

# Cost Data Book FY 2022-23



Prepared by:

**FEEDBACK INFRA**  
Making Infrastructure Happen

# FROM THE DESK OF MANAGING DIRECTOR



**Shri Avinash Kumar, I.A.S**  
**Managing Director**  
Jharkhand Bijli Vitran Nigam Limited

JBVNL (Jharkhand Bijli Vitran Nigam Limited) is the largest Distribution Company of Jharkhand State. The company is currently serving approx. 5.16 million consumers and has a peak load of around 2,400 MW. JBVNL is also dedicated to improve the living standard of its citizen, and to support economic growth by providing 24x7 Power for All in Jharkhand.

The Electricity Department of Jharkhand has prepared plans to strengthen distribution system and enhance the quality of power supply to Consumers. JBVNL has taken several initiatives like implementation of ERP & SCADA, online capex monitoring application, SMS based burnt DT reporting, android-based mobile application (eZy-bZly), facilitating bill payment, new connections, lodging complaints, integrated Geographical Information System (GIS), Saral-Samiksha (online project monitoring tool), Suvidha portal, Sashakt (24x7 toll free helpline), Urja Mitra, etc.

JBVNL is thus, committed towards the said goal and in this context, in Consultation with M/s FEEDBACK INFRA, has developed the Schedule of Rates (SoR)/ Cost Data Book 2022-23 to assist the officials in timely, fair and fast acquisition of items for Capital Works under the jurisdiction of JBVNL.



# PREAMBLE

In the electricity distribution business, it is crucial to have a comprehensive and updated cost data book (CDB) that provides information on the cost of various electrical equipment. This book is essential for engineers, contractors, and purchasing vendors who need to make informed decisions about equipment costs. The cost data book should include information on prices, lead times, and availability of different types of electrical equipment. This information is used to estimate project costs, negotiate contracts, and make purchasing decisions.

The CDB includes the prices of labour, materials, equipment, and other miscellaneous items required for a project. It is updated regularly to reflect changes in the market, technology, and inflation.

Formation of Committee for the preparation of Cost data book for FY 2022-23:

A standing committee was constituted vide Officer Order No. 290 dated 29.03.2022 consisting of following officer for the preparation of Cost Data Book for FY 2022-23:

1. Executive Director (Projects), JBVNL, Ranchi - Chairman
2. General Manager (S&P), JBVNL, Ranchi - Member
3. General Manager (IA&FM), JBVNL, Ranchi - Member
4. General Manager (Comml.), JBVNL, Ranchi - Member  
Representative of Vigilance Department
5. General Manager,ESA, Ranchi - Member  
Member from Area Board
6. Sr. Manager, CRITL, JUSNL, Ranchi - Member  
Independent Member from JUSNL
7. Dy. General Manager (Store & TRW), JBVNL, Ranchi- Convener

M/s Feedback Infra Pvt. Ltd (FIPL) has been consultant to support the committee in the task of preparation of the cost data book. And FIPL has been doing since FY17.

The Cost Data for FY 2022-23 has been approved by the Board of Directors of Jharkhand Bijli Vitran Nigam Ltd. vide BoD Item No. 64-06 dated 13.12.2022.

Attached overleaf is the Board Resolution in this regard.



# झारखण्ड बिजली वितरण निगम लिमिटेड

**JHARKHAND BIJLI VITRAN NIGAM LIMITED**

(CIN: U40108JH2013SGC001702)

Regd. Office: - Engineering Building, H.E.C., Dhurwa, Ranchi - 834004.

Telephone: - 0651-2400760 & Fax: 0651-2446055

**EXTRACT OF MINUTES OF 64<sup>TH</sup> (SIXTY-FORTH) MEETING OF THE BOARD OF DIRECTORS OF JHARKHAND BIJLI VITRAN NIGAM LIMITED HELD ON TUESDAY 13<sup>TH</sup> DAY OF DECEMBER, 2022 AT 03.30 P.M. AT REGISTERED OFFICE OF THE COMPANY SITUATED AT ENGINEERING BUILDING, H.E.C., DHURWA, RANCHI - 834004.**

**ITEM NO. 64-06:**

**Proposal for approval on material and labour rates cost data book 2022-23 of JBVNL as recommended by the JBVNL's cost data committee report dated 30/11/2022.**

Salient features of the Agenda note were briefed before the Board thereafter; the Board of Directors after deliberation considered the following proposals:

To accord approval of rates of different materials and labour as recommended by Cost Data Committee for the JBVNL cost data book 2022-23.

**“The Board of Directors after deliberations unanimously approved the agenda/proposal.”**

**Certified to be True Copy**

Date: 04.01.2023

Place: Ranchi

For Jharkhand Bijli Vitran Nigam Limited

*Nimesh Anand*

(Nimesh Anand)  
Company Secretary  
JBVNL



## APPROACH AND METHODOLOGY:

In order to arrive at the rates for the items in the cost data book, the following methodology was adopted:

- Material list from Cost data Book 2018-19 having 730 total number of items, which was updated in 2022-23 to 1159 items in the BoD meeting was taken as reference.
- JBVNL Head Office latest procurement rates, wherever available are preferred to any prevalent purchase item rates and are hence updated in the Cost Data Book 2022-23. Rates of Total 37 Nos. Materials have been updated as per the latest P.O. issued.
- After evaluation of existing material list (approved by BoD for 2021-22) with that of other states, rates of total 57 Nos. of Materials have been updated.
- As per the requirement of JBVNL and latest procurement, few new items have been added, which totals around 6 Nos. Also, 11 Nos. of the Items which was left in the approved list of 2021-22, but was previously included in the Cost Data Book 2018-19 have been re-included and rates have been updated. Also, the rates of Earth work, excavation, filling, Brick flat soling, P.C.C & R.C.C. etc. work have been updated from latest approved rates of Building Construction department. Part B- 2022 (effective from July 2022), notified vide Letter No. 270 dated 29/07/2022 from Department of Cabinet Secretariat and Vigilance, Jharkhand.
- It has been observed that some items are not been use in JBVNL or been updated with the latest technical Specification, have been deleted, which totals around 07 Nos.
- As per the already approved Agenda by BoD in its 57<sup>th</sup> Meeting dated 7/7/2022, the rates of 05 Nos. Materials under LED Lights and related Items and 09 Nos. of Materials under Diesel Generator sets (Three Phase) with AMF Panel will be adopted from the latest SOR of Energy Department.

### *Estimation of Labor/Erection Rates:*

In order to calculate the cost of erection of 33 kV line, 11 kV line, 33/11 kV Power Sub Station, Distribution Sub Stations, LT Line and service connection, labor rate and percentage rise in labor rate as issued by Labor, Planning, Training and Skills Development Department of Government of Jharkhand have been considered. As per the No.2/MW-2071/2010 L & T - 501 Ranchi, dated 13/04/22 (Basic minimum daily wages w.e.f. 1st April 2022), issued by Labour, Planning , Training and Skills Development Department of Government of Jharkhand average 37.70% rise in previous rates. Same has been considered to arrive at labor rates.



### *Labor Rates for difficult areas:*

For difficult/Left wing extremism (LWE) affected areas in the state where regular labour rates are not acceptable due to various difficulties in execution, it is hereby proposed to allow 10% escalation over and above the proposed labour cost, on the approval of respective S.P and D.C office in line with similar provision in JBVNL Cost data book FY 2018-19.

### *Other components:*

- Sundries Charges including nut bolts, paint etc. (in INR) @ 3% of total material cost
- Contingencies Charges (in INR) @ 3% of total material cost
- Store Charges (in INR) @ 3% of total material cost
- Transportation Cost (in INR) @ 4% of total material cost
- T & P Cost (in INR) @ 2% of total material cost
- Overhead Cost (in INR) @ 10% of total material cost

### *Preparation of Estimation for turnkey:*

For calculation of rates for turnkey works, the following methodology has been considered:

An indirect cost component is considered in addition to the direct cost (landed supply cost + labor cost + civil cost) @ 26% (for projects size more than 5 crores) and @ 18% (for projects size less than 5 crores). This component of indirect cost is calculated as explained below:

### *For project size more than 5 Crores following indirect costs are associated:*

- Design/Consultancy @ 1% of landed supply cost of material
- Storage @ 3% of landed supply cost of material
- Transportation & Material handling @ 4% of landed supply cost of material
- T&P @ 2% of landed supply cost of material
- Testing and Commissioning Charges @ 0.5% of landed supply cost of material
- Finance charges for BG's and Securities @ 0.25% of landed supply cost of material
- Project Management Charges @ 2.25% of landed supply cost of material
- Contingencies Charges @ 3% of landed supply cost of material
- Overheard charges @10% of landed supply cost of material

### *For project size less than 5 Crores following indirect costs are associated:*

- Storage @ 3% of landed supply cost of material
- T&P @ 2% of landed supply cost of material
- Contingencies Charges @ 3% of landed supply cost of material
- Overheard charges @10% of landed supply cost of material

**NOTE: The various Schedules designed are for reference purposes only. Original estimates may be prepared as per the site requirement taking the actual unit Material and Labour rates.**



## CONTENTS

Estimation of Labor/Erection Rates: .....	4
Other components: .....	5
Preparation of Estimation for turnkey: .....	5
For project size more than 5 Crores following indirect costs are associated: .....	5
For project size less than 5 Crores following indirect costs are associated: .....	5
1. Material List.....	1
2. Unit rate summary sheet (JBVNL COST DATA BOOK 2022-23) .....	70
3. Single phase Service connection for Load up to 4 kW .....	74
4. Three phase Service connection for Load of 5 to 10 KW .....	75
5. LT Three phase Service connection for Load of 10 to 30 KW .....	76
6. LT Three phase Service connection for Load of 30 to 50 KW .....	77
7. LT Three phase Service connection for Load of 50 to 85 KW .....	78
8. HT Three phase Service connection for Load of 85 to 200 KVA .....	79
9. Single phase Service connection with UG Cable (Flat schemes having 12 flats).....	80
10. LT 1 no. 3 phase U/G Service Connection 5-10 KW.....	81
11. LT 1 no. 3 phase U/G Service Connection 10 to 30 KW.....	82
12. LT 1 no. 3 phase U/G Service Connection 30 KW to 50 KW .....	83
13. LT 1 no. 3 phase U/G Service Connection 50 KW to 85 KW .....	84
14. HT 1 no. 3 phase U/G Service Connection 85 to 200 KVA.....	85
15. Service connection labour .....	87
16. 33 kV labour line.....	89
17. 11kV labour line.....	101
18. 33-11 kV PSS labour.....	112
19. DSS Labour.....	121
20. LT line labour .....	126
21. UG line labour.....	131
22. AB Cable overhead line Labour Cost Analysis .....	139
23. 33 kV DP suspension labour .....	147
24. New 33/11 KV PSS with 2x5 MVA Power T/F with One 33 KV incoming, one 33 KV outgoing and four 11 KV outgoing .....	150
25. New 33/11 KV PSS with 1x10 MVA Power T/F with two 33 KV incoming and Six 11 KV outgoing. ....	153

