



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

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

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ABSTRACT

Operation & Maintenance charges of 33 kV Substation, Veliyambra constructed for Kerala Water Authority under Work Deposit Basis - Sanction accorded – Orders issued.

Corporate Office (SBU-T)

B.O.(FTD)No.679/2020/D(T&SO)/T5/33kV S/S Veliyambra/2020-21/Thiruvananthapuram dated.09.11.2020

- Read: 1. Letter No. CE/TRN/E2/Veliyambra/2012-13/1834 dated 07.02.2012 of the Chief Engineer (Transmission North)
2. Remarks of Deputy Chief Engineer(Commercial&Planning) with full powers of Chief Engineer
3. Letter No. CE/TRN/E2/Veliyambra/2020-21/860 dated 05.10.2020 of the Chief Engineer (Transmission North)
4. Note No. D(T&SO)/T5/33kV S/S Veliyambra/2020-21/218 dated 22.10.2020 of the Director (T&SO) (Agenda Item No.16/11/20)

ORDER

The Administrative Sanction was accorded by the Chief Engineer(Transmission North) for the construction of 33kV Indoor Substation, Veliyambra with 2x5 MVA, 33/11kV transformers on deposit work basis in favour of Kerala Water Authority for Rs. 3.89 crores, as per letter read as 1st above. Based on this, the work had been commenced on 2017 on temporary handing over of the land by KWA.

The substation consists of one 33 kV incoming feeder bay through the 33kV Mattannur-Kuyiloor feeder tap at Veliyambra and two numbers of 33/11kV 5MVA transformer bays. The substation construction was completed and inaugurated on 17.08.2020. As per the agreement executed with KWA, the Operation & Maintenance charges of the substation will be borne by KWA on intimation from KSEBL.

Having considered the remarks of the Deputy Chief Engineer(Commercial & Planning) with full powers of Chief Engineer as per letter read as 2nd above, that instead of relying normative number of bays and circuit kilometers of transmission lines for calculating O&M charges, a reasonable estimate to be prepared based on actual O&M cost of KSEBL for recovering the same from KWA.

Subsequently, the Chief Engineer(Transmission North) has submitted an estimate amounting to Rs. 80.97 Lakhs incl GST towards the O & M expenses of 33 kV Substation, Veliyambra for the financial years 2020-21 and 2021-22 to be realised from Kerala Water Authority.

The Chief Engineer (Transmission North) has submitted an estimate as per letter read as 3rd above includes the cost for engaging Diploma/Degree holder(Ele) as operator and ITI holder(Ele) for assisting in shift duties during night, supervision charges for inspection by KSEBL Engineers, periodical testing fees, line maintenance charges and other expenses is prepared based on the rates prevailing in KSEBL and maintenance charges for substation.

maintenance expenditure due to failure of major equipments like power transformers, instrument transformers, 33kV and 11kV VCB panels , battery charger etc are not included in this estimate.

The escalation rate of 4.84% per annum as escalation rate based on CPI:WPI as per KSERC Notification No. 2076/F&T/17/KSERC dated. 05.10.2018 is taken for calculating the expense for the second year.

| O&M Expenses | Period | Amount incl GST |
|--------------|--------------------------|-----------------|
| First year | 16.05.2020 to 15.05.2021 | Rs. 39,52,971/- |
| Second year | 16.05.2021 to 15.05.2022 | Rs. 41,44,294/- |
| Total | | Rs. 80,97,265/- |

The matter of O&M expenses of the 33kV Substation, Veliyambra constructed for KWA on work deposit basis to be realised from KWA was placed before the Full Time Directors for sanction as per note read (4) as above.

Having considered the matter in detail, the Full Time Directors in the meeting held on 04.11.2020,

Resolved to accord sanction for the O&M expenses amounting to Rs. 80,97,265/- (Rupees Eighty Lakh Ninety Seven Thousand Two Hundred and Sixty Five only) to be realised as the O&M charges for the financial years 2020-21 and 2021-22 of 33 kV Substation, Veliyambra constructed for KWA under Work Deposit Basis .

Further resolved to entrust the Chief Engineer(Transmission-North) to claim and to follow the pattern as per norms in subsequent years to claim the O&M charges.

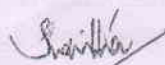
Orders are issued accordingly.

