



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 2446885, Fax: +91 471 2444738 E-mail: dkseb@kseb.in

ABSTRACT

Upgradation of 66kV SC Nallalam-Kuttikkattoor and Kuttikkattoor–Kunnamangalam line to 110kV DC under Transmission Circle, Kozhikode- Revised Administrative Sanction accorded - orders issued.

Corporate Office(SBU-T)

B.O.(FTD)No.300 /2020/D(T,SO&S)/T3/Nallalam- Kunnamangalam Upgradn/2019-20 dated, Thiruvananthapuram 27.04.2020

- Read: 1. BO(FB) No.815/(M(T&GO)T3/NLM-KNLM line conversion/12-13) dated 08.04.2013.
2. Letter No.CE/TRN/E6/Kuttikkattur-Cyberpark/2019-20/1651 dated 24.02.2020 of the Chief Engineer, Transmission North.
3.Note No.D(T&SO)/T3/ Nallalam- Kunnamangalam Upgradn/2019-20/ 150 dated 17.04.2020 of the Director(Transmission, System Operation & Safety) (Agenda No. 38/04/20) .

ORDER

The 66kV single circuit line from 220kV substation, Nallalam to 110kV Substation, Kunnamangalam feeds 66kV Mankavu, Cyber Park, Kuttikkattur, Mavoor (EHT consumer) and Ambalaparamba substations. This 66KV main line from Kunnamangalam–Mankavu substation portion was commissioned long back in 1947. Part of this feeder is still with stranded copper and some portions with ACSR Tiger & Dog conductors and hence cannot effectively cater to the increasing load requirements of connected substations. The 66kV Substation, Kuttikkattur is an important substation as main source of power to Kozhikode Medical college, KWA Booster station and KWA pump house at Velliparamba and other domestic and industrial consumers. The Cyberpark substation and LILO line to the substation are constructed in 110kV parameters in between Kuttikkattur and Methotuthazham portion of the 66kV line.

Due to the ageing of the line and heavy load conditions, conductor snapping and de-capping are happening frequently causing large number of supply interruptions and load limitations in the connected substations. Hence conversion of the existing 66kV SC line from Nallalam to Kunnamangalam to DC line in 110kV parameters is very much essential.

Considering the above facts, Board had issued Administrative Sanction as per order read as 1st above for the conversion of 15km 66kV Nallalam-Kunnamangalam feeder to 110kV and construction of 110kV feeder bays at 220kV Substation, Nallalam and 110kV Substation, Kunnamangalam substations at an estimate amount of Rs 13.67 Crore.

Out of the above, the upgradation work of Kuttikkattur –Kunnamangalam line (5.6 km) is progressing and is expected to be commissioned during may 2020 with an estimated amount of Rs 6.10 Crore.

For the balance portion (Nallalam–Kuttikkattur) which is passing through densely populated areas of Kozhikode Town, the construction could not be started due to public objections. Hence, in order to limit the tower footing area to the minimum, a revised estimate amounting to Rs 9.70 Crore has been prepared and forwarded by the Chief Engineer (Transmission North) as per letter read as 2nd above based on the latest cost data and with provisions for narrow based special towers. Provision for construction of bays at Nallalam and Kuttikkattur are not included in the estimate as the same is included in other projects.

Thus the total estimate amount for the upgradation of 66kV Nallalam-Kunnamangalam SC feeder to 110kV DC comes to Rs 15.80 Crore instead of approved Rs. 13.67Crore . The hike in the estimate amount is Rs 2.13 Crore (14.8%) .

The matter was placed before the Full Time Directors as per note read as 3rd above seeking sanction.

Having considered the above, the Full Time Directors in the meeting held on 23.04.2020,

Resolved to accord Administrative Sanction for a revised estimate amounting to Rs 15.80 Crore (Rupees Fifteen Crore and Eighty lakh only) for the conversion and upgradation of 66kV Nallalam-Kunnamangalam SC line to 110kV DC under Transmission Circle, Kozhikkode.

Further resolved that the tender shall be issued only during the financial year 2021-22 or afterwards.

Orders are issued accordingly.


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

To

: The Chief Engineer (Transmission North)

Copy to: The Deputy Chief Engineer, Transmission Circle, Kozhikode
The Deputy Chief Engineer(IT)
The Financial Adviser/ The Chief Internal Auditor.
The RAO/ RAO.
The TA to CMD/ 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

Annexure to B.O.(FTD)No.300 /2020/D(T,SO&S)/T3/Nallalam- Kunnamangalam Upgradn/2019-20
dated, Thiruvananthapuram 27.04.2020

KERALSA STATE ELECTRICITY BOARD LIMITED

**Abstract of Estimate for the Conversion of 66kV SC Nallalam -Kunnamangalam feeder
to 110 kV DC Line under Transmission Circle, Kozhikode**

ABSTRACT

	Description of works	Amount in Lakh
1	Estimate for the Conversion of 66kV SC Nallalam -Kuttikatoor to DC Line in 110kV parameters	970.00
2	Estimate for the Conversion of 66kV SC Kuttikatoor -Kunnamangalam to DC Line in 110kV parameters(ON Going Work)	610.00
	Total Amount	1580.00
	Rupees Fifteen Crore and Eighty Lakh only)	