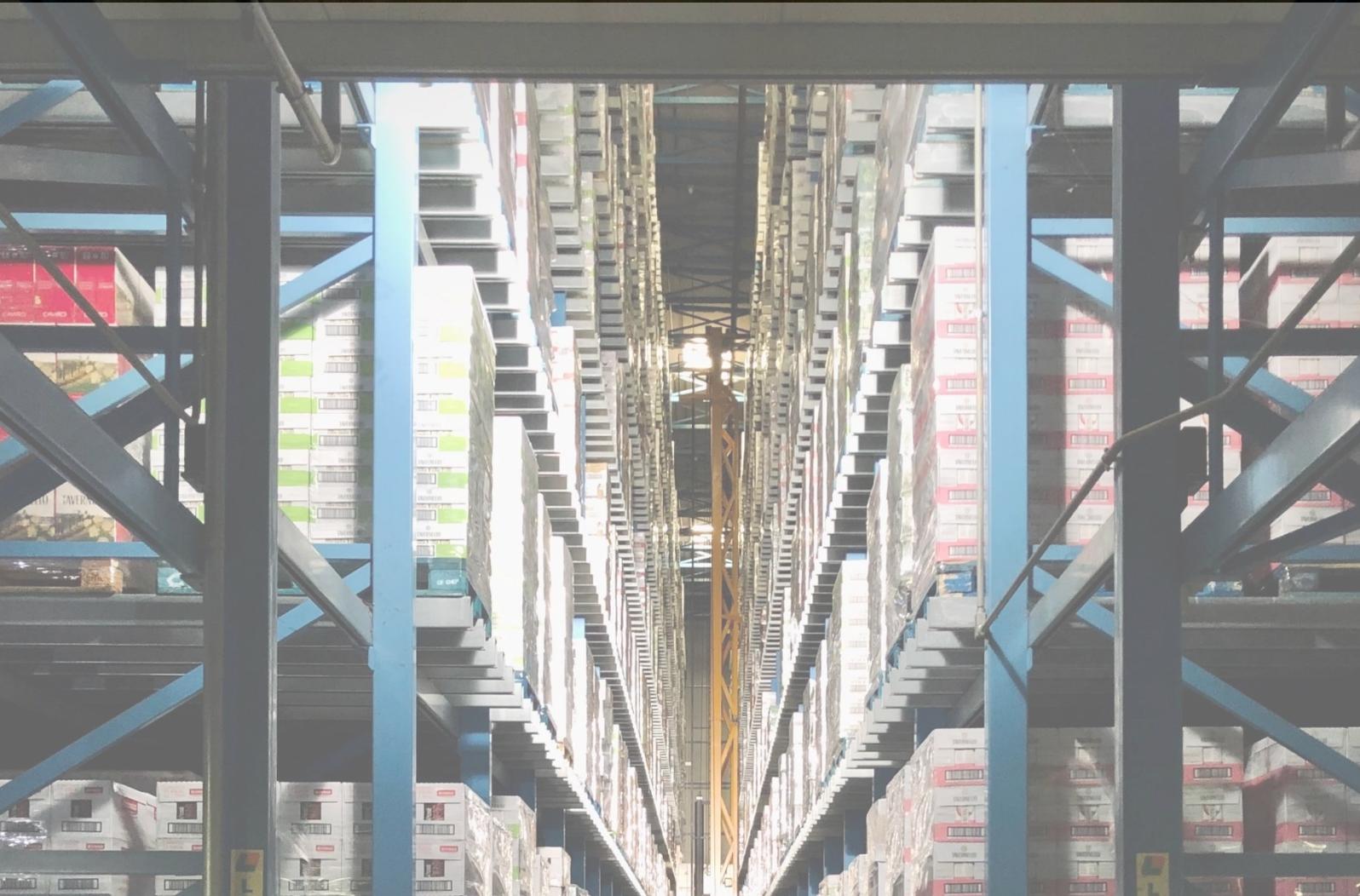


26.	1 KM 33KV Overhead DP Suspension line with 232 sq. mm. Panther Conductor on 13-meter 60kg/mtr Rail pole .....	157
27.	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 232 sq mm (Panther) Conductor With 50 Mtr Average Span with 1 Cut Point DP .....	158
28.	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 150 sq mm (Wolf) Conductor With 50 Mtr Average Span with 1 Cut Point DP .....	160
29.	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP .....	162
30.	1 KM 33kv HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	164
31.	1 KM 33kv HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	165
32.	1 KM 33kv HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	166
33.	1 KM 33kv HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	167
34.	1 KM 33kv HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	168
35.	1 KM 33kv HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	169
36.	1 KM 33kv HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end).....	170
37.	1 KM 33kv HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end).....	171
38.	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center).....	172
39.	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 80 sq mm (Raccoon) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center).....	174
40.	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 50 sq mm (Rabbit) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center).....	176
41.	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 34 sq mm (Weasel) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center).....	178
42.	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx50 sq. mm.+70 sq. mm. bare messenger .....	180
43.	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx95 sq. mm.+80 sq. mm. bare messenger .....	181



44.	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	182
45.	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	183
46.	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	184
47.	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	185
48.	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	186
49.	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end) .....	187
50.	1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end).....	188
51.	1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end).....	189
52.	1 KM LT Line of 34 sq. mm. (Weasel) conductor with 50 Mtr Average span .....	190
53.	1 KM LT Line of 50 sq. mm. (Rabbit) conductor with 50 Mtr Average span .....	191
54.	1 KM LT Overhead Line on 8 mtr PSC Pole LT XLPE AB Cable 3Cx95+1Cx70 sq. mm. ....	192
55.	1 KM LT Overhead Line on 8 mtr PSC Pole LT XLPE AB Cable 3x50+1Cx35 .....	193
56.	11/.433 KV DSS with 25 KVA Distribution Transformer .....	195
57.	11/.433 KV DSS with 63 KVA Distribution Transformer .....	197
58.	11/.433 KV DSS with 100 KVA Distribution Transformer .....	199
59.	11/.433 KV DSS with 200 KVA Distribution Transformer .....	201
60.	11/.433 KV DSS with 315 KVA Distribution Transformer .....	203
61.	11/.433 KV DSS with 500 KVA Distribution Transformer .....	205
62.	Calculation of Labour Cost Escalation .....	208





# **MATERIAL LIST**



1. **Material List**

S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
A	B	C	D	E	F	G
	<b>Line Supports (Poles)</b>					
1	Rail Pole 60 kgs 13 meter	Each	57000	67260.00	79366.80	84747.60
2	Rail Pole 52 Kgs 13 meter	Each	40417.10	47692.18	56276.77	60092.14
3	RS Joist Pole 9.3 meter (175x85mm) 19.6 kgs per mtr	Each	12123.44	14305.66	16880.68	18025.13
4	RS Joist Pole 9 meter (116x100mm) 23 kgs per mtr	Each	13767.57	16245.73	19169.96	20469.62
5	125x70x5 RS GI joist 8Mtr (13.3kg / Mtr)	Each	7076.664	8350.46	9853.55	10521.58
6	125x70x6 RS GI joist 5Mtr (13.3kg / Mtr)	Each	4422.915	5219.04	6158.47	6575.99
7	H Beam Pole 11 meters (152x152mm) 37.1 kgs per mtr	Each	21581.14	25465.75	30049.59	32086.85
8	H-Beams 152 X 152 mm., 37.1 Kg./Mtr.-13 mtr. Long = 482.3 kg	Each	25673.79	30295.08	35748.19	38171.80
9	H-Beams 152 X 152 mm., 37.1 Kg./Mtr.-9 mtr. Long= 333.9 kg	Each	17657.30	20835.61	24586.02	26252.87
10	H-Beams 152 X 152 mm., 37.1 Kg./Mtr.-7 mtr. Long= 259.7 kg	Each	13733.46	16205.48	19122.46	20418.90
11	PSC Pole 400 KG W.L (9 mtr.)	Each	3810	4495.80	5305.04	5664.71
12	PSC Pole 200 KG W.L (8 mtr.)	Each	2231.85	2633.58	3107.62	3318.31
13	Steel Tubular Pole (SP-28 ) of 9 meter	Each	6723.73	7934.00	9362.12	9996.84
14	Steel Tubular Pole (SP-55 ) of 11 meter	Each	11622.03	13714.00	16182.52	17279.64
15	Steel Tubular Pole (SP-72 ) of 13meter	Each	16550.97	19530.15	23045.58	24607.99
	<b>ACSR Conductors</b>					
16	ACSR Panther Conductor (232 sq. mm)	KM	157035.84	185302.29	218656.70	233480.89
17	ACSR Wolf Conductor (150 sq. mm)	KM	141460.16	166922.99	196969.13	210322.97
18	ACSR Dog conductor (100 sq. mm)	KM	88975.7	104991.33	123889.76	132289.07
19	ACSR Racocon conductor (80 sq. mm)	KM	61189.47	72203.57	85200.22	90976.50
20	ACSR Rabbit Conductor (50 mm2)	KM	50650	59767.00	70525.06	75306.42



