KSEBL/DIR/TSO/144/2023-AEE5



/39043/2024

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### KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956) Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram 695 004 CIN: U40100KL2011SGC027424 Web: www.kseb.in Phone :+914712514.576, 9446008884 Email :dtkseb@kseb.in. dtkseb@gmail.com

### ABSTRACT

Providing connectivity at 33kV voltage level to an extent of 12 MVA to M/s LULU Mall, Aakkulam on work deposit basis - Revised Administrative - Sanction accorded - Orders issued.

#### **Corporate Office (SBU-T)**

Dated:06-05-2024

B.O. (FTD) No. 207 / 2024 [D(T&SO)/T2/Lulu/2024-25] TVPM

Read: 1. AS vide B.O. (FTD) No. 803/2017 [D(T&SO)/T1/LULU/2016-17] dated 28.03.2017.
2. Revised AS vide B.O. (FTD) No. 255/2020 [D(T,SO&S)/T1/LULU/2019-20] dated 31.03.2020.

3. Note No. CETS/AE4/D1096/E-9616/LULU/23-24 dated 31.01.2024 of the Chief Engineer (Transmission South).

4. Note No. CETS/AE4/D1096/E-9616/LULU/23-24/1552 dated 21.02.2024 of the Chief Engineer (Transmission South).

5. Note No. D(T,SO&P)/T2/LULU/2023-24 dated 20.03.2024 of the Director (Transmission, System Operation & Planning) (Agenda No.14-05/2024).

#### **ORDER**

Administrative sanction for Rs.2470 Lakh was accorded as per the B.O read as 1 <sup>st</sup> above, for the work of providing 12MVA supply to M/s Lulu Mall, Akkulam, through dual 33kV connectivity, on work deposit basis.

The works involved are

- a. Replacing 5.97km Wolf conductor in existing Pothencode-Kazhakuttom 110kV DC feeder with HTLS conductor on pro-rata basis.
- **b.** 110kV bay extension, installation of 2 Nos. of 16MVA 110/33 kV transformers and providing 33kV take off arrangement at 110kV Substation, Kazhakuttom on work deposit basis.
- c. Laying 7km, 2 runs of 3x400sqmm 33kV UG cable from 110kV Substation, Kazhakuttom to LULU site (under the scope of LULU, supervision charges to be paid to KSEBL).

M/s. LULU remitted Rs.784.41 Lakh on 02.05.2017 towards the work deposit amount. During the course of work, the proposal for construction of outdoor 33kV yard at Kazhakuttom substation was dropped, foreseeing the possibility of hindrance to the transportation of transformers in and out of the substation at times of repairs/maintenance in future and also due to space constraints for the erection of 33kV outdoor panel in the yard. Hence, it was proposed to provide 33kV indoor 5-panel switchboard inside the newly extended control room at Kazhakuttom Substation.

Based on this scheme change, the estimate was revised and revised Administrative Sanction for Rs.2520 Lakh was accorded as per the B.O read as  $2^{nd}$  above.

Even though KSEBL tendered for procurement of 33kV indoor panel set, the tender was cancelled due to lack of bidders with sufficient experience. Since the panel was urgently required for completion of the project and since the expenditure for procurement of panel has to be met by M/s.LULU, they agreed to procure the panel themselves, conforming to the technical specifications and Guaranteed Technical Particulars of KSEBL.

The Chief Engineer (Transmission South), as per note read as 4 <sup>th</sup> above, reported that the work is completed and the transformers / feeders to LULU Mall were energised on 25.09.2021. Revised estimate and actual expenditure statement is prepared based on actual invoices, cost data and sanctioned estimate. The actual expenditure Statement and the abstract estimate are attached as Annexure I & II.

The final expenditure incurred for the work is Rs.3092 Lakh and the same exceeds the revised sanctioned estimate amount of Rs.2520 Lakh by 22.7%. Out of the total expenditure of Rs.3092 Lakh, the balance amount to be remitted by M/s.LULU, after deducting the work deposit amount already remitted by them is Rs.3,25,82,027/-

The Chief Engineer (Transmission South) requested sanction for the revised estimate of Rs.3092 Lakh so that the expenditure statement can be issued to M/s.LULU for remitting the balance amount of Rs.3,25,82,027/- for settling the accounts.

