



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

Reg. Office: Vidyuthi Bhavanam, Pattom, Thiruvananthapuram - 695 004

CIN :U40100KL2011SGC027424, Website: www.kseb.in.

Phone: +91 471 2514576, 2446885, 9446008884, E-mail: dtkseb@kseb.in

ABSTRACT

Providing Reliable communication and Data Acquisition system to all Sub Stations of and above 110kV level - Revised Administrative Sanction- Sanctioned- Orders issued.

Corporate Office(SBU-T)

B.O.(DB)No. 398/2020/D(T,SO&S)/T6/Reliable Communication/2019-20 dated Thiruvananthapuram 10.06.2020

- Read :
1. BO(DB) No. 1111/2017 (D(T&SO)/T2/SO/Reliable Communication/2016) dated 27.04.2017.
 2. Letter No. CESO/Tech/Reliable Communication/19-20/1859A dated 25.10.2019 of the Chief Engineer (Transmission System Operation).
 3. Note No. D (T,SO&S) /T6 / Reliable communication /2019-20 dated 19.05.2020 of the Chairman & Managing Director.
 4. Proceedings of the 53rd meeting of the Board of Directors held on 25.05.2020 (Agenda No. 8-5/2020).

ORDER

KSEBL as per BO read above resolved to accord Administrative Sanction for the estimate amounting to ₹ 212.45 crore towards providing Reliable Communication and Data Acquisition System with OPGW, to all Sub Stations of and above 110kV level and VSAT facility, with 30% financial assistance from Power System Development Fund (PSDF) and the remaining amount from KSEBL's own fund.

Based on the discussions with PSDF Committee, the following modifications were made and the Ministry of Power (MoP) approved the project for an amount of ₹ 147.52 crore with ₹ 73.76 crore (50%) as grant :

- VSAT was removed treating as redundant communication medium.
- PDH equipment was exempted because of additional capabilities of new SDH equipments.
- Instead of 48 core OPGW, 24 core was admitted being sufficient for Power system application.

The estimate has further been revised limiting the expenditure to present requirement and giving price escalation considering the present market price of various equipments and for accommodating additional cost for supporting KFON project of Government of Kerala by providing

48 fibre instead of 24 fibre. The VSAT part is avoided and decided to provide Satellite phones for very remote Sub Stations which is being provided by Government in selected locations. .

The Chief Engineer(TSO), as per letter read 2nd above forwarded the revised estimate with total project cost amounting to ₹ 175.21 crore of which, ₹ 73.76 crore will be funded by PSDF and 58% of the project cost has to be met from KSEBL fund. Also, revised DPR for the subject work, with the following details, was forwarded for sanction and approval :

Mode of Execution :

Through Competitive Bidding Contracts. OPGW part will be done by the Kerala State IT Infrastructure Ltd.(KSITIL), the bid processing co-ordinator. KSITIL after completion of competitive bidding process has awarded the work order to the consortium of M/s BEL. All other works in this project would be executed by KSEBL. All the works in this project will be supervised by the experienced personnel of Transmission/Communication wing of KSEBL

Period of Completion : 36 months from the date of release of first instalment of grant (13.05.2019) sanctioned from PSDF.

Major Equipments to be procured : OPGW for earth wire replacement, SDH /PDH equipment for Fibre Optic Communication, Battery & Chargers for power supply and RTU for Data Acquisition.

Source of Fund : As per the revised estimate, 58% of the revised estimated cost to be borne by KSEBL and the remaining can be met from PSDF grant (₹ 73.76 cr.). The Budget provision has been provided as : FY 19-20 – ₹ 21cr., FY 20-21 – ₹ 87cr., FY 21-22 – ₹ 68cr.

Benefits : Fibre Optic Network using OPGW has been finalized to connect all 110 kV and above Sub Stations as

- Advanced voice and data connectivity to all Sub Stations and Generating stations are required for efficient operation of LDC.
- The present PLCC Communication facility cannot meet the demands of future because of frequency congestion and poor Bandwidth (BW) capability.
- With the Fibre Optic Connectivity, it is possible to operate any substation from a remote station ensuring high speed, sufficient bandwidth and all cyber security features.
- The fibre optic cable system through EHT line is more reliable than any other terrestrial communication system including Under Ground OF systems due to the least amount of down time. This is obvious from KSEBL's experience over 14 years.
- OPGW will enhance feeder protection due to lightening and hence line outages become less.
- 24 fibres out of 48 available with KSEBL can be utilised for KFON which is the project proposed by the Government of Kerala for interconnecting various offices of the Government and providing internet connections to public.

The Full Time Directors in the meeting held on 07.05.2020 resolved to place the matter of according Administrative Sanction for the revised amount of ₹ 175.21 crore before the Board of Directors, on the condition that the additional cost has to be borne by KFON.

The matter was placed before the Board of Directors as per note read as 3rd above.

Having considered the above, the Board of Directors, in the meeting held on 25.05.2020 resolved to accord Revised Administrative Sanction for the project "Providing Reliable communication and Data Acquisition system to all Sub Stations of and above 110kV level" at an amount of ₹ 175.21 crore (Rupees One hundred and seventy five crore and twenty one lakh only), on the condition that additional cost, if any, due to the drawing of 48 fibre cable instead of 24 fibre cable has to be borne by KFON. The Board of Directors further resolved to modify the Board order, B.O(DB) No. 1111/2017 (D(T&SO)/T2/SO/Reliable Communication/ 2016) dated 27.04.2017 to this extent.

Orders are issued accordingly.

By Order of the Director Board
Sd/-
Lekha G.
Company Secretary (In- Charge)

To :

The Chief Engineer, Transmission System Operation

Copy to:

The Deputy Chief Engineer(IT)

The Financial Adviser/ The Chief Internal Auditor.

The RAO/ RAO.

The TA to Chairman & MD/ D(T,SO&S)/ D(D , IT&HRM)/ D(G-C)/ D(G-E& SCM)

The PA to Director (Finance)/CA to Company Secretary

Fair Copy Superintendent/Library/Stock File.

Forwarded / By Order


Assistant Executive Engineer