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
21	ACSR Weasel conductor (34 sq. mm)	KM	26321.94	31059.89	36650.67	39135.46
	<b>Insulators &amp; H/W fittings</b>					
22	33 KV Pin Insulator 10 KN with Pin (Porcelain type)	Each	486.14	573.65	676.91	722.80
23	33 KV Polymer Pin Insulators 10 KN with GI PIN	Each	383.42	452.44	533.88	570.07
24	33 kV B&S type Disc Insulator (Polymer Type) 90 KN with H/W fitting	Set	640.38	755.65	891.67	952.12
25	33 KV B&S type Disc. Insulator (Porcelain Type) 70 KN with H/W fitting	Set	584.91	690.19	814.42	869.64
26	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Set	479.66	566.00	667.88	713.16
27	Suspension Hardware suitable for Panther Conductor	Set	1862.1	2197.28	2592.79	2768.57
28	Tension Hardware suitable for Panther Conductor	Set	855.75	1009.79	1191.55	1272.33
29	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Set	280	330.40	389.87	416.30
30	11 KV Pin Insulator 5KN with Pin (Porcelain Type)	Each	151.23	178.45	210.57	224.85
31	11 KV Pin Insulator 5 KN with Pin (Polymer Type)	Each	125.09	147.61	174.18	185.98
32	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W	Set	450	531.00	626.58	669.06
33	11 KV B&S type Disc Insulator (Porcelain Type) 45 KN with H/W	Set	585.19	690.53	814.83	870.07
34	11 KV B&S type Disc Insulator (Polymer Type) 45 KN with H/W	Set	367.09	433.17	511.14	545.79
35	LT Pin insulator with Pin (Porcelain type)	Each	28.00	33.04	38.99	41.63
36	LT Pin insulator (Porcelain type)	Each	50.86	60.01	70.81	75.62
37	T Pin	Each	47.87	56.48	66.65	71.17
38	LT Shackle insulator (Porcelain type)	Each	39.5	46.61	55.00	58.73
39	LT shackle strip with bolts and nut	Kg	38.00	44.84	52.91	56.50
40	33 KV Post Insulator 10 KN (Polymer)	Set	673.89	795.19	938.32	1001.94
41	11 KV Post Insulator 5 KN (Polymer)	Set	186.72	220.33	259.99	277.62
42	3 KV Stay Insulator	Each	30.99	36.57	43.15	46.08



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
43	11 KV Stay Insulator	Each	57.87	68.29	80.58	86.04
44	LT Stay Insulator	Each	8.47	9.99	11.79	12.59
45	Mid span compression Joints suitable for ACSR Panther conductor	Each	361	425.98	502.66	536.73
46	Repairing Sleeve suitable for ACSR Panther conductor	Each	379	447.22	527.72	563.50
	<b>Isolator</b>					
47	33 KV Post Insulator 10 KN (Polymer)	Set	37963	44796.34	52859.68	56443.39
48	33 KV Isolator 800 Amp ,3 Phase, with out Earth Switch	Set	35645.00	42061.10	49632.10	52996.99
49	33 KV Isolator 630 Amp, 3 Phase, without Earth Switch	Set	21610.17	25500.00	30090.00	32130.00
50	33 KV Isolator 630 Amp, 3 Phase, with Earth Switch	Set	24441.53	28841.00	34032.38	36339.66
51	33 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	23366.0	27571.84	32534.77	34740.52
52	11 KV Isolator 630 Amp, 3 Phase, with Earth Switch	Set	20308.45	23963.97	28277.49	30194.60
53	11 KV Isolator 630 Amp, 3 Phase, without Earth Switch	Set	16884	19923.12	23509.28	25103.13
54	11 KV Isolator 400 Amp, 3 Phase, without Earth Switch	Set	12474.58	14720.00	17369.61	18547.21
55	11 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	13250.2	15635.23	18449.58	19700.39
56	11 KV Isolator 200 Amp Single Phase	Set	9275.42	10945.00	12915.10	13790.70
	<b>AB Switch</b>					
57	33 KV 3 pin type, 3 Phase, AB switch 800 Amp (Porcelain Type)	Set	37963	44796.34	52859.68	56443.39
58	33 KV 3 pin type, 3 Phase, AB switch 630 Amp (Porcelain Type)	Set	36088.00	42583.84	50248.93	53655.64
59	33 KV 3 pin type, 3 Phase, AB switch 630 Amp (Polymer Type)	Set	22299.00	26312.82	31049.13	33154.15
60	11 KV 3 pin type, 3 Phase, AB switch 630 Amp (Porcelain Type)	Set	17725.00	20915.50	24680.29	26353.53



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
61	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Polymer Type)	Set	14185.00	16738.30	19751.19	21090.26
62	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	13250.19	15635.22	18449.56	19700.38
63	11KV 3 pin type, AB Switch 200 Amps (double break)	Set	11092.00	13088.56	15444.50	16491.59
64	12 kV, 3-ph, 200 A, 3 Pin type, Horizontal Mounting type, Gang Operated, AB Switch along with Support Insulators, Base Channel, down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Set	12150.00	14337.00	16917.66	18064.62
65	11 KV 3 pin type, 3 Phase, AB switch 800 Amp (Porcelain Type)	Set	26147.00	30853.46	36407.08	38875.36
	<b>Lightening Arrestor</b>					
66	Lightening Arrestor (9kV 5KA) Line type	Set	843	994.74	1173.79	1253.37
67	11 KV Lightening Arrestor (9 KV, 10 KA Class II, station type)(1set=3nos)	Set	4915.20	5799.94	6843.93	7307.92
68	33 KV Lightening Arrestor (30KV,10KA Class II, station type)(1set=3nos)	Set	10699.50	12625.41	14897.98	15908.02
	<b>Earthing</b>					
69	25mm dia MS rod 3 m long for earth mat	Each	778.05	918.10	1083.36	1156.80
70	Spike Earthing made of 20mm GI solid Rod	Each	498.75	588.53	694.46	741.54
71	30 V 80 AH Battery Charging unit complete with battery and stand	Kg	66.50	78.47	92.59	98.87
72	G.I Earthing Strip Size 35x3 mm	Kg	66.50	78.47	92.59	98.87
73	G.I Earthing Strip Size 35x4 mm	Kg	66.50	78.47	92.59	98.87
74	G.I Earthing Strip Size 40x4 mm	Kg	66.50	78.47	92.59	98.87
75	G.I Earthing Strip Size 40x5 mm	Kg	66.50	78.47	92.59	98.87
76	Insulated GI/Alum.flexible wire 16 sq.mm	Kg	28.00	33.04	38.99	41.63
77	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500	Each	12890	15210.20	17948.04	19164.85



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	mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment					
78	Earthing complete Conventional type having intermittent layer of charcoal and salt <b>Stay set</b>	Each	17346.70	20469.11	24153.55	25791.08
79	GI stay set complete for D/s/s (1900x 16mm) with staywire 7/12 SWG and Guy insulator	Set	895.76	1057.00	1247.26	1331.82
80	GI stay set complete for D/s/s (1900x 20mm) with staywire 7/10 SWG and Guy insulator	Set	1051.02	1240.20	1463.44	1562.65
81	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	887	1046.66	1235.06	1318.79
82	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	978.80	1154.98	1362.88	1455.27
83	LT Stay set complete (1700x16 mm) with stay wire 7/12 SWG	Set	661.02	780.00	920.40	982.80
84	GI Stay Wire No. 7/8, 7/10, 7/12, 7/14, 7/16 <b>P.G.Clamps</b>	Kg	57.00	67.26	79.37	84.75
85	P G clamp for 232/150 sq mm conductor	Each	153.70	181.37	214.02	228.53
86	P G clamp for 80/100mm <sup>2</sup>	Each	28.00	33.04	38.99	41.63
87	P G Clamps for 34/55mm <sup>2</sup>	Each	33.90	40.00	47.20	50.40
88	Bimettalic clamps For Distribution Transformers HT side (25 to 200 KVA)	Each	60.00	70.80	83.54	89.21
89	Bimettalic clamps For Distribution Transformers HT side above (200 KVA)	Each	168.92	199.32	235.20	251.14
90	Bimettalic clamps For Distribution Transformers LT side (25 to 200 KVA)	Each	105.00	123.90	146.20	156.11



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91	Bimettalic clamps For Distribution Transformers LT side above (200 KVA)	Each	197.00	232.46	274.30	292.90
92	Bimettalic clamps For Power Transformer 5 MVA	Each	420.00	495.60	584.81	624.46
93	Bimettalic clamps For Power Transformer 10 MVA	Each	438.00	516.84	609.87	651.22
94	Bimettalic clamps For VCBs for 33KV and 11 KV	Each	317.13	374.22	441.57	471.51
95	Bimettalic clamps For CT PT Unit	Each	332.26	392.07	462.64	494.01
96	P G Clamp 3 bolt for ABT Meters	Each	458.62	541.17	638.58	681.87
<b>Structures, Gantry Columns and Base Plates</b>						
97	Structure for 33kV Lightning Arrestor [Non-Galvanized]	Set	25511.02	30103.00	35521.54	37929.78
98	Structure for 33kV Lightning Arrestor [Galvanized]	Set	31358.02	37002.46	43662.90	46623.10
99	Structure for 33 KV Isolator (MS)	Set	13757.78	16234.18	19156.33	20455.07
100	Structure for 11 KV Isolator (MS)	Set	13757.78	16234.18	19156.33	20455.07
101	Structure for 33 KV Isolator [Galvanized]	Set	15042.25	17749.86	20944.83	22364.82
102	Structure for 11 KV Isolator [Galvanized]	Set	15042.25	17749.86	20944.83	22364.82
103	Structure for 33 KV PT (Non-Galvanised)	Set	25511.01	30102.99	35521.53	37929.77
104	Structure for 33 KV PT [Galvanized]	Set	31358.10	37002.56	43663.02	46623.23
105	Structure for 11 KV PT (Non-Galvanised)	Set	25511.01	30102.99	35521.53	37929.77
106	Structure for 11 KV PT [Galvanized]	Set	37276.09	43985.79	51903.23	55422.10
107	Structure for Post Insulator for 11KV (Galvanised)	Set	3768.35	4446.65	5247.05	5602.78
108	Structure for Post Insulator for 33 KV [Galvanized]	Set	3768.35	4446.65	5247.05	5602.78
109	Structure for 33 KV HG fuse set (Non-Galvanised)	Set	12899.15	15221.00	17960.78	19178.46
110	Structure for 33 KV HG fuse set [Galvanized]	Set	17925.12	21151.64	24958.94	26651.07
111	A swing bus structure	Set	19552.54	23072.00	27224.96	29070.72
112	Gantry Column, Girder structures for 33/11 KV PSS for single Transformer [Galvanized]	Set	43399.36	51211.24	60429.26	64526.16
113	'A' structures for top mounted AB switch on 33 KV Bus [Galvanized]	Set	31358.10	37002.56	43663.02	46623.23
114	'A' structures for top mounted AB switch on 11 KV Bus [Galvanized]	Set	29179.79	34432.15	40629.94	43384.51