The matter was circulated among the Full Time Directors as per note read as 5<sup>th</sup> above for sanction.

Having considered the matter in detail, the Full Time Directors resolved to accord revised Administrative Sanction for Rs. 30.92 Crore (Rupees Thirty Crore Ninety Two Lakh only) for the work of providing power supply at 33kV voltage level to an extent of 12MVA to M/s LULU Mall, Aakkulam on work deposit basis.

Further resolved to authorise the Deputy Chief Engineer, Transmission Circle, Thiruvananthapuram to issue demand notice to M/s. LULU Mall, Aakkulam for remitting the balance work deposit amount of Rs.3,25,82,027/- (Rupees Three Crore Twenty Five Lakh Eighty Two Thousand and Twenty Seven Only) in respect of the subject work.

Orders are issued accordingly.

By Order of the Full Time Directors

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LEKHA G COMPANY SECRETARY

To:

The Chief Engineer (Transmission South)

KSEBL/DIR/TSO/144/2023-AEE5

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#### Copy to:

The Company Secretary / Chief Engineer (IT,CR&CAPS) / Financial Advisor / LA&DEO / Chief Internal Auditor / Chief Vigilance Officer

The Deputy Chief Engineer, Transmission Circle, Thiruvananthapuram

The TA to the Chairman & Managing Director / Director (Generation-Civil) / Director

(Distribution, Safety, SCM & IT) / Director (Transmission, SO & Planning) / Director (Generation -

Electrical, REES, SOURA, Sports & Welfare)

The PA to the Director (Finance & HRM)

The Sr.CA to the Secretary (Administration)

The RCAO/ RAO

Stock File.

Forwarded / By Order

Assistant Executive Engineer

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<b>~</b>	Expenditure State	ment - Al	NNEXURE	5 I	
	Annexure I to B.O.(FTD)No207/2024[D(T&SO	)/T2/Lu	lu/2024-2	5]TVPM dated 06.0	5.2024
	EXPENDITUR	E STATE	MENT		
Name Akkul	e of work:- Providing dual supply at 33 kV volta am on work deposit basis by installing 2 x 16 I Kazhak	MVA, 1	.10/33 k	extent of 12 MVA V Transformers at	to M/s. LULU Mall, 110 kV Substation,
<u>(A)</u>	Prorata of the work of Replacing the WO Pothencode-Kazhakuttom DC feeders (1PCI co	LF conc (Z #1 & onducto	. #2) witl	the existing 5.97 l h High Temperatur	km long 110 kV re Low Sag (HTLS)
	Part	A - Mat	erials		
	Material Part	A (i) (i	ncluding	(GST)	
				Actual exper	nditure
Sl. No.	Particulars	Unit	Quanti ty	Rate, Rs.	Amount, Rs.
	HTLS conductor	km	36.536	922496.47	33704331.03
2	HTLS Conductor (for jumpering and sag-2 %)	km			
	Total (PART A(i	)			33704331.00
	Part A(ii)- Mater	ials ( ra	, ate with	out GST)	
	Single tension hardware fittings + clamps suitable for 120KN insulator (15 Nos of tension towers + gantries at both substation ends less 6 spans with double tension hardware fittings and including spares)		165	57400.00	9471000.00
4	Double tension hardware fittings suitable for 120KN insulator (6 spans including spares)	set	31	61000.00	1891000.00
5	Single suspension hardware fittings suitable for 90KN insulator (12 nos suspension towers including spares)	set	67	6560.00	439520.00
6	Vibration Dampers	set	349	6455.00	2252795.00
	Midspan joints	Nos.	10	66715.00	667150.00
	Repair sleeve	Nos.	12	2603.00	31236.00
	Preformed Armoured Rod Polymer long rod insulator for tension (165	Nos.	73	2041.00	148993.00
10	single tension+40 double tension)	set	226	5425.00	1226050.00
	Polymer long rod insulator for suspension (75 single suspension)	set	95	4920.00	467400.00
12	Tee Tap with connector	set	25	9985.00	249625.00
	Connector for T Clamp with hole	set	26	7241.00	188266.00
14	Connector for T Clamp without hole	set	26	7241.00	188266.00
15	GI Strip	kg	57.12	76.34	4360.37
16	ACSR Kundah Conductor	km	0.15	212823.00	31923.45
17	110kV Current Transformer(800/400/200/100/1-1-1-1-1A)	Nos.	12	163071.00	1956852.00
18	110kV 1200 A triple pole double break gang operated Bus Isolator with structure	Set	4	224589.00	898356.00

