



## KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)
Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram -695004
CIN:U40100KL2011SGC027424

Web site: www.kseb.in
Tel:+914712448720,Email: dgkseb@kseb.in

## **Abstract**

Chathankottunada Stage I SHEP (2x2.5MW,12.06 MU)- Administrative Sanction Accorded-Orders issued.

## CORPORATE OFFICE (SBU-G/C)

B.O(DB) No 306 /2021 (DGC/AEE VI/CHKN- 1 /2014) Thiruvananthapuram, Dated 05.05.2021

- Read: 1. Note No.CE(CI &CC)/ Chathankottunada/2018-19/5914 dated 02.04.2019 of the Chief Engineer (Civil-Investigation & Construction Central).
  - 2. Note No.CE(CI &CC)/ Keeithode/SHEP/2020/237 dated 12.08.2020 of the Chief Engineer (Civil-Investigation & Construction Central).
  - 3.BO(FTD) No.52/2021(DGC/AEEV/MNRE/2015) dated 22.01.2021
  - 4. Note No.DGC/CHKN-1 /2014 dated 26.02.2020 of the Chairman & Managing Director.
  - 5.Proceedings of the 58<sup>th</sup> meeting of the Board of Directors held on 17.03.2021 vide Agenda No.05-03/2021.

## **ORDER**

The proposed Chathankottunada Stage I Small HEP is a run of the river scheme located in Kavilumpara Panchayat of Vadakara Taluk, Kozhikode District and is aimed to operate generally during monsoon, utilizing the inflow from two streams, Poothampara & Chappanthottam, which are the tributaries of Kuttiady river. A gravity type weir will be constructed across each stream, 83.5m long at Poothampara and 63.5m at Chappanthottam to divert water through separate rectangular canals(2mx2m) of total length 2624m to a forebay tank 20m diameter. From the forebay tank, the water is taken through a steel penstock of length 270 m and diameter 1.5m which will branch in to two feeder pipes to feed two units of 2.5 MW each. The total capacity of the Power House is operating at a net head of 90 m and average annual generation is 12.06 MU. There is an additional benefit of 2.48 MU in Chathankottunada Small HEP Stage II, which is now under construction, due to the implementation of Chathankottunada Stage I, as water from Chappanthottam stream can also be utilized in the stage II Power house. Therefore, the total energy benefit from the scheme will be 14.54 Mu. The tail water is discharged into the poothampara stream just upstream of Chathankottunada stage II weir. About 11 hectares of land is required for the project which includes 0.7 hectares of revenue land along river course and 10.3 hectares of private land. No forest land is involved.

The estimated cost of the project (based on DSR 2016 and cost Index 2017) is ₹ 71.59 Crore (Civil - ₹44.69 Crore and electrical --₹26.9 Crore including power

evacuation). The period of construction of the project is 30 months. The MNRE grant of ₹17.5 Crore can be availed as Central financial assistance from the Government of India for the project. The total project cost including IDC after availing MNRE grant is ₹59.22 Crore.

The financial analysis has been done as per SERC/CERC guidelines. The levelised tariff is ₹4.09/kW-h only and payback period is 10 years. The project will have an IRR of 12.65% and net present value is ₹55.05 crore.

The Chief Engineer (Civil- Investigation & Construction Central) as per note read as 1<sup>st</sup> above has requested Administrative Sanction for the implementation of Chathankottunada Stage 1 SHEP (2x2.5MW) at an estimated cost of ₹71.59 Crores (The cost including IDC after availing MNRE assistance being ₹59.22Crore).

The Full Time Directors of KSEBL, while considering the matter of according Administrative Sanction to Pasukkadavu Small HEP, have decided to explore the availability of funds from the Government of Kerala viz, SPB for plan provision under capital head and the same decision was considered for Chathankottunada Stage I SHEP also. Accordingly a proposal to explore the possibility of getting financial support from the Government of Kerala for the implementation of three SHEPs by KSEBL viz, Pasukkadavu SHEP(2x2MW-10.34MU), Chathankottunada SHEP Stage-I (2 x 2.5 MW, 12.06MU) and Keerithodu SHEP (2X6 MW,27.65 MU was considered by the Full Time Directors of KSEBL and the Full Time Directors of KSEBL authorized the Deputy Chief engineer with full powers of Chief Engineer ( Commercial & Planning) for taking up the matter with the Government. On the proposal of the Director (Planning & Safety), to seek viability gap funding from the Government for the implementation of the above three SHEPs, the Chief Engineer (Civil -Investigation and Construction Central) as per note read as 2<sup>nd</sup> above has pointed out various facts and remarked that Small Hydro Power Projects merits due consideration for implementation considering the minimal environmental impacts, local area development etc. The Chief Engineer has requested to take appropriate decision for the implementation of the scheme without waiting for Government sanction for financial assistance

Meanwhile, KSEBL as per BO read as 3<sup>rd</sup> above, considering the matter of financial support from the MNRE for the preparation of Detailed Project Report (DPR) for Small Hydro Electric Project has decided to place the proposal to issue Administrative Sanction for Chathankottunada stage -1 SHEP before the Full Time Directors meeting once again for approval.

Accordingly, the proposal for according Administrative Sanction to Chathankottunada SHEP Stage 1 was placed before the Full Time Directors and the Full Time Directors in the meeting held on 08.02.2021 (Agenda 33/02/21) have discussed the matter in detail and approved for placing before the Director Board for sanction.

Accordingly, the matter was placed before the Board of Directors, as per note read as 4<sup>th</sup> above. The Board of Directors in its 58<sup>th</sup> meeting held on 17.03.202 considered the proposal and in the meeting the Chairman & Managing Director intimated that as per MNRE guidelines KSEBL will be eligible for financial support for the preparation of DPR cost and requested formal Administrative sanction for Chathankottunada Stage 1 SHEP (2x2.5MW) to proceed further in this regard. He also stated that the viability of the project depends upon the availability of Central Finance Assistance (CFA) and Viability Gap Funding (VGP) from Central / State Government and based on that the entire figures are to be reworked to see whether the project can be taken ahead. He intimated that before the final decision for execution of the project is taken the proposal would be presented again before the Board.

After discussion, the Board **Resolved to** accord Administrative Sanction for the implementation of Chathankottunada Stage 1 SHEP (2x2.5MW) at a cost of ₹ 71.59 Crore (The cost including IDC after availing MNRE assistance being ₹ 59.22Crore)

Orders are issued accordingly

By Order of the Director Board.
Sd/LEKHA.G
Company Secretary i/c

To: The Chief Engineer (Civil –Investigation & Construction Central)

Copy to: 1. The Financial Adviser/ The Chief Internal Auditor

2. The RCAO/RAO

3. The Deputy Chief Engineer (IT)

4. TA to CMD/ Dir(D,IT&HRM)/ Dir(T,SO&REES)/Dir (GE&SCM)/Dir(Plg&S)/Dir(GC)

5. PA to Dir (F)/Company Secretary6. FC Supdt/ Librarian/Stock file / File

Forwarded / By Order

**Assistant Executive Engineer**