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115	'A' Structures for 11 KV Take off with top mounted AB Switch and provision of Lightening Arrester [Galvanized]	Set	31358.10	37002.56	43663.02	46623.23
116	GI Base Plate for 33KV (500x500x10 mm) Avg weight 19.6kg/plate	Each	1333.05	1573.00	1856.14	1981.98
117	Stone Base plate for 11 KV, DSS, LT	Each	188.98	223.00	263.14	280.98
<b>Current and Potential Transformers</b>						
118	33 KV CT Outdoor Oil immersed type, 3 Core, 200-100/5-5-1 Amp, Class 0.5 for differential protection	Each	15371.68	18138.58	21403.52	22854.61
119	33 KV CT Outdoor Oil immersed type, 3 Core, 300-150/5-5-1 Amp, Class 0.5 for differential protection	Each	22183.81	26176.89	30888.73	32982.88
120	33 KV CT 800-400/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	18828.10	22217.16	26216.25	27993.62
121	33 KV CT 400-200/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	19117.84	22559.05	26619.68	28424.40
122	33 KV CT 300-150/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	19819.71	23387.26	27596.96	29467.94
123	33 KV CT 200-100/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	17644.03	20819.96	24567.55	26233.14
124	11 KV CT Outdoor Oil immersed type, 3 Core, 600-300/5-5-1Amp, Class 0.5 for differential protection	Each	11264	13291.52	15683.99	16747.32
125	11 KV CT 800-400/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	16736.08	19748.58	23303.32	24883.21
126	11 KV CT 400-200/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	17999.90	21239.88	25063.06	26762.25
127	11 KV CT 300-150/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	16641.95	19637.50	23172.25	24743.25
128	11 KV CT 200-100/5-5A, 2 Core, 15VA, 5P10 for Protection, 10VA, 0.5 Accuracy for metering	Each	12559.21	14819.87	17487.44	18673.03
129	33/√3/110/√3/110/√3 PT (Core 1:0.5S, Core2:3P)	Set	11148	13155.00	15522.90	16575.30
130	11/√3/110/√3/110/√3 PT (Core 1:0.5S, Core2:3P)	Set	6314	7451.00	8792.18	9388.26
<b>Power Transformer</b>						



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131	33/11 KV Power Transformer 10 MVA Copper Wound, CRGO Core (off load tap changer)	Each	5295000.00	6248100.00	7372758.00	7872606.00
132	33/11 KV Power Transformer 10 MVA Copper Wound, CRGO Core (on load tap changer)	Each	6264000.00	7391520.00	8721993.60	9313315.20
133	33/11 KV Power Transformer 05 MVA Copper Wound, CRGO Core (off load tap changer)	Each	3510000.00	4141800.00	4887324.00	5218668.00
134	33/11 KV Power Transformer 05 MVA Copper Wound, CRGO Core (on load tap changer)	Each	3828000.00	4517040.00	5330107.20	5691470.40
	<b>Distribution Transformer</b>					
135	11/0.433 KV Distribution Transformer 500 KVA, Copper wound, CRGO M4 Core ONAN; BIS Level 1	Each	643972.23	759887.23	896666.93	957457.91
136	11/0.433 KV Distribution Transformer 400 KVA, Copper wound, CRGO M4 Core ONAN; BIS Level 1	Each	479000.00	565220.00	666959.60	712177.20
137	11/0.433 KV Distribution Transformer 315 KVA, Copper wound, CRGO M4 Core ONAN; BIS Level 1	Each	445877.97	526136.00	620840.48	662931.36
138	11/0.433 KV Distribution Transformer 250 KVA, Aluminium wound, CRGO M4 Core ONAN; BIS Level 1	Each	355637.50	419652.25	495189.66	528761.84
139	11/0.433 KV Distribution Transformer 200 KVA, Aluminium Winding, Stack type CRGO Core fitted, Completely Self Protected; 4 star - BEE rating ; BIS Level 1	Each	185101.00	218419.18	257734.63	275208.17
140	BIS Energy Efficiency level-I, 11/0.433 kV 100 kVA, Al. wd., stack type CRGO core, distribution transformer fitted with completely self-protected (CSP)	Each	115320	136077.60	160571.57	171457.78
141	BIS Energy Efficiency level-I, 11/0.433 kV 63 kVA, Al. wd., stack type CRGO core, distribution transformer fitted completely self-protected (CSP)	Each	89250	105315.00	124271.70	132696.90
142	BIS Energy Efficiency level-1 type tested, 11/.433 kV 25 kVA, Al. wd., stack type CRGO core, distribution transformer fitted completely self -protected (CSP)	Each	50880.00	60038.40	70845.31	75648.38



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143	11/0.433 KV, 500 KVA, Dry Type, two winding, 3 phase, Dyn11, 50 Hz, AN, off circuit tap changer with +/-5% in Steps of 2.5%on HV side for station transformer & 4% impedance with losses as per CBIP	Each	762711.86	899999.99	1061999.99	1133999.99
144	Lighting transformer of 415/415V, 50 KVA, Dry type, two winding, 3 phase, Dyn11, 50 HZ with 4% impedance	Each	44068.31	52000.61	61360.72	65520.77
145	Trolley Mounted Substation suitable with 250 kVA 11/0.433 kV, BIS Level-I, Distribution Transformers	Each	1015000	1197700.00	1413286.00	1509102.00
146	11/0.433 kV, 800 kVA Cu. Wd. stack type CRGO core, BIS level -I, distribution transformer	Each	843000	994740.00	1173793.20	1253372.40
<b>Distribution Box</b>						
147	LT Distribution box suitable for 500 KVA transformer (800 A, isolator & 12 TP MCCB of 160 A)	Each	56554.82	66734.69	78746.93	84085.71
148	LT Distribution box suitable for 315 KVA transformer (600 A, isolator & 9 TP MCCB of 160 A)	Each	45337.63	53498.40	63128.11	67407.98
149	LT Distribution box suitable for 200 KVA transformer (400 A, isolator & 6 TP MCCB of 120 A)	Each	34003.37	40123.98	47346.30	50556.21
150	LT Distribution box suitable for 100 KVA transformer (300 A, isolator & 6 TP MCCB of 200 A)	Each	17001.74	20062.05	23673.22	25278.18
151	LTDB for 200KVA, Isolator 400A, incoming MCCB 4P,400A,50KA, Outgoing MCCB 3P 100A,36KA	Each	39474.00	46579.32	54963.60	58689.94
152	LTDB for 100KVA & 63KVA, Isolator 250A, incoming MCCB 4P,200A,36KA, Outgoing MCCB 3P 100A,36KA	Each	24990.00	29488.20	34796.08	37155.13
153	LTDB for 25KVA, Isolator 63A, incoming MCCB 4P,63A,20KA, Outgoing MCCB 3P 32A,20KA	Each	16064.41	18956.00	22368.08	23884.56
154	LT Distribution box suitable for 63 KVA transformer (200 A, isolator & 6 TP MCCB of 100 A)	Each	11926	14072.68	16605.76	17731.58



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155	Spring loaded CP multi conn bus-bar in insulated box Single Phase 1 in 6 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Each	850.00	1003.00	1183.54	1263.78
156	Spring loaded CP multi conn bus-bar in insulated box Single Phase 1 in 9 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Each	970.00	1144.60	1350.63	1442.20
157	Spring loaded CP multi conn bus-bar in insulated box Three Phase 1 in 3 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Each	1055.00	1244.90	1468.98	1568.57
158	Spring loaded CP multi conn bus-bar in insulated box Three Phase 1 in 5 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Each	1573.00	1856.14	2190.25	2338.74
159	Spring loaded CP multi conn bus-bar in insulated box Three Phase 1 in 8 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Each	2621.00	3092.78	3649.48	3896.90
160	Spring loaded distribution Bus Bar insulated Box for fixing on pole suitable for AB XLPE Cable and three phase connection 1 incoming and out going 3 phase connection as per field requirement	Each	1228.58	1449.73	1710.68	1826.66
	<b>VCB, C&amp;R Panel</b>					
161	33 KV VCB, 1250 Amp., Outdoor Type, 26.3 KA for 1 sec rupturing capacity , with CR panel, & C.T. Ratio 1200-600-300/1-1A, 2 Core, 15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. PT 33KV / 110V, Accuracy class 0.5, VA Burden 50VA, with metering system in Panel with numeric Relay annunciator	Set	587700	693486.00	818313.48	873792.36
162	33 KV VCB, 1250 Amp., Outdoor Type, 16 KA for 1 sec rupturing capacity , with CR panel, & C.T. Ratio 600-300/1-1A or 400-200/1-1A, 2 Core, 15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. PT 33KV / 110V, Accuracy class 0.5, VA Burden 50VA,	Set	215978.69	254854.85	300728.73	321117.12



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163	11 KV VCB, Outdoor type, 1250 A, 25 KA for 3 sec. rupturing capacity with C&R Panel. CT 1200-600-300/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 11 KV/110V, Accuracy class 0.5, 30 VA with metering system in Panel	Set	408813.56	482400.00	569232.00	607824.00
164	11 KV VCB, Outdoor type, 630 A, 25 KA for 3 sec. rupturing capacity with C&R Panel. CT 600-300/5-5A or 400-200/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 11 KV/110V, Accuracy class 0.5, 30 VA	Set	326779.84	385600.21	455008.25	485856.26
165	11 KV VCB, Outdoor type, 800 A,for Incoming, 18.4 KA for 1 sec. rupturing capacity with Panel (Indoor) 24 V DC operated with CT 600-300/5-5A or 400-200/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 33KV/110V, Accuracy class 0.5, 30 VA	Set	227354.24	268278.00	316568.04	338030.28
166	11 KV VCB, Outdoor type, 400 A,for outgoing, 18.4 KA for 1 sec. rupturing capacity with Panel (Indoor) 24 V DC operated with CT 600-300/5-5A or 400-200/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 33KV/110V, Accuracy class 0.5, 30 VA	Set	252682.84	298165.75	351835.59	375688.85
167	Indoor type control and relay panel for 33kV, VCB (Feeder Breaker) consisting of A-meter, volt-meter, Relays & accessories complete.	Set	55978.58	66054.72	77944.57	83228.95
168	Indoor type control and relay panel for 33kV, VCB (Transformer Breaker) consisting of A-meter, volt-meter, Relays & accessories complete.	Set	51345.86	60588.11	71493.97	76341.02



