


KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956)

Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004

CIN: U40100KL2011SGC027424 Web: www.kseb.in

Phone :04712448720

Email :dgkseb@kseb.in

-ABSTRACT

Implementation of Pumped Storage Projects(PSPs) - Seeking in Principle approval from Government - Sanctioned - Orders issued.

CORPORATE OFFICE (SBU-G/C)

 B.O. (FTD) No.191/2024 (DGC/AEE-II/Pumped Storage/2022)
 Thiruvananthapuram

Dated:29-04-2024

Read : 1. Note No. CE(C-I&CC)/AEE2/PSP-General/2024 dated 29.02.2024 of the Chief Engineer (Civil-Investigation & Construction Central).
 2. Note No. DGC/AEE -II/Pumped Storage/2022 dated 31.03.2024 of the Director (Generation Civil) to the Full Time Directors (Agenda No.48-04/2024).

ORDER

The Government of India is encouraging the states to setup PSPs in different parts of the country to increase the electricity generation share from Renewable sector. The recent years have witnessed a tremendous increase in Variable and Renewable Energy (VRE) Sources like Solar and Wind in the energy mix. The inherent variability, uncertainty and intermittent nature of the wind and solar sources presents a huge challenge for integrating large quantities of renewables while maintaining the grid stability. Pumped storage schemes are need of the hour for mass energy storage technology. In addition to facilitate the temporal storage of electricity from VRE sources and the peak power support, the PSPs offer many other ancillary services like grid quality improvement, ramping up and ramping down support, spinning reserve, reactive power etc. As per the Renewable Purchase Obligation and Energy Storage Obligation Trajectory issued by the Ministry of Power on 22.07.2022, by the year 2029-30, there shall be storage system for at least 4% of the Solar / Wind installations. Therefore KSEBL has to identify one or two pilot PSPs for early implementation before the 2030 bench mark. Different selection criteria were adopted for identifying the suitable and most feasible PSPs and nine potential PSP sites were identified based on these criteria. A detailed presentation on all potential PSP sites were conducted before the CMD, KSEBL and Full Time Directors on 17.02.2024.

Out of the 9 potential sites, the Idukki (700MW) and Pallivasal (600MW) were identified by M/s. THDCIL and all other PSP sites were identified indigenously by the Investigation wing of KSEBL. Based on the selection criteria mentioned earlier, a ranking has been given focussing the easiness in implementation of PSPs.

On the basis of the "No Forest land" criteria and other governing factors, it is better for KSEBL to proceed with the implementation of Manjappara PSP 30MW based on Karappuzha reservoir in Wayanad district and Mudirapuzha PSP 100MW based on Ponnudi

reservoir in Idukki district as pilot PSPs.

The matter was placed before the Full Time Directors as per note read as 2nd above with the following Road Map for implementation of PSPs.

1. The proposal shall be submitted to Government for In principle approval for implementation of Manjappara PSP (30MW) with rough cost estimate of Rs 180 Crore. and Mudirapuzha PSP (100MW) with rough cost estimate of Rs 573 Crore.
2. As soon as the In principle approval is received, the Project feasibility studies shall be done through an Expert Agency by doing transparent bidding process.
3. Based on the feasibility studies, project financial structuring shall be done by engaging an expert Agency and to conduct of Bidding so as to get proper response to the bidding for EPC contractor.
4. After Project feasibility report and financial structuring, the projects to be taken up on EPC contract method for the implementation of Manjappara PSP (30MW) and Mudirapuzha PSP (100MW) including Survey & Investigation, Detailed Project Report preparation, Construction, Commissioning.
5. For proper project monitoring, an independent professional Project Monitoring Agency (PMA) to be engaged by doing transparent bidding.
6. The funding for the project shall be mobilized through internal resources of KSEBL and project financing through market borrowing. The proposal shall be submitted to the Government for Viability Gap Funding for the 1st project Manjappara.
7. If KSEBL financial situation is stable, as per 6 above the second project financing also shall be done.

Having considered the matter, the Full Time Directors resolved to accord sanction to submit the proposal to Government for In principle approval, for implementation of Manjappara Pumped Storage Project (30MW) with rough cost estimate of Rs 180 Crore. and Mudirapuzha Pumped Storage Project (100MW) with rough cost estimate of Rs. 573 Crore, in accordance with the road map for implementation as detailed above.

Orders are issued accordingly.

By Order of the Full Time Directors

LEKHA G
Company Secretary

To:

The Chief Engineer (Civil-Investigation & Construction Central)

/37617/2024

Copy to:

The Company Secretary / Chief Engineer (IT,CR&CAPS) / Financial Advisor / LA&DEO / Chief Internal Auditor / Chief Vigilance Officer

The TA to the Chairman & Managing Director / Director (Generation-Civil) / Director (Distribution, Safety, SCM & IT) / Director (Transmission, SO & Planning) / Director (Generation - Electrical, REES, SOURA, Sports & Welfare)

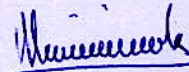
The PA to the Director (Finance & HRM)

The Sr.CA to the Secretary (Administration)

The RCAO/ RAO

Stock File.

Forwarded / By Order



Assistant Executive Engineer