	Expenditure Statement - ANNEXURE		30440300 0
	Total C Transportation and insurance (6% Material Cos	ost of Materials	<b>20112792.8</b> 1206767.5
	Total	<u>,</u>	21319560.3
	GST18%		3837520.8
	Part A (ii) Total		25157081.2
	Part A Material Cost = PartA(i) + Part(ii) A	<u>а. а.</u> е с с е	58861412.2
·	Part B - Labour (amount including	g 18%GST)	•
1	Payment towards Sterlite Power Transmission Ltd for re-cond km of 110 kV Pothencode-Kazhakuttom double circuit feeder conductor and 7/9 earth wire OPGW under work deposit sche	with HTLS	32177416.0
2	Dismantling 6 nos of old 110 kV CTs and erecting new 110 kV Pothencode-Kazhakuttom feeder bay at 220 kV Substation, Po		37380.0
3	Replacing 110kV 800 A Bus Isolators of BUS A and Bus B with 3 Bus Isolators of Pothencode Kazhakuttom feeder No:1 (1PCKZ No:2 (1PCKZ #1) at 110 kV Substation, Kazhakuttom	110kV 1200A #1) and feeder	141299.0
4	Dismantling 6 Nos of old 110kV CTs and Erecting New 110kV Pothencode -Kazhakkuttom No. 1 & No. 2 Bay at 110 kV Subs Kazhakuttom in connection with HTLS work.	CTs on tation,	73362.0
	Total Labour -B-		32429457.0
	Abstract of (A)		
	Cost of materials	A	58861412.2
	Cost of Labour	В	32429457.0
	Sub total	C = A + B	91290869.2
	Supervision Charges	D = 10% of C	9129086.9
-	Total for PART A	E =C +D	100419956.18
	GST 18%		
-	Total(A)	H = F + G	10,04,19,956.00
A	Prorata amount to be remitted by M/s. LULU to KSEBL	1,06,50,601.00	
<u>(B)</u>	110 kV Bay Extension, installation of 2 Nos of 16MVA, 110/ 3 arrangement at 110kV Substation, Kazhakuttom	3 kV Transforme	rs and 33kV take of
	Labour		
	Part I (a) - Civil Works (Including	18%GST)	······