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169	Indoor type control and relay panel for 11kV, VCB (Transformer Breaker) consisting of A-meter, volt-meter, Relays & accessories complete.	Set	51345.86	60588.11	71493.97	76341.02
170	Indoor type control and relay panel for 11kV, VCB (Feeder Breaker) consisting of A-meter, volt-meter, Relays & accessories complete.	Set	52761.42	62258.48	73465.01	78445.68
	<b>Distribution Board</b>					
171	415V AC Power Distribution Board	Set	80529.00	95024.22	112128.58	119730.52
172	30V DC Distribution Board	Set	36801.00	43425.18	51241.71	54715.73
	<b>Pipe Connector</b>					
173	Aluminium pipe connector	Each	193.08	227.84	268.85	287.08
174	Connector Pipe to Panther	Each	137.29	162.00	191.16	204.12
175	Connector Panther to Panther	Each	124.58	147.00	173.46	185.22
176	Connector Panther to AB Switch	Each	105.93	125.00	147.50	157.50
177	Connector Pipe to Pipe	Each	145.76	172.00	202.96	216.72
178	Connector Pipe to Dog	Each	150.00	177.00	208.86	223.02
179	Connector Pipe to AB Switch	Each	138.14	163.00	192.34	205.38
180	Connector Dog to AB Switch	Each	106.78	126.00	148.68	158.76
	<b>Copper Control Cable</b>					
181	2.5 mm <sup>2</sup> copper 2 core control cable (Armoured)	Mtr	47.35	55.87	65.93	70.40
182	2.5 mm <sup>2</sup> copper 2 core control cable (Unarmoured)	Mtr	36	42.48	50.13	53.52
183	2.5 mm <sup>2</sup> copper 4 core control cable (Armoured)	Mtr	74.82	88.29	104.18	111.24
184	2.5 mm <sup>2</sup> copper 4 core control cable (Unarmoured)	Mtr	70.49	83.18	98.15	104.80
185	2.5 mm <sup>2</sup> copper 6 core control cable (Armoured)	Mtr	98.4	116.11	137.01	146.30
186	2.5 mm <sup>2</sup> copper 6 core Un-armourd cable	Mtr	108.47	128.00	151.04	161.28
187	7 Core x 2.5 sq.mm. Armoured Control cable	Mtr	146.46	172.82	203.93	217.75
188	2.5 mm <sup>2</sup> copper 8 core control cable (Unarmoured)	Mtr	100.91	119.07	140.51	150.03
189	2.5 mm <sup>2</sup> copper 10 core control cable (Armoured)	Mtr	154.77	182.63	215.50	230.11
190	2.5 mm <sup>2</sup> copper 10 core control cable (Unarmoured)	Mtr	132.06	155.83	183.88	196.35
191	2.5 mm <sup>2</sup> copper 12 core control cable (Armoured)	Mtr	183.03	215.98	254.85	272.13



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192	2.5 mm2 copper 12 core control cable (Unarmoured)	Mtr	142.91	168.63	198.99	212.48
193	19 Core x 2.5 sq.mm. Armoured Control cable	Mtr	376.58	444.37	524.36	559.91
	<b>Capacitor Bank</b>					
194	Fully automatic Capacitor bank with automatic control panel, isolator, indoor type suitable Vacuum Circuit Breaker, mounting structures etc as required as per technical specifications, drawings, scope of the works of following capacities: (Banks in Multiple of 600 KVAR as per Specification)-3600 KVAR	Set	1310535.52	1546431.91	1824789.65	1948504.21
195	1815 kVAR 12.1 kV 3-phase 50 Hz Outdoor type Capacitor bank having step as 363 kvar+726 kvar+726 Kvar 12.1 kv Bank shall be complete with capacitor units of 121 kVAR at 6.98 kV including allied materials such as suitable size of aluminium busbars, pin/pos	Set	182287.09	215098.77	253816.54	271024.45
196	Fully automatic Capacitor bank with automatic control panel, isolator, indoor type suitable Vacuum Circuit Breaker, mounting structures etc as required as per technical specifications, drawings, scope of the works of following capacities: (Banks in Multiple of 600 KVAR as per Specification)-1200 KVAR	Set	748964.00	883777.52	1042857.47	1113559.68
197	1089 kVAR 12.1 kV 3-phase 50 Hz Outdoor type Capacitor bank having step as 363	Set	123614.31	145864.89	172120.57	183789.76
	<b>Metering Equipment</b>					
198	33 KV Metering Cubicle with PT & CT ,0.5s accuracy class for CT and 0.5S accuracy class for PT of different capacity	Set	230100.00	271518.00	320391.24	342112.68



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199	33 kV outdoor type oil immersed CT-PT combined metering Unit 0.5s accuracy class for CT and 0.5S accuracy class for PT of different capacity	Set	57900.00	68322.00	80619.96	86085.72
200	33 KV, Three phase three wire/Three Phase Four Wire, Accuracy class 0.2s, DLMS Compliant ABT Meter ( Modular rack-mounted ) of different capacity	Each	139804	164968.72	194663.09	207860.59
201	33 KV, Three phase three wire/Three Phase Four Wire, Accuracy class 0.2s, DLMS Compliant ABT Meter (projection type ) of different capacity	Each	139804.33	164969.11	194663.55	207861.08
202	33 kV/ 110 V, Three Phase Four Wire,(0.2s accuracy class for CT and 0.2 accuracy class for PT), ratio-1600/1A or 1200/1A CT-PT combined Metering Unit for Feeder	Each	278430.00	328547.40	387685.93	413969.72
203	Metering Panel, Data Concentrator Unit (DCU) with Modem	Set	518307	611602.26	721690.67	770618.85
204	Structure for 33 kV Metering Unit	Set	21435	25293.30	29846.09	31869.56
205	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Set	12501	14751.18	17406.39	18586.49
206	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.5S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	13671.17	16131.98	19035.74	20326.30
207	Trivector Energy Meter of 800/5 Amp	Each	9402	11094.36	13091.34	13978.89
208	Trivector Energy Meter of 400/5 Amp	Each	9402	11094.36	13091.34	13978.89
209	11 KV, Outdoor type oil immersed CT-PT combined metering unit, 3 phase 4 wire (11kV/110V) [12 KV PT 50VA Burden 0.5S Accuracy class; CT 20/5A, 30/5A, 60/5A, 100/5A, 200/5A, 400/5A, 15 VA, 0.5 accuracy class]	Set	25800.00	30444.00	35923.92	38359.44



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
210	11 KV Metering Cubicle with PT ratio 11KV/√3/110V and CT ratio 20/5A, 30/5A, 60/5A, 100/5A, 200/5A, 400/5A, 0.5 accuracy class for both	Set	60761.38	71698.43	84604.15	90340.02
211	LTCT Electronic Meter (200/150/100/5) 3 Phase 4 Wire with meter box, Class 0.5s accuracy	Each	13482	15908.76	18772.34	20045.04
212	AC 3 Phase, 4 Wire, 40-200Amp LT Electronic Trivector accuracy class 1.0 DLMS Compliant Category A Meter with inbuilt CT's and inbuilt GSM/GPRS modem for DI rating upto 100 KVA	Each	10932	12899.76	15221.72	16253.70
213	Structure for D.T Meter	Set	2526	2980.68	3517.20	3755.66
214	AC 3 Phase DTR Meter complete set above 100KVA 400/5A	Each	9402	11094.36	13091.34	13978.89
215	LT electronic Trivector Meter 40-200 Amp.	Each	6700	7906.00	9329.08	9961.56
216	11 KV/110, 3 phase 4 wire accuracy class DLMS compliant trivector energy meter ratio 200/5A	Each	12501	14751.18	17406.39	18586.49
217	11 KV/110, 3 phase 4 wire accuracy class DLMS compliant trivector energy meter ratio 400/5A	Each	12501	14751.18	17406.39	18586.49
218	11 KV/110, 3 phase 4 wire accuracy class DLMS compliant trivector energy meter ratio 600/5A	Each	12501	14751.18	17406.39	18586.49
219	33 KV/110, 3 phase 4 wire accuracy class DLMS compliant trivector energy meter ratio 400/1A	Each	12501	14751.18	17406.39	18586.49
220	33 KV/110, 3 phase 4 wire accuracy class DLMS compliant trivector energy meter ratio 600/1A	Each	12501	14751.18	17406.39	18586.49
221	33KV/110V , 3 phase, 4 wire , accuracy class 0.5 CT-PT, combined metering unit for feeder, ratio 400/1A	Each	193000	227740.00	268733.20	286952.40
222	11KV/110, 3 phase, 4 wire , accuracy class 0.5 CT-PT, combined metering unit for feeder, ratio 400/5A	Each	109000	128620.00	151771.60	162061.20
223	11 KV/110 V 3 phase 4 wire Accuracy Class 0.5 CT-PT combined metering unit for feeder, Ratio 200/5 A	Each	109000	128620.00	151771.60	162061.20



