



KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956)

Registered Office: Vidyuthi Bhavanam, Pattom,

Thiruvananthapuram – 695 004

CIN: U40100KL2011SGC027424

Website: www.kseb.in

Phone: +91 471 2514576, 2446885, 9446008884

Email: dtksebl@ksebl.in

ABSTRACT

Providing bus bar protection to 110 kV bus of major substations of KSEBL - Revision in estimate - Revised Administrative sanction accorded - Orders issued

CORPORATE OFFICE(SBU-T)

BO (FTD)No.24 7/2023(DIRTSO-AEE3/2022/1471)

Thiruvananthapuram, Dated: 16.05.2023

- Read: 1. B.O. (FTD) No. 500/2022(DIRTSO-AEE3/2022/1471) dated 08.06.2022.
2. Letter No. CESO/Tech/AEE(T1)/BBP/23-24/60 dated 5.04.2023 of the Chief Engineer (TSO).
3. Note No. DIRTSO-AEE3/2022/1471 (1) dated 08.05.2023 of the Director (T,SO,P,S & G-E) to the Full Time Directors (Agenda Item 38/05/23).

ORDER

The Administrative Sanction was accorded as per the B.O read as 1st above to the proposal for providing bus bar protection at the 110 kV bus of 29 nos of substations of KSEBL, at an estimated cost of Rs. 26 crore. The Chief Engineer (TSO) was authorized to seek funding from PSDF for the project.

The Chief Engineer (TSO) as per letter read as 2nd above reported that the proposal was submitted to PSDF Secretariat for availing PSDF grant (90%) and the same was discussed in the 65th TESS meeting held on 01.09.2022. With respect to the estimate provided by KSEBL, TESS members sought the following:-

- Finalized quantity of items such as isolators/ CTs/ bus couplers/ sectionalisers after detailed survey (instead of lump sum provided in the estimate).
- Cost breakup (breakup of modification cost and relay cost).
- Revision of cost estimate based on the latest available PO/LOA (LOA of similar schemes sanctioned for Punjab and Rajasthan).

The Chief Engineer (TSO) further reported that in view of the above observations, the estimate was revised based on the approved BoQ for bus bar protection schemes sanctioned by PSDF Secretariat for Rajasthan Rajya Vidyut Prasaran Nigam Limited. In the process of revising the estimate, it was observed that the CTs available in the identified substations were not of required accuracy class for the cores and needs to be replaced. Also, some of the substations included in the list initially approved were excluded since they are either in the pipeline to be converted to GIS or are being considered for SAS implementation. The 110kV substations with high fault level and 220 kV substations where there is no bus bar protection for 110 kV bus are included instead. After modifications as above, the number of substations where bus bar protection is to be implemented got modified to 28 nos. and the estimate amount is revised to Rs. 34.36 crore.

Since the revised estimate amount exceeded the amount of AS by 32.15% (Rs. 8.36 crore), revised Administrative sanction for the proposal was sought as per note read as 3rd above.

Having considered the matter in detail, the Full Time Directors, in the meeting held on 11.05.2023 resolved to accord revised administrative sanction to the proposal for providing bus bar protection at the 110 kV bus of the 28 Nos. of substations, as detailed in the Annexure, at an estimated cost of Rs. 34.36 crore (Rupees Thirty four crore thirty six lakhs only).

Orders are issued accordingly.

**By Order of the
Full Time Directors**

Sd/-

**LEKHA G
Company Secretary**

To:

The Chief Engineer (Transmission System Operation)

Copy to: The Financial Adviser/ Chief Internal Auditor / Chief Engineer (IT, CR & CAPs)/
Company Secretary
The TAs to CMD/ D(T,SO,P,S & G-E)/ D(D,IT, SCM,REES & Soura)/ D(G-C)
The PA to Director (Finance & HRM)
The Sr. CA to Secretary (Administration)
Stock File.

Forwarded / By Order



Assistant Executive Engineer

Annexure to BO(FTD) No. 247/2023(DIRTSO-AEE3/2022/1471) dated 16.05.2023

List of substations and estimate amount

Sl.No.	Name of Substation	No. of bays	BBP Cost	Installation Amount in Lakhs	Total Cost for BBP
System Operation Circle, Kannur					
1	220kV Mylatty	12	33.33	39.13	72.46
2	220kV SS Ambalathara	10	29.47	11.38	40.85
3	220kV SS Thaliparamba	14	38.86	33.51	72.37
4	220kV SS Kanhirode	16	44.39	35.77	80.16
5	220kV SS Nallalam	26	77.71	121.74	199.45
6	220kV SS Areakode	9	29.47	23.51	52.98
7	220kV SS Malaparamba	17	38.86	36.84	75.7
8	220kV SS Palakkad	32	88.78	139.92	228.7
9	110kV SS Kuttiyadi	6	20.33	42.83	63.16
10	110kV SS Chakkittapara	6	20.33	25.11	45.44
11	110kV SS West Hill	6	20.33	35.55	55.88
12	110kV SS Koduvally	6	20.33	42.85	63.18
13	110kV SS Kinalur	6	20.33	19.34	39.67
System Operation Circle, Kalamassery					
14	220kV SS Brahmapuram	23	66.66	189.89	256.55
15	110kV SS Kodungalloor	8	24.8	74.72	99.52
16	110kV SS Kandasankadavu	8	24.8	151.73	176.53
17	220kV SS Kunnamkulam	15	44.39	17.91	62.3
System Operation Circle, Trivandrum					
18	220kV SS Pothencode	23	66.65	261.65	328.3
19	220kV SS Punnappra	14	38.86	56.64	95.5
20	220kV SS Edappon	14	38.86	62.1	100.96
21	110kV SS Neyyattinkara	6	24.8	51.73	76.53
22	110kV SS Parassala	10	29.5	81.6	111.1
23	110kV SS Kazhakkootam	16	44.39	135.71	180.1
24	110kV SS Balaramapuram	10	29.5	67.26	96.76
25	110kV SS Aattingal	10	29.5	121.6	151.1
26	110kV SS Paruthippara	18	49.92	261.08	311
27	110kV SS Kattakkada	9	29.5	18.37	47.87
28	110kV SS Pathanamthitta	18	49.92	201.88	251.8
GRAND TOTAL					3435.92
Rounded to Rs. 34.36 Crore					
(Rupees Thirty Four Crore Thirty Six Lakhs only)					