By Order of the Full Time Directors,
s/d
LEKHA.G
Company Secretary (In-Charge)

To : The Chief Engineer (Transmission North)

Copy to: The Deputy Chief Engineer, Transmission Circle, Kannur
The Financial Adviser/ The Chief Internal Auditor/ The Company Secretary
The RCAO/ RAO
The TA to Chairman & MD/D(T&SO)/D(D,IT&HRM)/ D(G-C)/D(G-E& SCM),D(P&S) PA to D(F)
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Forwarded / By Order


Assistant Engineer

Annexure to B.O.(FTD) No.679/2020/D(T&SO)/T5/33kV S/S Veliyambra/2020-21/Thiruvananthapuram dated, 09.11.2020

ESTIMATE

| A OPERATION EXPENDITURE | | | | | | |
|---|---|---------------------------------------|----------------|-----------------|----------|---------------------|
| | Particulars | | | Rate | Qty | Amount |
| 1 | Salary of operating staff per year | Operator | 3shift/day | 935 /shift | 365 days | 10,23,825.00 |
| | | Shift assistant | 1.5 shift/day | 740 /shift | 365 days | 4,05,150.00 |
| 2 | Supervision expenses of Assistant Engineer and sub Engineer (weekly) per year | Station engineer (4 visits per month) | 4 visit/ month | 12000 /month | 12 month | 1,44,000.00 |
| | | Sub Engineer(4 visits per month) | 4 visit/ month | 8000 /month | 12 month | 96,000.00 |
| 3 | Inspection charges of Assitant Executive Engineer/ Executive Engineer / Deputy Chief Engineer per year | | 1 visit/month | 10000 /month | 12 month | 1,20,000.00 |
| 4 | Hire charges of vehicles per year | | | 10000 /month | 12 month | 1,20,000.00 |
| 5 | Other Utility Charges (Telephone/ Internet/ Water/ electricity) | | | 5000 /month | 12 month | 60,000.00 |
| 6 | Inspection fee for electrical inspectorate per year | | | 100000 /year | 1 year | 1,00,000.00 |
| 7 | Building Tax and land tax per year | | | 25000 /year | 1 year | 25,000.00 |
| B MAINTENANCE EXPENDITURE | | | | | | |
| 1 | Routine maintenance charges of substation per year | | | 20000 /month | 12 month | 2,40,000.00 |
| 2 | Cost of consumables like Silica gel, Transformer oil, lubricating oil, grease, distilled water, petroleum gelly, cotton waste | | | 10000 /month | 12 month | 1,20,000.00 |
| 3 | Cost of Spares per year | | | | | |
| | cable end termination 33 kV & 11 kV | | | 50000 /6months | 1 year | 1,00,000.00 |
| | Vacuum circuit bottle | | | 100000 /6month | 1 year | 2,00,000.00 |
| 4 | Upkeeping and cleaning of control room building, electrical and plumbing systems etc per year | | | 5000 /month | 12 month | 60,000.00 |
| 5 | Routine testing of power equipment by Relay | | | 80000 /year | 1 year | 80,000.00 |
| 6 | Routine testing of power equipment by PET | | | 352000 /year | 1 year | 3,52,000.00 |
| 7 | Routine testing of meters by meter testing unit | | | 80000 /year | 1 year | 80,000.00 |
| 8 | Routine maintenace charges of 33kV line per year | | | 2000 month | 12 month | 24,000.00 |
| Total | | | | | | 33,49,975.00 |
| GST @ 18% | | | | | | 6,02,995.50 |
| Total Operation and maintenance expenditure per year | | | | | | 39,52,970.50 |
| O&M Expenses details | | Period | From | Escalation Rate | | Amount |
| | | | To | | | |
| 1 | First Year (Date of commissioning. 16/05/2020) | 16-05-2020 | 15/05/2021 | 0 | | 39,52,970.50 |
| 2 | Second Year | 15/05/2021 | 14/05/2022 | 4.84 %/Year | | 41,44,294.27 |
| Total | | | | | | 80,97,264.77 |

Note: Maintenance expenditure due to failure of major equipment such as Power Transformers, CTs, PTs, LAs, Auxilliary transformer, 33kV VCB panel sets, 11kV 10 panel sets, Battery set, Battery charger etc. are not included in this expenditure.