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224	33KV/110V , 3 phase, 4 wire , accuracy class 0.5 CT-PT, combined metering unit for feeder, ratio 600/1A	Each	193000	227740.00	268733.20	286952.40
225	11 KV /110, 3 phase 4 wire Accuracy class 0.5 CT-PT combined metering unit for feeder, Ratio 600/5 A	Each	109000	128620.00	151771.60	162061.20
226	LT Static Energy Meter, 3 Phase 4 Wire, direct connected, 100 Amp. with Meter Box, Class 1.0 accuracy	Each	6700	7906.00	9329.08	9961.56
227	Three Phase 4 - wire AC static whole current meter, Electronic energy meter with box(10-60)Amp	Each	4939	5828.02	6877.06	7343.31
228	Three Phase 4 - wire AC static whole current meter, Electronic energy meter with box(20-100)Amp	Each	3220.34	3800.00	4484.00	4788.00
229	Single Phase Electronic Meter, two wire, 5-30 Amp. class 1.0 accuracy with Box	Set	1261.77	1488.89	1756.89	1876.00
230	Single Phase RF Meter with Box as per IS 13779 standards, DLMS compliant	Each	925.25	1091.80	1288.32	1375.67
231	Three Phase RF meter with Box as per IS 13779 standards, DLMS compliant	Each	6467.80	7632.00	9005.76	9616.32
232	Single phase RS 232/ 485 Prepaid energy meter	Each	6854.07	8087.80	9543.60	10190.63
233	Three phase RS 232/ 485 Prepaid energy meter	Each	10709.59	12637.32	14912.04	15923.02
234	Single phase RF Prepaid energy meter	Each	9425.02	11121.52	13123.39	14013.12
235	Three phase RF Prepaid energy meter	Each	12423.56	14659.80	17298.56	18471.35
236	Single phase GPRS/GSM Prepaid energy meter	Each	11887.27	14026.98	16551.84	17673.99
237	Three phase GPRS/GSM Prepaid energy meter	Each	14671.12	17311.92	20428.07	21813.02
238	PVC Cable gland sizes 20 mm,	Each	60	70.80	83.54	89.21
239	PVC Cable gland sizes 25 mm,	Each	65	76.70	90.51	96.64
240	PVC Cable gland sizes 32 mm	Each	70	82.60	97.47	104.08
241	PVC Cable gland sizes 40 mm	Each	75	88.50	104.43	111.51
242	PVC Cable gland sizes 50 mm	Each	85	100.30	118.35	126.38
243	PVC Cable gland sizes 63 mm	Each	90	106.20	125.32	133.81
244	PVC Cable gland sizes 75 mm	Each	100	118.00	139.24	148.68



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
245	Single Phase Whole Current Smart Meter (5-30 Amp) with RF communication Module (Excl. NIC Card) incl. Polycarbonate Meter Box	Each	2555.83	3015.88	3558.74	3800.01
246	Three Phase Whole Current Smart Meter (10-50 Amp) with RF communication Module (Excl. NIC Card) incl. Polycarbonate Meter Box	Each	4759.81	5616.58	6627.56	7076.89
247	Three Phase Whole Current Smart Meter (20-100 Amp) with RF communication Module (Excl. NIC Card) incl. Polycarbonate Meter Box	Each	5898.06	6959.71	8212.46	8769.24
248	LT Three Phase CT Operated Smart Tri Vector Meter with RF communication Module (Excl. NIC Card) for consumer incl. SMC Double Chambered Meter Box with embedded CT (CT Ratio 100/5 Amp)	Each	8988.53	10606.47	12515.63	13364.15
249	LT Three Phase CT Operated Smart Tri Vector Meter with RF communication Module (Excl. NIC Card) for consumer incl. SMC Double Chambered Meter Box with embedded CT (CT Ratio 200/5 Amp)	Each	8988.53	10606.47	12515.63	13364.15
250	LT Three Phase CT Operated Smart Tri Vector Meter with RF communication Module (Excl. NIC Card) for consumer incl. SMC Double Chambered Meter Box with embedded CT (CT Ratio -/5 Amp)	Each	7762.28	9159.49	10808.20	11540.96
251	HT Three Phase CT Operated Smart Tri Vector Meter with RF communication Module (Excl. NIC Card) for Feeder (CT Ratio -/5Amp)	Each	4815.4	5682.17	6704.96	7159.54
252	HT Three Phase CT Operated Smart Tri Vector Meter with RF communication Module (Excl. NIC Card) for consumer incl. meter Box (CT Ratio -/5Amp)	Each	4815.4	5682.17	6704.96	7159.54
253	Field Routers/Collectors/DCU along with installation Clamp and Accessories- Complete	Each	39307.26	46382.57	54731.43	58442.03
254	Network Interface Card (NIC) for Smart Meter	Each	1103.01	1301.55	1535.83	1639.96



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
255	Centralized management Console with single 24" LED Monitor	Each	132261.9	156069.04	184161.47	196646.99
256	Work Station Consoles with dual 24" LED Monitor along with Operating System, antivirus & License	Each	153690.48	181354.77	213998.62	228507.01
257	Network LaserJet (B/W) Photocopy, scanning and Printing	Each	39880.95	47059.52	55530.23	59295.00
258	A4 Size inkjet/ Bubble jet printer	Each	11904.76	14047.62	16576.19	17700.00
259	A3 Size inkjet Colour printer/ All in One Colour Laserjet Printer	Each	903647.62	1066304.19	1258238.95	1343543.28
260	L.T. CT ratio 50/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	268.57	316.91	373.95	399.31
261	L.T. CT ratio 100/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	301.76	356.08	420.17	448.66
262	L.T. CT ratio 200/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	320.00	377.60	445.57	475.78
263	L.T. CT ratio 300/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	213.87	252.36	297.79	317.98
264	L.T. CT ratio 400/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	241.60	285.09	336.41	359.21
265	L.T. CT ratio 500/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	550.85	650.00	767.00	819.00
266	L.T. CT ratio 600/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	550.85	650.00	767.00	819.00
267	L.T. CT ratio 800/5A, 5VA, 0.5 Accuracy for metering, Epoxy casted	Each	550.85	650.00	767.00	819.00
	<b>GI Service Pipe</b>					
268	GI service pipe 25 mm diameter 3 mtr length	Each	376.39	444.14	524.09	559.62
269	GI service pipe 40 mm diameter 3 mtr length	Each	444.36	524.35	618.73	660.68
270	GI Service pipe 60mm diameter 3 mtr length	Each	539.22	636.28	750.81	801.71
271	G.I. Pipe 3" dia	Mtr	682.37	805.20	950.14	1014.55
	<b>Ring Main units</b>					



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
272	11 KV 3 Way RMU, 2OD + 1VL, One Incomer + One Breaker + One Outgoing	Set	741560.30	875041.15	1032548.56	1102551.85
273	11 KV 4 Way RMU, 2OD + 2VL, (One Incomer + Two Breakers + One Outgoing	Set	1053363.35	1242968.75	1466703.13	1566140.63
274	11 KV 5 Way RMU, 2OD + 3VL, (One Incomer + Three Breakers + One Outgoing)	Set	1359612.62	1604342.89	1893124.61	2021472.04
275	11 KV 6 Way RMU, 2OD + 4VL,(One Incomer + Four Breakers + One Outgoing	Set	1665861.90	1965717.04	2319546.11	2476803.47
<b>XLPE insulated Cables</b>						
276	33 KV HT XLPE Cable Single Core 630mm2 (Armoured)	Mtr	1364.86	1610.53	1900.43	2029.27
277	1C x 400mm2 cable (33 KV power cable)	Mtr	1032.21	1218.01	1437.25	1534.69
278	33 KV HT XLPE Cable 3 core 400 sq mm (Armoured)	Mtr	2315.31	2732.07	3223.84	3442.40
279	33 KV HT XLPE Cable 3 Core 300mm2 (Armoured)	Mtr	2080.17	2454.60	2896.43	3092.80
280	33 KV HT XLPE Cable 3 Core 240mm2 (Armoured)	Mtr	1720.97	2030.75	2396.28	2558.74
281	33 KV HT XLPE Cable 3 Core 185mm2 (Armoured)	Mtr	1970.50	2325.19	2743.72	2929.74
282	33 KV HT XLPE Cable 3 Core 150mm2 (Armoured)	Mtr	1681.96	1984.71	2341.96	2500.74
283	33 KV HT XLPE Cable 3 Core 120mm2 (Armoured)	Mtr	1529.21	1804.47	2129.27	2273.63
284	33 KV HT XLPE Cable 3 Core 95mm2 (Armoured)	Mtr	1388.40	1638.31	1933.21	2064.27
285	33 KV HT XLPE Cable 3 Core 70mm2 (Armoured)	Mtr	1215.9	1434.75	1693.01	1807.79
286	33 KV HT XLPE Cable 3 Core 50mm2 (Armoured)	Mtr	1083.2	1278.16	1508.23	1610.49
287	11 kv 3 Core x 35 sq. mm cable (Armoured)	Mtr	1129.07	1332.30	1572.11	1678.70
288	11 KV XLPE Cable single core 630mm2 (Armoured)	Mtr	1079.23	1273.49	1502.72	1604.60
289	3Core x 630sq mm (11 KV power cable)	Mtr	3590.61	4236.92	4999.57	5338.52
290	11 KV XLPE Cable 3 core 400mm2 (Armoured)	Mtr	1598.49	1886.22	2225.74	2376.63
291	11 KV XLPE Cable 3 Core 300mm2 (Armoured)	Mtr	1394.62	1645.65	1941.87	2073.52
292	11 KV XLPE Cable 3 Core 240 mm2 (Armoured)	Mtr	1257.13	1483.41	1750.43	1869.10
293	11 KV XLPE Cable 3 Core 185mm2 (Armoured)	Mtr	958.60	1131.15	1334.75	1425.25
294	11 KV XLPE Cable 3 Core 150mm2 (Armoured)	Mtr	928.64	1095.80	1293.04	1380.70
295	11 KV XLPE Cable 3 Core 120mm2 (Armoured)	Mtr	824.93	973.42	1148.63	1226.51
296	11 KV XLPE Cable 3 Core 95mm2 (Armoured)	Mtr	751.11	886.31	1045.85	1116.75



