्द्रीय जल आयोग/ **Central Water Commission**
परियोजना मूल्यांकन (दक्षिण) निदे./ **Project Appraisal Organization.**

टेली/ फैक्स/ **Tele/ Fax: 011-29583418**
ई- मेल / **E-mail: pasdte-cwc@nic.in**

मंजिल—7वां तल(द.)/**7th Floor**
सेवा भवन / **Sewa Bhawan**
आर.के. पुरम / **R.K. Puram**
नई दिल्ली/ **New Delhi-110066**

Sub: Screening Committee Meeting to consider the Feasibility Report Proposal of proposed Mekedatu Balancing Reservoir cum Drinking Water Project of Karnataka - regd.

Ref: 1. Screening Committee Meeting held on dated 24.10.2018.

2. Govt. of Karnataka Lr No. WRD/114/MMK/ 2017 dated 04.08.2018

Please find enclosed herewith the Minutes of Meeting of Screening Committee to consider the Feasibility Report Proposal of proposed Mekedatu Balancing Reservoir cum Drinking Water Project of Karnataka for the preparation of DPR , held on 24.10.2018 under the Chairmanship of Chief Engineer, PAO, CWC for information and further necessary action please.

5/11/2018

Encl: As above.
(Annex II & III sent via email)

(N. Mukherjee)
Director

To:

1. Director, Hydrology (South) / Director, ISM-1 / Director CMDD (NW&S) / Director, HCD (NW&S) /Director, FE&SA Directorate,/ Director, PA(N), CWC, New Delhi.
2. Director, PAC,CEA/ Director (HPP&I) CEA, New Delhi.

Copy for kind information to:

1. PPS to Chairman, CWC, New Delhi.
2. PPS to Member, WP&P, CWC, New Delhi.
3. PPS to Member, D&R, CWC, New Delhi.
4. Chief Engineer, IMO, CWC, New Delhi
5. Chief Engineer, HSO, CWC
6. Chief Engineer, Designs (NW&S)
7. Chief Engineer, (HPP&I),CEA

Minutes of Meeting of Screening Committee on Feasibility Report for the proposed Mekedatu Balancing Reservoir Cum Drinking Water Project as submitted by Govt. of Karnataka.

A meeting of Screening Committee to discuss the Feasibility Report for the proposed Mekedatu Balancing Reservoir Cum Drinking Water Project was held on 24.10.2018 in CWC, New Delhi, under the chairmanship of CE, PAO. List of Officers from CWC & CEA, present during the meeting is attached as Annexure–I.

Brief Description of Project:

The proposed project is a Balancing Reservoir cum Drinking Water Project with Installed capacity 400MW having an estimated cost Rs. 5912.00 Crore at Price Level of June,2018.The Salient features of the project proposal are given at Annexure-II.

After detailed discussion, it was decided that the project authority may go ahead for preparation of Detailed Project Report (DPR) subject to following conditions.

- The points raised by Govt of Tamil Nadu vide Chief Secretary letter dated 17.09.2018 addressed to Secretary/MoWR,RD &GR(copy enclosed as Annexure-III) shall be taken into consideration by the Govt of Karnataka while preparing the said DPR. Views of other co-basin States would also be taken into consideration while preparing the DPR so that interstate issues can be resolved amicably.
- As the main objective of this scheme as stated in the FR is to implement the Cauvery Water Dispute Tribunal(CWDT) Award as modified by the Hon'ble Supreme Court, acceptance of Cauvery Water Management Authority(CWMA) would be a pre-requisite for consideration of the DPR by the Advisory Committee of MoWR, RD & GR.
- The DPR would be prepared in due consultation with CEA and concerned Units of CWC.
- The cost of preparing the DPR would be borne solely by the Govt. of Karnataka and even in the event of the final DPR not found acceptable by the Advisory Committee of MoWR, RD & GR, the cost will not be borne or shared by the Central Govt/Authorities/Agencies/Co-Basin States.

In addition to the above conditions the following comments/suggestions from the Specialized Directorates of CWC are also to be incorporated while finalizing the DPR.

1. **Comments of Cost Appraisal (Irrigation)-2 Directorate:**

(i) While preparing DPR, it should be ensured that assessment of the land quantity (private, government, forest) falling in the working area of Dam & allied works including dumpling area and in the reservoir submergence area should be based on village-wise detailed survey upto FRL/MWL. Also, identification/survey of number of project affected families (PAFs) due to the construction of project has to be carrying out as per norms of RFCTLARR Act, 2013. The assessment of land requirement & PAFs should be in consultation with the concerned State/Central Departments.

(ii) Estimate should be prepared on current Schedule of Rates/ price level and Civil work/H&M/E&M quantities should be based on drawings/design approved by the competent authority.

2. CMDD(NW&S) Directorate:

(i) The height of the proposed concrete dam is 99 m.Hence site specific seismic study for the project has to be carried out and the same has to be approved from the NCSDP.

(ii) The Hydrological studies & the Design flood of the project shall be got approved from the Hydrology Directorate of CWC.

(iii) The Geology of the project area shall be got examined by GSI and their recommendation has to be duly incorporated in the DPR.