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·	Expenditure Statement - ANNEXONE 1	
1	Construction of equipment / structure foundation, cable trench, laying earth mat	3864145.00
2	Site levelling, construction of dwarf wall, yard metalling, chain link fencing	3333761.00
3	Construction of Water Bound Macadam road	412812.00
· 4	Construction of base and surface course of existing WBM Mac road	874165.00
5	Control Room Extension Total : Rs. 1,83,63,066/- for 5866.46 sq ft. (= Rs. 3120 per sq. ft.) Expenditure for Lulu control room (area : 2419.08 sq. ft.)	7572151.81
	Part I (b) - Other Civil and Electrical Works (Including 18%GST)	
1	Lifting and placing of 33kV Panel set to the control room	11000.00
2	Additional works for 33kV takeoff - removing and relaying of gravel in transformer yard and mini yard, erection of NCTs with support, Earth srtip laying, Erection of CT, Erection of LA with structure, Fabrication of stand for power cable support	163652.00
3	Control wiring for 2 Nos of Transformer bay	220113.00
4	Structure and Equipment Erection for the installation of 2 Nos of 16 MVA, 110/ 33 kV Transformers	318926.00
5	Construction of foundation for 2 Nos of Marshalling boxes for 2 Nos of new transformer bay	14082.00
6	Installation and commissioning of LED luminaries and ceiling fans at 33 kV Control room	14784.00
7	Loading of Power cable from the work site of M/s.Lulu Mall Akkulam to Department lorry and Unloading of Power cable from the Department lorry	5900.00
8	Erection of LT panel	8095.00
9	Erection, hot oil circulation of 1 No, 16 MVA, 110/ 33 kV TELK Transformer	98885.00
10	Loading of control cables from Transmission Store, Angamaly to Department lorry	2100.00
11	Fabrication and supply of 1 No LT Panel for providing LT connections to 110kV bay equipments, panels in the new control room	394000.00
12	Assembling and hot oil circulation of 2 <sup>nd</sup> 16 MVA, 110/ 33 kV ATLANTA Transformer	78013.00
13	33KV cable laying and take - off arrangements	436713.00
14	Additional civil work for modification of Foundation for 33kV five panel set	110832.00
15	Erection of 33kV five panel set, 110 kV Transformer C & R panels and RTCC panels	185394.00
16	Erection of Battery and Battery charger (done departmentally)	
17	Supplying and fixing cable tray at top of the 33kV panels for fixing the control cable	18259.00
18	Caution Board for 110kV and 33kV LULU yard	13120.00
19	Royalty of earth for the construction of WBM road for M/s. Lulu Mall at 110 kV Substation, Kazhakuttom	22440.00
20	Control room electrical wiring	273083.00
21	Advertisement charges (e tender ID : 2021_KSEB_431829_1) for the work of construction of base and surface courses of existing WBM MAC road	7308.00
22	Electrical Inspectorate -Inspection fee for TRFR No.1 bay and 33kV Miniyard and five panel set.	64675.00
23	Electrical Inspectorate - Inspection fee for Trfr No. 2 Bay	45050.00
24	Electrical Inspectorate - Inspection fee for 7km 33 kV UG cable	700.00
25	Collecting tower parts and stacking the same	6221.00
26	Collecting and stacking angle iron, conductor, supporting structure, GI earth wire at Kazhakuttom substation	6199.00
27	Erection of yard lights	382677.00

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	Total La	bour	Part I(a	a) + Part I (b)	18959255.81		
Materials							
	Part II a - Materials pro	cured					
Sl. No.	Particulars	Unit	Quanti ty	Kate, Ks.	Amount, Rs.		
SI. No.	Particulars	Unit	Quanti	Actual exper			
			ty	Kate, KS.	Amount, Rs.		
	Power Transformer 16MVA, 110kV/33kV	Nos	2	11877625.00	23755250.00		
	110/33kV transformer Control and Relay Panel	Nos	2	535554.00	1071108.00		
3	110kV Neutral CT 400/200/100/1A	Nos	0	23116.00	0.00		
4	33kV Neutral CT(HV side)	Nos	2	18405.00	36810.00		
	110kV Current Transformer(400/200/100/1-1- 1-1-1A)	Nos	6	162724.00	976344.00		
6	110kV Circuit Breaker(SF6) with structure	Set	2	567698.00	1135396.00		
7	110kV Lightning Arrestor with structure	Nos	6	38197.00	229182.00		
8	110kV 800 A triple pole double break gang operated Bus Isolator without structure	Set	4	182223.00	728892.00		
9	33kV Lightning Arrestor without structure	Nos	6	11834.00	71004.00		
10	33kV Line Isolator with Structure	Set	2	96359.00	192718.00		
11	120kN Disc insulator(24 x 8 + 12 x 4)	Nos	192	640.00	122880.00		
12	33kV Pin Insulator with Pin	Nos	0	900.00	0.00		
13	Marshalling Box	Nos	2		75000.00		
14	Kundah Conductor for Bus arrangement	km	0.713	212823.00	151742.80		
	Fabricated structure including columns, ISMB,ISMC,beams etc	MT	19.18	78181.00	1499511.58		
16	B&N of different sizes	LS			50000.00		
17	Hardware fittings with single tension string for Kundah with AAH bolt type, clamps for 120kN disc	LS			225000.00		
18	MS rod 32mm	MT	4.58	47926.58	219503.74		
19	GI Strip	MT	15.989	76337.00	1220521.76		
20	Control Cable 19C x 2.5mm <sup>2</sup>	km	0.99	407077.00	403006.23		
21	Control Cable 12C x 2.5mm <sup>2</sup>	km	0.427	269826.00	115215.70		
22	Control Cable 7C x 2.5mm <sup>2</sup>	km	0.373	175447.00	65441.73		
23	Control Cable 2C x 2.5mm <sup>2</sup>	km	0.3	68839.00	20651.70		
24	Control Cable 4C x 4mm <sup>2</sup>	km	0.831	161070.00	133849.17		