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
297	11 KV XLPE Cable 3 Core 70mm <sup>2</sup> (Armoured)	Mtr	695.95	821.22	969.04	1034.74
298	11 KV XLPE Cable 3 Core 50mm <sup>2</sup> (Armoured)	Mtr	526.70	621.51	733.38	783.10
299	11 KV XLPE Cable 3 Core 25mm <sup>2</sup> (Armoured)	Mtr	340.27	401.52	473.79	505.91
300	Power Cable for DT Meter 120 sq.mm unarmoured	Mtr	279.86	330.23	389.67	416.09
301	Power Cable for DT Meter 240 sq.mm unarmoured	Mtr	279.86	330.23	389.67	416.09
302	LT XLPE cable 4 Core 16 mm <sup>2</sup> (Armoured)	Mtr	234.30	276.47	326.23	348.35
303	LT XLPE Cable 4 Core 16mm <sup>2</sup> (Unarmoured)	Mtr	68.47	80.79	95.34	101.80
304	T XLPE Cable 4 Core 25mm <sup>2</sup> (Armoured)	Mtr	50.85	60.00	70.80	75.60
305	LT XLPE Cable 3.5 Core 300mm <sup>2</sup> (Armoured)	Mtr	1256.09	1482.19	1748.98	1867.55
306	LT XLPE Cable 3.5 Core 185mm <sup>2</sup> (Armoured)	Mtr	1121.80	1323.72	1561.99	1667.89
307	LT XLPE Cable 3.5 Core 120mm <sup>2</sup> (Armoured)	Mtr	617.79	728.99	860.21	918.53
308	LT XLPE Cable 3.5 core 95 mm <sup>2</sup> (Armoured)	Mtr	506.97	598.22	705.91	753.76
309	LT XLPE Cable 3.5 Core 50mm <sup>2</sup> (Armoured)	Mtr	346.72	409.13	482.77	515.50
310	LT XLPE Cable 3.5 Core 25mm <sup>2</sup> (Armoured)	Mtr	267.23	315.33	372.09	397.32
311	LT XLPE Cable 2 Core 16 mm <sup>2</sup> (Armoured)	Mtr	103.98	122.70	144.79	154.60
312	LT XLPE Cable 2 Core 10mm <sup>2</sup> (Armoured)	Mtr	50.47	59.56	70.28	75.05
313	LT XLPE Cable 2 Core 6mm <sup>2</sup> (Armoured)	Mtr	41.07	48.46	57.18	61.06
314	LT XLPE Cable 1Cx120 mm <sup>2</sup> (Armoured)	Mtr	88.58	104.53	123.34	131.70
315	LT XLPE Single Core Cable 95 mm <sup>2</sup> (Armoured)	Mtr	80.51	95.00	112.10	119.70
316	XLPE Single Core Cable 50 mm <sup>2</sup> (Armoured)	Mtr	76.21	89.93	106.12	113.32
317	T XLPE Single Core Cable 25 mm <sup>2</sup> (Armoured)	Mtr	51.87	61.21	72.22	77.12
318	LT XLPE cable 3.5 core 35 Sq. mm. (Armoured)	Mtr	53.56	63.20	74.58	79.63
319	T XLPE cable 3.5 core 70 Sq. mm. (Armoured)	Mtr	34.10	40.24	47.48	50.70
320	XLPE single core unarmoured 1 x 400 mm <sup>2</sup>	Mtr	282.29	333.10	393.06	419.71
	<b>PVC insulated Cables</b>					
321	3.5 Core 300 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	760.61	897.52	1059.08	1130.88
322	3.5 Core 240 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	712.96	841.29	992.72	1060.03
323	3.5 Core 185 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	700.91	827.08	975.95	1042.12



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
324	3.5 Core 150 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	315.00	371.70	438.61	468.34
325	3.5 Core 70 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	207.10	244.37	288.36	307.91
326	3.5 Core 35 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	121.22	143.04	168.79	180.23
327	2 Core 16 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	42.16	49.75	58.71	62.69
328	1 Core 120 Sq. mm Unarmoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	Mtr	67.93	80.16	94.59	101.00
329	LT PVC Cable 3.5 core 95 mm2 (Armoured)	Mtr	223.91	264.21	311.77	332.90
330	LT PVC Cable 3.5 Core 10 mm2 (armoured)	Mtr	57.90	68.32	80.62	86.08
331	LT PVC Cable 3.5 Core 6 mm2 (armoured)	Mtr	46.70	55.11	65.03	69.44
332	LT PVC Cable 2 Core 16 mm2 (armoured)	Mtr	34.4	40.59	47.90	51.15
333	LT PVC Cable 2 Core 10 mm2 (armoured)	Mtr	40	47.20	55.70	59.47
334	LT PVC Cable 2 Core 6 mm2 (armoured)	Mtr	30	35.40	41.77	44.60
335	LT PVC Cable 2 Core 4 mm2 (armoured)	Mtr	26	30.68	36.20	38.66
336	LT PVC Cable 1 Core 16 mm2 (armoured)	Mtr	12.03	14.20	16.75	17.89
337	LT PVC Cable 1 Core 50 mm2 (armoured)	Mtr	31.49	37.16	43.85	46.82
338	LT PVC Cable 1 Core 70 mm2 (armoured)	Mtr	43.62	51.47	60.74	64.85
339	LT PVC Cable 1 Core 150 mm2 (armoured)	Mtr	85.75	101.19	119.40	127.49
340	LT PVC Cable 1 Core 300 mm2 (armoured)	Mtr	170.2	200.84	236.99	253.05
341	PVC Single Phase service cable 3.5 core 25 mm2 (Armoured)	Mtr	84.95	100.24	118.28	126.30
342	2.5 sq mm twin core PVC service cable (Armoured)	Mtr	25.96	30.63	36.15	38.60
343	4 sq mm twin core PVC service cable (Unarmoured)	Mtr	31.1	36.75	43.36	46.30
344	PVC Single Phase service cable 2 core 2.5 mm2 (UnArmoured)	Mtr	8.02	9.46	11.17	11.92
345	PVC Single Phase service cable 2 core 6 mm2 (Unarmoured)	Mtr	17.07	20.14	23.77	25.38



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
346	PVC Three Phase service cable 4 core 6 mm2 (Armoured)	Mtr	40.98	48.36	57.06	60.93
347	PVC Three Phase service cable 4 core 8 mm2 (Armoured)	Mtr	49.76	58.72	69.29	73.98
348	PVC Three Phase service cable 4 core 10 mm2 (Armoured)	Mtr	59	69.62	82.15	87.72
349	PVC Three Phase service cable 4 core 16 mm2 (Armoured)	Mtr	71.78	84.70	99.95	106.72
350	PVC Three Phase service cable 4 core 25 mm2 (Armoured)	Mtr	99.29	117.16	138.25	147.62
351	PVC Three Phase service cable 4 core 10 mm2 (Unarmoured)	Mtr	25.72	30.35	35.81	38.24
<b>Aerial Bunched Cables</b>						
352	11 KV XLPE HT AB Cable 3Cx185mm2+240mm2 bare messenger	Mtr	956.0	1128.09	1331.15	1421.39
353	11 KV XLPE HT AB Cable 3Cx185mm2+150mm2 bare messenger	Mtr	645.58	761.78	898.91	959.85
354	11 KV XLPE HT AB Cable 3Cx150mm2+120mm2 bare messenger	Mtr	555.96	656.03	774.12	826.60
355	11kV XLPE HT AB Cable 3cx120 mm2 + 95mm2 bare messenger	Mtr	497.8	587.42	693.16	740.15
356	11 KV XLPE HT AB Cable 3Cx95mm2+80mm2 bare messenger	Mtr	377.47	445.41	525.59	561.22
357	11 KV XLPE HT AB Cable 3Cx70mm2+70mm2 bare messenger	Mtr	306.77	361.99	427.15	456.11
358	11 KV XLPE HT AB Cable 3Cx50mm2+70mm2 bare messenger	Mtr	302.62	357.09	421.37	449.94
359	11 KV XLPE HT AB Cable 3Cx35mm2+70mm2 bare messenger	Mtr	231.78	273.50	322.73	344.61
360	11 KV XLPE HT AB Cable 3Cx35mm2+35mm2 bare messenger	Mtr	373.0	440.14	519.37	554.58
361	LT XLPE AB cable 3Cx120+1Cx70+1Cx16 mm2	Mtr	332.22	392.02	462.58	493.94



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362	LT XLPE AB Cable 3Cx95 sqmm + 1x70 sqmm+1x70 sq mm	Mtr	212.0	250.20	295.24	315.25
363	LT XLPE AB cable 3Cx95+1Cx70+1Cx16 mm2	Mtr	277.5	327.50	386.45	412.65
364	LT XLPE AB cable 3x70+1x50+1x16 (Street Light) mm2	Mtr	119.73	141.28	166.71	178.01
365	LT XLPE AB Cable 3Cx50 sqmm + 1x35 sqmm+1x16 sq mm	Mtr	134	158.12	186.58	199.23
366	LT XLPE AB Cable 3x50+1x25+1x35 mm2	Mtr	108.25	127.74	150.73	160.95
367	LT XLPE AB Cables 1x16(ph) + 1x25 (Bare conductor + 1x16 (Insulated Street Lighting) mm2	Mtr	53.9	63.61	75.06	80.15
368	LT XLPE AB Cable 3Cx120+70mm2	Mtr	209.48	247.19	291.68	311.45
369	LT XLPE AB Cable 3Cx95+70mm2	Mtr	172.93	204.06	240.79	257.11
370	LT XLPE AB Cable 3Cx50+35mm2	Mtr	148.20	174.87	206.35	220.34
371	LT XLPE AB Cable 3Cx35+25mm2	Mtr	99.8	117.81	139.02	148.45
372	LT XLPE AB Cable 3Cx25+25mm2	Mtr	85.04	100.35	118.42	126.44
373	LT XLPE AB Cable 3Cx16+25mm2	Mtr	63.39	74.81	88.27	94.26
374	LT XLPE AB Cable 1Cx16+25mm2 Single phase	Mtr	25.40	29.97	35.37	37.77
	<b>AB Cable accessories</b>					
375	11 kV AB Cable Straight thru' joint kit suitable for 35-70 sqmm	Set	4044.93	4773.02	5632.16	6014.00
376	11 kV AB Cable Straight thru' joint kit suitable for 95-120 sqmm	Set	4256.65	5022.85	5926.96	6328.79
377	11 kV ABC Termination kit 35-70 sqmm	Set	2154.85	2542.72	3000.41	3203.83
378	11 kV ABC Termination kit 95-120 sqmm	Set	2270.14	2678.76	3160.94	3375.24
379	LT Pre insulated mid span joint suitable 25 mm2 phases	Each	100	118.00	139.24	148.68
380	LT Pre insulated mid span joint suitable 35 mm2 phases	Each	111.0	130.95	154.52	165.00
381	LT Pre insulated mid span joint suitable 50 mm2 phases	Each	104.24	123.00	145.14	154.98