(iv) The availability & suitability of the construction material in the close proximity of the project area shall be got approved from CSMRS.

(v) Flood routing studies of the project shall be submitted for further examination.

3. Hydrology Directorate:

(i) The schematic plan of the project and position of intercepting dams may be shown in the report. The catchment plan showing catchment boundary , stream network, contours, location of the projects, G&D sites, rain gauge station etc. may also be given in the report.

(ii) The average, maximum and minimum annual rainfall in the catchment may be given in the report.

(iii) The details of utilization data of all existing, proposed and ongoing projects etc. at u/s and d/s of the project may be provided in the report.

(iv) It is suggested that observed flow of Kollegal G&D site(CA-21082 sq km) located u/s of Mekedatu Dam may be collected to assess the 75% dependability net yield series at project site. The same may be compared with yield series assessed by Biligundlu G&D site (in SI unit)

4. Hydropower Aspect:

The project has to be concurred by CEA as per the provision of Section 8 of Electricity Act 2003 etc.

5. HCD(NW&S) Directorate:

(i) Various alternatives has to be explored and tried before finalizing the present layout being adopted in the project.

(ii) All Geological investigations may be carried out as per MoWR, RD & GR "Guidelines for Preparation of Detailed Project Report of Irrigation and Multipurpose Projects,2010 & and further 2017."

(iii) All Geological tests such as bore holes, drift, etc., shall be conducted, as per relevant IS Codes, before finalization and fixing of hydropower components.

(iv) Length of Main Access Tunnel to power house appears to be too long. To reduce the length alternative may be explored.

(v) Surge shaft size as shown in page no. 119 is not matching.

(vi) In put file forTransient analysis for tail race surge shaft as mentioned at Appendix-15.3 of volume 2 of the Report may be submitted for examination.

(vii) Head loss taken in the water conductor system is 3m which appears to be on lower side. Detailed calculation as per relevant IS codes may be included in feasibility Report.

(viii) Emergency gate along with service gate provision shall be there for maintenance purpose. In some drawings (EIT-1230X-WRE-XX-STR-A020(1/2)(2/2), EIT-1230X-WRE-XX-STR-A021(1/2)(2/2) Emergency gate is shown but in report and other relevant drawings provision of emergency gate has been omitted.

(ix) There is a provision of 72 cm high semi circular trash rack in front of power intake. Maintenance and cleaning operations of such mammoth size of trash rack is very difficult in vertical position. Instead of this, a provision of operating platform in the form of slab may be provided above MDDL taking into consideration of drinking water intake level. Under these conditions, trash rack can be cleaned and maintained water intake level. Drinking Water intake details may also be shown in the drawings

(x) Inadequate spacing between power house and transformer hall cavern, transformer hall and surge shaft caverns have been shown in the drawing. Placing the two caverns close together may give rise to unfavorable stress conditions in pillar between the caverns. Rock pillar length (rock mass gap) shall be at least equal to height of larger cavern depending upon rock mass strength.

(xi) Draft tubes shall be less protruding in surge chamber. If we consider 7.5m extension of draft tube in surge chamber it may be required to accommodate loss of area due to draft tube extension. Draft tube gate provided inside the surge chamber may be shifted upstream.

6. FE&SA Directorate

(i) Since the height of the Dam is more than 30m and it falls in Seismic Zone-II of the Seismic Zonation map of India {IS: 1893 (part-I)-2002}, the site specific seismic studies for determination of design earthquake parameters shall be carried out in accordance with National Committee on Seismic Design Parameters (NCSDP) guidelines and report to be submitted to the NCSDP for approval. The "Guidelines for preparation and submission of site specific study report of river valley project to NCSDP" may be downloaded from CWC official website http://www.cwc.gov.in.

(ii) Further, as far as geotechnical investigations are concerned, the project authorities shall get clearances from GSI (Geological Survey of India)/ Agency accredited by GSI separately as indicated in the CWC's guidelines for submission, Appraisal and Acceptance of Irrigation and Multipurpose Project, 2017.

The meeting ended with a vote of thanks to the Chair.

Annexure-I

List of Participants during the meeting of Screening committee on "Mekedatu Balancing Reservoir cum Drinking Water Project" Karnataka, on 24.10.2018 held in the chamber of CE, PAO, CWC.

Sl. No.	Name & Designation & Office	Organisation/ Directorate
1	Shri C K L Das	CE, PAO, CWC
2	Shri N. Mukherjee	Director, PA(S)
3	Shri Sureshwar Singh Bonal	Director, CA(I)-1
4	Shri S.K. Das	Director, HCD (NW&S)
5	Shri Kayum Mohammad	Director,CMMD(NW&S)
6	Dr. D.R. Mohanty	Dy. Director, PA(S)
7	Shri A.K. Pandey	Dy. Director, ISM-1
8	Ms. Manjeet Kaur	Dy. Director, Hyd(S)
9	Shri Ashish Singh Kushwah	Assistant Director.
10	Budhbir Singh	Assistant Director.
11	Shri Ashish Kr. Lohiya	Assistant Director.