

KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

Reg.Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004, Kerala Phone: +91 471 2514528, 2514576, 9446008884. CIN: U40100KL2011SGC027424

E-mail: dtkseb@kseb.in, pse@kseb.in Website: www.kseb.in.

ABSTRACT

Construction of new 110 kV Substation at Vattalakki, Kottathara, Palakkad Dist. – Proposal - Orders issued.

Corporate Office (SBU-T)

BO(FTD) No.457/2021/D(T&SO)/PSE/NP/Vattalakki/2021-22, Thiruvananthapuram, dtd. 18.06.2021

Read: 1. Letter No. DCPKD/8089/2020-CA1/09.09.2020 of the District Collector, Palakkad addressed to the Secretary, Power Dept., GoK.

- Note No. D(D&IT)/D4/Kottathara Ss/2020-21/68 dtd. 05.10.2020 of the Director(D,IT& HRM).
- 3. Letter No. 2905/VIP/Min (ELE.)/2020/06.10.2020 of the Hon. Minister for Electricity forwarded to the Director(T&SO).
- 4. Letter No. PWR-C3/181/2020-POWER dated 06.10.2020 of the Secretary, Power Department, Govt of Kerala.
- 5. Letter No. PWR-C3/181/2020/ Power Dept dated 04.01.2021 of the Secretary, Power Department, Govt. of Kerala.
- 6. Representation received through the Swanthana Sparsam Adalath 2021 conducted by Hon. Ministers of Govt. of Kerala, in February 2021.
- 7. Note no. D(T&SO)/PSE/NP/Vattalakki/2021-22/29 dated 31.05.2021 of the Director (Transmission and System Operation). (Agenda item No. 83/5/21)

ORDER

The Director (D&IT) as per Note read as 2nd above had forwarded the proposal submitted by the Chief Engineer (Distribution North) to the Director (T&SO), for constructing a new 110kV Substation at Vattalakki near Kottathara, Palakkad District in view of the frequent power failure incidents of long duration in Attappadi and Agali area due to natural calamity at Attappady Ghat and flood in the Bhavani river basin during monsoon. During such periods of interruptions, the consumers connected to 288 Nos. of distribution transformers under Electrical Sections, Kottathara and Agali were affected. The proposal was prepared based on the direction from the Sub Collector, Ottappalam in his review meeting held at Agali on 06.08.2020 to discuss the natural calamity damages in Attappady. It was requested for alternate proposals for avoiding such supply interruption in that area.

The Power supply to Attappadi and Agali areas in Palakkad district, bordering Tamil Nadu, is currently fed from 33kV Substation Agali. 33kV supply to this Substation is fed from 110kV Substation, Mannarkad. The Agali 33kV substation is also the pooling station for the wind energy units totaling 18.7MW capacity installed in Agali/Kottathara areas by various private developers. When the grid connectivity fails, generation from these wind units will also be affected. Further, new projects like 1MW Solar PV Plant by KSEBL, 600kW Solar PV Plant by Palakkad District Panchayath, 72MW Wind Electric Generators (WEG) by M/s NHPC etc. are currently held up due to lack of sufficient power evacuation capacity in the present 33kV grid at Agali. If dedicated and

reliable power supply is available, the existing WEGs can run continuously and the proposed WEGs of NHPC can be connected to the grid.

Hence, a project is necessary for mitigating the prevailing 33kV supply unreliability due to natural calamities and also as a remedy for the inadequacy of power evacuation capacity from renewable energy potential at Agali. Further, this will result in the overall development of Attappady, which is one of the most backward areas in the State.

The proposal is for constructing a new 110kV Substation at Vattalakki near Kottathara and constructing 110kV DC line from Somayanur near Coimbatore, Tamilnadu. As per preliminary investigations, it is inferred that 110kV supply can be tapped from 110kV Thudiyallur-OKM Mills Pakuthi feeder of TANTRANSCO. The Estimated cost of the proposed project is Rs 27 crores (Rupees twenty seven Crores only) without considering any land cost.

As this project will help in the overall development of Agali area, possibility of getting fund for the project from SC/ST & BC Department, Government of Kerala can be explored.

As per the information received from the Tahsildar, Mannarkad Taluk, 2.3 acres of barren forest land is available beside the Agali-Anakkatti road, opposite to the Vattalakki Krishi Bhavan, leased to the Vattalakki Farming Society. The Tahasildar and the DFO, Mannarkkad remarked that the Government of Kerala can sanction this barren forest land for other Government purposes. The Sub Collector, Ottappalam has informed that necessary instructions has been given to hold a general body/ex-officio members' meeting of the Society to decide on the land transfer.