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·	Expenditure State	ment - A	7 <u> </u>		
25	Control Cable 2C x 4mm <sup>2</sup>	· km	0.75	95233.00	71424.75
26	7/3.15mm Earth wire	km	0.358	33212.00	11889.90
27	Fire fighting equipments	LS			150000.00
28	Control Cable 4C x 2.5mm <sup>2</sup>	km	0.642	119191.80	76521.14
29	Control Cable 12C x 4mm <sup>2</sup>	km	0.349	427410.75	149166.35
30	Insulation mat for 33 kV 5 panel set				23010.00
31	Al lugs 500 sqmm & 240 sqmm				7776.00
32	Bed Plates and Shim plates			·	10000.00
33	Cable glands, ferrule, terminal connectors, cable lugs, HRC Fuse, Nut & Bolt and PVC Sleeve				15200.00
34	Pipes, Tees, bends and End caps of various sizes				19800.00
35	Surge Arrestor 33kV 10kA Class 2 - 12nos (Polymer type)				134520.00
36	Supply of LED Luminaires and fans for the new control room building				189675.00
37	3 x 400 sq mm, 33kV end terminations kits : 08 Nos				149860.00
38	T calmp and Isolator clamps				38940.00
39	Yard Lights and Poles				375901.00
40	Battery Charger 30A				115876.00
41	Tubular Lead Acid Battery 200 Ah	Set	1		278784.00
	J		Tot	al - Part II (a)	34317372.54
	Transportation, Insurance and Conting	encies	6% of	Part IIa	2059042.35
		Total			36376414.89
	GST 18%				6547754.68
	Total Part II(a) cost of M	aterial	A		42924169.57
		<u> </u>			
	Abstract	of <u>(B)</u> (	(i) 		42924169.57
	Cost of materials, Part II (a) Cost of Labour, Part I(a) + Part I (b)			A B	18959255.81
		S	ub total	C = A + B	61883425.38
	Supervision Charges			D = 10% of C	6188342.54
			Total	E =C +D	68071767.92
	Fee for Relay testing			F	568466.00
	Fee for Power Equipment testing			G	430540.0

