



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

Registered Office : Vidyuthi Bhavanam, Pattom, Thiruvananthapuram -695004

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Abstract

Pasukkadavu Small Hydro Electric Project (2x2 MW- 10.34 MU) - Administrative Sanction – Accorded - Orders issued.

CORPORATE OFFICE (SBU-G/C)

B.O(DB) No.307/2021(GPC1 /118/2004) Thiruvananthapuram, Dated 05.05.2021

- Read :
- 1.Note No.CE(CI&CC) /Pasukkadavu/2018-19/5915 dated 02.04.2019 of the Chief Engineer (Civil - Investigation & Construction Central)
 - 2.Note No.CE(CI&CC) /Keerithodu/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.GPC1 /118/2004 dated 26.02.2021 of the Chairman and Managing Director, KSEB Ltd.
 - 5.Proceedings of the 58th Meeting of the Board of Directors held on 17.03.2021 vide, Agenda item No. 06-03/2021

ORDER

The Pasukkadavu Small HEP is a run of the river scheme with very small storage proposed in Kavilumpara Panchayat of Vadakara taluk,Kozhikkode District. The scheme envisages development of power by utilising the inflow from Meenpattypuzha, a tributary of Kuttiyadi river. A Gravity type weir, with a length of over flow section of 20 m and maximum height 19.50 m will be constructed across the stream to divert the water through an inclined tunnel,307 m long and 3m diameter to a surge of diameter 8.5m and height 27 m. From the surge, the water is taken through a steel penstock of 1.25 m diameter which will branch in to two feeder pipes to feed two units of 2.0 MW each. The tail race water will be discharged into the same river. The installed capacity of the scheme is fixed as 4 MW (2 x 2 MW). The average annual energy generation expected is 10.34 MU. The net head of the scheme is 122.7 m. This proposal is the totally modified version of the earlier proposal for 2 MW SHEP at Pasukkadavu, considered by KSEBL in 2004. An extent of 5.79 hectares of land is required for the project, which includes 0.8 hectares of revenue land along river course and 4.99 hectares of private land. No forest land is involved.

The estimated cost of the project as per the DPR is ₹ 52.67 Crore (based on the DSR 2016 and cost index 2017),out of this ₹ 31.69 Crore is for civil works and ₹ 17.32 Crore towards E&M works and ₹ 3.66 Crore for power evacuation. The construction of the project is estimated to be completed in a period of 30 months. The total project cost including IDC after availing MNRE grant is estimated as ₹ 42.30 Crore. The draft DPR of the

proposed project was presented before the DPR approval committee on 22.03.2019 and the committee approved the same in principle and further decided that execution would be considered after ensuring availability of funds from the Government of India / Government of Kerala and availability of land.

The financial analysis of the scheme is arrived based on parameters stipulated by SERC/CERC Guidelines with debt equity ratio 90:10 and interest rate 10%. The Loan repayment period is taken as 13 years. MNRE grant of ₹14 Crore is expected for this scheme and is taken into account in the financial analysis. The Payback period of the project will be 11 years and the levelised tariff is ₹ 4.40 per KW-h . The project will have an IRR of 12.14% and net present value is ₹ 35.12 crore.

The Chief Engineer(Civil-Investigation and Construction Central) as per note read as 1st above has requested Administrative sanction for the implementation of Pasukkadavu Small HEP(2x2MW) at an estimate cost of ₹52.67 Crore (The cost including IDC after availing MNRE assistance being ₹ 42.30 Crore).

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. Accordingly a proposal to explore the possibility of getting financial support from the Government of Kerala for the implementation of three SHEPs 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 authorised the Deputy Chief Engineer with full powers of the 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 2nd 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 schemes without waiting for Government sanction for financial assistance.

Meanwhile, KSEBL as per BO read as 3rd 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 Pasukkadavu SHEP(4 MW) and Chathankottunada SHEP Stage-I (5 MW) before the Full Time Directors meeting once again for approval.

Accordingly the proposal for according Administrative Sanction to Pasukkadavu Small HEP was placed before the Full Time Directors and the Full Time Directors in the meeting held on 28.01.2021 vide, Agenda item No.92/1/2021 have discussed the matter in detail and approved for placing the matter before the Director Board for sanction.

Accordingly the matter was placed before the Director Board as per note read as 4th paper above vide, Agenda Item No.06-03/2021.The Board of Directors in the meeting held on 17.03.2021 considered the proposal and in the meeting the Chairman and Managing Director intimated that as per MNRE guidelines KSEBL will be eligible for financial support for preparation of DPR cost and requested formal Administrative Sanction for Pasukkadavu SHEP (2X2 MW- 10.34 MU) to proceed further in this regard. He also stated that the viability

of the project depends upon the Central Financial Assistance (CFA) and Viability Gap Funding (VGF) from Central/State Government and based on that, the entire figures have 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 Pasukkadavu Small HEP (2X2 MW- 10.34 MU) at a cost of ₹52.67 Crore (The cost including IDC after availing MNRE assistance being ₹ 42.30 Crore).

Orders are issued accordingly.

BY ORDER OF THE DIRECTOR BOARD

Sd/-

LEKHA. G

COMPANY SECRETARY IN CHARGE

To:

The Chief Engineer(Civil - Investigation and Construction Central) ,Vydyuthi Bhavanam,Tvm

Copy to:-

The Chief Internal Auditor/ Financial Adviser
The Chief Engineer (IT)
The RCAO/The RAO
The TA to Chairman&MD/Director (GC)/ Director (D,IT&HRM)
Director (T & S.O) /Director (GE&SCM)/Director (Plg & S)
The PA to Director (Finance) / Company Secretary
The Legal Liaison Officer, KSE Board Ltd, Kochi
Library/ FC Supt/Stock File

Forwarded/By Order



Assistant Executive Engineer