Sd/-

Director (Transmission, System Operation & Safety

Abstract of Estimate for the Conversion of 66kV SC Kuttikatoor-Kunnamangalam to DC Line in 110kV parameters(ON Going Work)

SI no.	Item Description	Quantity	unit	Rate	Total in Lakhs
1	Tower parts including stub and cleat ,all accessories with B&N	167.00	MT	71057	118.67
2	Template for towers	4.000	MT	65186	2.61
3	ACSR Wolf	36	km	94258	33.93
4	Earth wire	6	km	33212	1.99
5	110kV 90KN Polymer Insulator (tension type)	378	set	2533	9.57
6	110kV 70KN Polymer Insulator (suspension type)	21	set	2339	0.49
7	Single suspension hardware fittings for ACSR wolf with arcing horn	21	set	1274.4	0.27
8	Double suspension hardware fittings with for ACSR wolf arcing horn	0	set	2950	0.00
9	Single tension hardware fittings(compression type) for ACSR wolf with arcing horn	330	set	1203.6	3.97
10	Double tension hardware fittings(compression type) for ACSR wolf with arcing horn	60	set	2950	1.77
11	Tension set for 7/3.15mm Earth wire with copper bond	60	set	920.4	0.55
12	Suspension set for 7/3.15mm earth wire with copper bond	3	set	1038.4	0.03
13	Vibration damper for ACSR wolf conductor	336	no.	383.5	1.29
14	Vibration damper for 7/3.15mm earth wire	55	no.	377.6	0.21
15	Preformed armour rod for ACSR wolf	75	no.	548.7	0.41
16	Repair Sleeve for ACSR Wolf	15	no.	182.9	0.03
17	Midspan joint for ACSR Wolf	40	no.	365.8	0.15
18	Midspan joint for 7/3.15mm earth wire	15	no.	123.9	0.02
A	Cost of Material				175.96

B	Labour Charges				
	Civil work for foundation of Towers, line and earth stringing, Tower and line and earth conductor dismantling,		LS	208.00	
	Erection and commissioning @ 7.5% A			13.20	
	Transportation, Insurance and Contingencies @ 6% A			10.56	
	Survey		LS	1.50	
C	Protective work with BSNL		LS	0.50	
D	Tower foot compensation		LS	25.00	
E	Tree cutting compensation		LS	30.00	
F	Electrical inspectorate fee		LS	0.10	
G	Sub Total B+C+D+E+F			288.85	
H	Total A+G			464.81	
I	Overhead/ Supervision Charges (10% of H)			46.481	
J	Sub Total H+I			511.293	
K	GST @18%on J			92.033	
	Add for Unforeseen			6.67	
	Grand Total			610.00	
Say Rupees Six Crore Ten Lakh only					

Abstract of Estimate for the Conversion of 66kV SC Nallalam -Kuttikatoor line to 110kV DC Line

Sl no.	Item Description	Quantity	unit	Rate	Total in Lakhs
1	Tower parts including stub and cleat ,all accessories with B&N	230.00	MT	94990	218.48
2	Template for towers	8.000	MT	65186	5.21
3	ACSR Wolf	58	km	113430	65.79
4	Earth wire	10	km	34342.72	3.43
5	110kV 90KN Polymer Insulator (tension type)	492	set	2533	12.46
6	110kV 70KN Polymer Insulator (suspension type)	105	set	2339	2.46
7	Single suspension hardware fittings for ACSR wolf with arcing horn	69	set	1186.92	0.82
8	Double suspension hardware fittings with for ACSR wolf arcing horn	18	set	2761.2	0.50
9	Single tension hardware fittings(compression type) for ACSR wolf with arcing horn	204	set	1207.28	2.46
10	Double tension hardware fittings(compression type) for ACSR wolf with arcing horn	144	set	2301	3.31
11	Tension set for 7/3.15mm Earth wire with copper bond	58	set	704.99	0.41
12	Suspension set for 7/3.15mm earth wire with copper bond	12	set	710.83	0.09
13	Vibration damper for ACSR wolf conductor	618	no.	383.5	2.37

14	Vibration damper for 7/3.15mm earth wire	76	no.	377.6	0.29
15	Preformed armour rod for ACSR wolf	87	no.	383.5	0.33
16	Repair Sleeve for ACSR Wolf	40	no.	101.48	0.04
17	Midspan joint for ACSR Wolf	50	no.	276.12	0.14
18	Midspan joint for 7/3.15mm earth wire	50	no.	83.78	0.04
A	Cost of Material				318.63
B	Labour Charges				
	Civil work for foundation of Towers, line and earth stringing, Tower and line and earth conductor dismantling,			LS	300.00
	Erection and commissioning @ 7.5% A				23.90
	Transpotation,Insurance and Contingencies @ 6% A				19.12
	Survey			LS	1.50
C	Protective work with BSNL			LS	0.50
D	Tower foot compensation			LS	60.00
E	Tree cutting compensation			LS	50.00
F	Electrical inspectorate fee			LS	0.10
G	Sub Total B+C+D+E+F				455.12
H	Total A+G				773.75
I	Overhead/ Supervision Charges (10% of H)				77.375
J	Sub Total				851.121
K	GST @18%on (5.21+12.46+2.46+455.12+77.375)				99.472
	Add for Unforeseen				19.406
	Grand Total				970.00
Say Rupees Nine Crore Seventy Lakh only					