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Expenditure Statement -	ANNEXURE I
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	Total for B(i)			H = E + F + G	69070773.92
-	Part III Land		;		
	Cost of Land utilised, Part III		-	D	7024500.00
	10% Stamp Duty & regis	tration	Charge		7,02,450.00
	Total for PART III				77,26,950.00
	Part II (b) - Materials procur	ed by N	1/s. Lulı	(Including 18%G	5T)
SI. No.	Particulars	Unit	Quanti ty	Rate, Rs.	Amount, Rs.
				Actual expe	nditure
SI. No.	Particulars	Unit	Quanti ty	Rate, Rs.	Amount, Rs.
1	33kV indoor switch gear panel	Nos	1	6967221.50	69,67,221.50
2	33kV 3 x 400 sq mm cable	km	0.553	2093839.20	11,57,893.08
	Total - Part II (b)		•		81,25,114.58
	Abstract	of <u>(B)</u> (	ii)		
	De stievlers	11		Actual expe	nditure
SI. No.	Particulars	Unit	Quanti ty	nti Rate, Rs. A	Amount, Rs.
	Cost of materials, Part II (b)	·	·	A	81,25,114.58
		S	ub total	-	81,25,114.58
	Supervision Charges				8,12,511.46
			Total	D = B+C	89,37,626.04
	Total for B(ii)			E = D	89,37,626.00
	Supervision Charges			F	8,12,511.46
	Total Supervision charges to be borne by M/s.	Lulu		C = 10% of B	8,12,511.46
В	Total amount to be to be remitted by M/ B(i) + Supervision charge of B(ii))	s. LUL	U to KS	EBL (Total	6,98,83,285.38
<u>(C)</u>	Laying 7 km 33kV 3 x 400 Sqmm UG Cable fro	om 110 site	kV Subs	tation, Kazhakutto	om to the proposed
	Labo	our	<b></b>		
1	Surveying, investigation, making trial pit prepa cable through HDPE pipe, end termination etc. termination kit, straight joint and cable route r ID tags and other sundry items)	(includ	ing cost	ofend	3,38,84,865.00
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4	Expenditure State	ment - Al	NEXURE	1	
	Mate	erials •			
	enditure				
51. 140.	Particulars	Unit	Quanti ty	Rate, Rs.	Amount, Rs.
1	33 kV 3 x 400 sq mm cable	km	13.9	1674000.00	2,32,68,600.00
2	Optical Fibre Cable	km	7	110000.00	7,70,000.00
	33 kV 3 x 400 sq mm outdoor end termination kit	set			-
4	33 kV 3 x 400 sq mm straight joint kit	กอร	inclu	ded in labour	-
5	Cable route marker, nylon cable ties, cable ID tags and other sundry items	LS		portion	-
	Total Cost of Materia	ais (A)	ı		2,40,38,600.00
	۶ Ab:	stract o	of C		
	Cost of materials			A	2,40,38,600.00
	Cost of Labour			В	3,38,84,865.00
	Transportation, Insurance and Contingencies			C = 6% of A	14,42,316.00
		S	ub total	D = A + B + C	5,93,65,781.00
	Supervision Charges			E = 10% of D	59,36,578.10
	Total F = [				6,53,02,359.10
	GST 18%			G = 18% of F	1,17,54,424.64
	Total for C			H = F + G	7,70,56,784.00
·	Supervision Charges			E	59,36,578.10
	GST 18%			J = 18% of E	10,68,584.06
	Total Supervision charges to be borne by	M/s.	נטנט	K = E+J	70,05,162.16
	AMOUNT TO BE REMITTE	DBY	M/S.LL	JLU TO KSEBL	
A	Prorata of the work of Replacing the WOLF cor long 110 kV Pothencode-Kazhakuttom DC feed Temperature Low Sag (HTLS) conductor	nductor lers (1P	in the e CKZ #1 {	existing 5.97 km & #2) with High	1,06,50,601.00
	110 kV Bay Extension, installation of 2 Nos of 16MVA, 110/33 kV Transformers and 33kV take off arrangement at 110kV Substation, Kazhakuttom				6,98,83,285.38
с	Supervision Charges for Laying 7 km 33kV 3 x 4 110kV Substation, Kazhakuttom to the propose	400 Sqi ed site	nm UG (	Cable from	70,05,162.16
D	Total				8,75,39,048.54
E	GST @ 18% (D*1	8%)			1,57,57,028.74

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Cost of Land	77,26,950.00
 Grand Total	11,10,23,027.27
Amount remitted by M/s.LULU	7,84,41,000.00
Balance to be remitted by M/s. LULU	3,25,82,027.00

Sd/

Director (T,SO & S)

Forwarded by Order

Assistant Executive Engineer

# Annexure II to B.O.(FTD)No207/2024[D(T&SO)/T2/Lulu/2024-25]TVPM dated 06.05.2024

	KERALA STATE ELECTRICITY BOARD LIMITED					
	Estimate for providing dual power supply at 33 kV voltage level to an extent of 12 MVA to M/s LULU Mall					
	ABSTRACT					
SI No	Description	Amount in Lakhs.				
A	Replacing the WOLF conductor in the existing 5.97 km long 110 kV Pothencode- Kazhakuttom DC feeders with High Temperature Low Sag (HTLS) conductor	1004.20				
в	110kV Bay Extension, installation of 2 Nos of 16 MVA, 110/33 kV Transformers and 33KV take off arrangement at 110kV Substation, Kazhakuttom	780.08				
с	Laying 7 Km, 2 run 3 X 400 Sqmm UG Cable from 110 kV Substation, Kazhakuttom to the M/s LULU's site	770.57				
	Total	2554.85				
	GST@18%	459.87				
	- Cost of Land	77.27				
	Grand Total	3091.99				
	(Rupees Thirty Cro	re Ninety Two Lakh Only)				

Sd/

Director (T,SO & S)

Forwarded by Order

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Assistant Executive Engineer