The Additional connectivity to the proposed 110kV Substation Vattalakki can be established from the 220kV Substation Kottathara, proposed to be constructed as part of the 'Attappady Green Energy Corridor project' to evacuate the upcoming 72MW Wind power project. The Kottathara 220/33kV pooling station cum 220/110kV Substation under TransGrid 2.0 can be constructed adjacent to the proposed Vattalakki 110kV Substation so that the cost of transmission will be reduced. As the proposed 110kV Substation Vattalakki is connected to both Kerala and Tamil Nadu grid, the green energy generated at Agali area can be easily evacuated ensuring N-1 grid connectivity to Kerala (at 220kV level) and to Tamil Nadu (at 110kV level). The Agali 33kV substation can also be connected to the proposed 110kV Substation Vattalakki. Thus at Agali, there will be 33kV connectivity from two different substations viz, 110kV Substation Mannarkad and the proposed 110kV Substation Vattalakki. Further, even under the islanding of Kerala grid, Agali 33kV Substation along with the WEGs and Solar plants (the Green Power Generators) at Agali/Kottathara area can function smoothly.

It is required to collect the technical particulars and other requisite details for conducting a Load Flow Study (LFS) and feasibility study on the proposed project. Since the proposed project is an interstate one, intervention at Government level between Kerala and Tamil Nadu is needed. KSEBL may have to approach TANTRANSCO and SRPCTP for taking permission. TANTRANSCO has to approve the proposal, and then only KSEBL can go ahead with the project.

Meanwhile Mr. Jothi Anil kumar, President, Puthur Grama Panchayath has sent a representation read as 6th above, to the Chief Minister of Kerala through the Swanthana Sparsam Adalath 2021 conducted by Hon.Ministers of Govt. of Kerala, in February 2021 with regard to the Power interruption in that area and requested for installing a new Substation at Puthur.

In this context the Director (TSSO) in his note and 7 should

- 1. This proposal for constructing a new 110kV Substation at Vattalakki near Kottathara and drawing 110kV DC line from Somayanur near Coimbatore, Tamilnadu may be approved in principle and put up in the upcoming 3rd SRPCTP meeting as an agenda item for getting approval and further proceedings.
- 2. Secretary, Power Department, Government of Kerala may be requested to take up the matter with his counterpart in Government of Tamil Nadu for giving necessary directions to TANTRANSCO for cooperating with KSEBL for initiating a joint study in advance to ascertain the feasibility of providing 110kV connectivity to the proposed 110kV substation at Vattalakki, by tapping from the 110kV Thudiyalur - OKM Mills Pakuthi feeder of TANTRANSCO.
- 3. KSEBL may request to the SC/ST & BC department of Govt. of Kerala for providing the necessary funding for the project.
- 4. To take up with the District Collector, Palakkad for allotting the necessary land for the project.

This matter was placed before the Full Time Directors as per note read 7 above.

Having considered the matter in detail, the Full Time Directors in its meeting held on 31.05.2021 resolved to approve the proposal for constructing a new 110kV Substation at Vattalakki near Kottathara and drawing 110 kV DC line from Somayanur near Coimbatore, Tamilnadu in principle for placing before the upcoming 3rd SRPCTP meeting as an agenda item for getting approval and further proceedings.

Further resolved to request the Secretary, Power department, Government of Kerala to take up the matter with his counterpart in Government of Tamilnadu for giving necessary directions to TANTRANSCO for cooperating with KSEBL for initiating a joint study in advance to ascertain the feasibility of providing 110kV connectivity to the proposed 110kV Substation at Vattalakki, by tapping from the 110kV Thudiyalur - OKM Mills Pakuthi feeder of TANTRANSCO. Further resolved to request the SC/ST & BC Department of Government of Kerala for providing the necessary funding for the project. Further resolved to request the District Collector, Palakkad for allotting the necessary land for the project.

Orders are issued accordingly.

By order of the Full Time Directors Sd/-Lekha. G **Company Secretary (In-Charge)**

To: The Chief Engineer,

Distribution North.

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

The Deputy Chief Engineer (IT)

T.A to Director (T&SO) Company Secretary

Fair Copy Superintendent/Library/Stock File

Forwarded / By Order

Assistant Executive Engineer