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382	LT Pre insulated mid span joint suitable 70 mm2 Phases	Each	137.1	161.76	190.88	203.82
383	LT Pre insulated mid span joint suitable 95 mm2 Phases	Each	157.02	185.28	218.63	233.46
384	LT Pre insulated mid span joint suitable 120 mm2 Phases	Each	179.8	212.21	250.41	267.38
385	Pre insulated mid span joint suitable for 25 mm2 Neutral messenger	Each	137.3	162.05	191.22	204.18
386	Pre insulated mid span joint suitable for 35 mm2 Neutral messenger	Each	247.2	291.70	344.21	367.54
387	Pre insulated mid span joint suitable for 50 mm2 Neutral messenger	Each	159.3	187.98	221.82	236.85
388	Insulation Piercing Connector for DB charging	Each	71.1	83.95	99.06	105.78
389	Insulation piercing connector branching suitable for T Joints	Each	185.0	218.30	257.59	275.06
390	Piercing Connector for LT AB Cable	Each	106.2	125.29	147.84	157.87
391	Insulation piercing connector-Type-I (main 16-95 mm2 & tap 4-35 mm2)	Each	69.00	81.42	96.08	102.59
392	Insulation piercing connector-Type-II (main 16-95 mm2 & tap 16-95 sq mm)	Each	70.15	82.78	97.68	104.30
393	Insulation piercing connector-Type-III (main 25-150 mm2 & tap 25-150 sq mm)	Each	80.00	94.40	111.39	118.94
394	Satellite Connector	Each	431.9	509.68	601.42	642.20
395	LT AB Cable accessory, 1.1Mtr. Stainless steel strap IF207(20x0.7)	Mtr	33.0	38.89	45.89	49.00
396	Buckle for strap	Each	7.1	8.43	9.95	10.62
397	Suspension clamp with eyehook	Set	360.2	425.00	501.50	535.50
398	Suspension Clamp Suitable for 25 -70 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	290	342.20	403.80	431.17



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399	Suspension Clamp Suitable for 35 -95 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	320.28	377.93	445.96	476.19
400	Suspension Clamp Suitable for 95 -150 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	296.45	349.81	412.78	440.76
401	Dead end clamp with eyehook	Set	206.8	244.00	287.92	307.44
402	Dead End Clamp Suitable for 25 -50 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	326	384.68	453.92	484.70
403	Dead End Clamp Suitable for 70 -95 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	360	424.80	501.26	535.25
404	Dead End Clamp Suitable for 95 -150 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Set	315.13	371.85	438.79	468.54
405	Service main anchor clamp for proper support of service cable	Each	65.9	77.78	91.78	98.00
406	Eye Hook	Each	81	95.58	112.78	120.43
407	Stainless Steel Strip of 20mmX1mmx1000mm with Buckle Clip	Each	44	51.92	61.27	65.42
<b>Fabricated Items</b>						
408	Hot Dip Galvanized Fabricated Iron Material For 33 kV Line, LT Line & DSS	MT	66508.47	78480.00	92606.40	98884.80
409	33 kv Pole Top Bracket 50x10 mm flat[GALVANIZED] (2.5 Kgs.)	Each	166.27	196.20	231.52	247.21
410	33 kv Pole Top Bracket 65x65x6 mm [GALVANIZED] (3.58 Kgs.)	Each	238.10	280.96	331.53	354.01
411	33 KV Pole top bracket [NON-GALVANIZED] (2.9 Kgs.)	Each	54.00	63.72	75.19	80.29
412	11kv Pole Top Bracket 50x8 mm [GALVANIZED] (2.2 Kgs.)	Each	146.32	172.66	203.73	217.55



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413	11 KV Pole top bracket 50x8 mm (F- type)[NON GALVANIZED] (2.2 Kgs.)	Each	132.00	155.76	183.80	196.26
414	11 kV F clamp/Bracket (2.1 Kgs.)	Pair	139.67	164.81	194.47	207.66
415	11 kV Fish Plate (1.6 Kgs.)	6 No.	94.80	111.86	132.00	140.95
416	33 kV Fish Plate (for ST Pole 13 Mtr.) (3 Kgs.)	6 No.	199.53	235.44	277.82	296.65
417	33kv V Cross Arm for (100x50x6 mm) [GALVANIZED] (19.7 Kgs.)	Each	1310.22	1546.06	1824.35	1948.03
418	33 KV V cross arm (100x 50x 6 mm) [NON-GALVANIZED] (19.7 Kgs.)	Each	1182.00	1394.76	1645.82	1757.40
419	33 kV DP Special type V cross Arm [Galvanised] (21 Kgs.)	Each	1396.68	1648.08	1944.73	2076.58
420	11kv V Cross Arm (100x50x6 mm), [GALVANIZED] (16 Kgs.)	Each	1064.14	1255.68	1481.70	1582.16
421	11kv V Cross Arm (75x40x6 mm), [GALVANIZED] (14.6 Kgs.)	Each	971.02	1145.81	1352.05	1443.72
422	11 KV "V" cross arm (75 x 40 x6 mm) [NON-GALVANIZED] (14.6 Kgs.)	Each	876.00	1033.68	1219.74	1302.44
423	MS Angle (65x65x6 mm) for guarding of 33 KV[GALVANIZED] (16 Kgs.)	Each	1060.81	1251.76	1477.07	1577.21
424	MS Angle (65x65x6 mm) for guarding of 11 KV [GALVANIZED] (13.6 Kgs.)	Each	904.52	1067.33	1259.45	1344.83
425	MS Angle (65x65x6 mm) for guarding of 33 KV, 11 KV, L.T line [NON-GALVANIZED] (13.6 Kgs.)	Each	816.00	962.88	1136.20	1213.23
426	Top Channel Set (100x50x6 mm) 3200 mm Length [GALVANIZED] (66.2 Kgs.)	Each	4405.52	5198.52	6134.25	6550.13
427	Top Channel Set ( 100x50x6 mm) [NON GALVANIZED] (66.2 Kgs.)	Each	3974.40	4689.79	5533.95	5909.14
428	MS Channel for AB Switch (100x50x6 mm) [GALVANIZED] (28.16 Kgs.)	Each	1872.88	2210.00	2607.80	2784.60
429	MS Channel AB switch (100x50x6 mm) [NON GALVANIZED] (28.16 Kgs.)	Each	1689.60	1993.73	2352.60	2512.10



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430	33kv D P Channel ( 100x50x6 mm) 3150 mm Long [ GALVANIZED] (65.2 Kgs.)	Each	4336.69	5117.29	6038.40	6447.78
431	33kv D P Channel ( 100x50x6 mm) 2200 mm Long [ GALVANIZED] (45.5 Kgs.)	Each	3028.80	3573.98	4217.30	4503.21
432	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	3445.60	4065.81	4797.65	5122.92
433	33 KV D.P Channel (100x50x6 mm)1.3 Meter [NON-GALVANIZED] (26.9 Kgs.)	Each	1789.74	2111.90	2492.04	2660.99
434	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	2746.80	3241.22	3824.64	4083.94
435	11KV D.P Channel (75x40x6mm)[NON GALVANIZED] (41.3 Kgs.)	Each	2478.00	2924.04	3450.37	3684.29
436	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)	Each	3500.34	4130.40	4873.87	5204.31
437	Transformer base Channel (100x50x6 mm) [NON-GALVANIZED] (52.63 Kgs.)	Each	3500.34	4130.40	4873.87	5204.31
438	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm) [GALVANIZED] (52.3 Kgs.)	Set	3478.39	4104.50	4843.31	5171.68
439	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm) [NON GALVANIZED] (52.3 Kgs.)	Set	3138.00	3702.84	4369.35	4665.58
440	Belting Angle-A (65x65x6 mm) [GALVANIZED] (31 Kgs.)	Each	2061.76	2432.88	2870.80	3065.43
441	Belting Angle-B (65x65x6 mm) [GALVANIZED] (28 Kgs.)	Each	1862.24	2197.44	2592.98	2768.77
442	Back clamp ( 50x6 mm) for V-XRM & Top Bracket for 13 Mtr. STP [GALVANIZED] (3.2 Kgs.)	Each	212.83	251.14	296.34	316.43
443	Back clamp ( 50x8 mm) for Guarding Angle for 13 Mtr. STP [GALVANIZED] (3.2 Kgs.)	Each	212.83	251.14	296.34	316.43
444	Back clamp ( 50x8 mm) for Guarding Angle for 9 Mtr. PSC Pole [GALVANIZED] (3 Kgs.)	Each	199.53	235.44	277.82	296.65



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
445	Back clamp ( 50x6 mm) for 60kg Rail Pole[GALVANIZED] (3.2 Kgs.)	Each	212.83	251.14	296.34	316.43
446	Back clamp ( 50x6 mm) for 60kg Rail Pole[NON GALVANIZED] (3.2 Kgs.)	Each	192.00	226.56	267.34	285.47
447	Back clamp ( 50x8 mm) for V-XRM & Top Bracket for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Each	199.53	235.44	277.82	296.65
448	Back clamp ( 50x6 mm) for V-ARM & Top Bracket 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Each	180.00	212.40	250.63	267.62
449	Back clamp ( 50x6 mm) for 9mtr 400kg PSC Pole[NON GALVANIZED] (3 Kgs.)	Each	199.53	235.44	277.82	296.65
450	Back Clamp ( 50x6 mm) for 8 mtr 200kg PSC pole[GALVANIZED] (2.8 Kgs.)	Each	186.22	219.74	259.30	276.88
451	Back Clamp ( 50x6 mm) for 8 mtr 200kg PSC pole[NON GALVANIZED] (2.8 Kgs.)	Each	168.00	198.24	233.92	249.78
452	Back clamp (50x6 mm) for Tubular Pole[GALVANIZED] (2 Kgs.)	Each	133.02	156.96	185.21	197.77
453	Back clamp( 50x6 mm) for Tubular Pole[ NON GALVANIZED] (2 Kgs.)	Each	120.00	141.60	167.09	178.42
454	Support Clamp for V Cross Arm for 60kg Rail Pole[GALVANIZED] (1.6 Kgs. each)	Pair	212.83	251.14	296.34	316.43
455	Support Clamp for V Cross Arm for 60kg Rail Pole[ NON GALVANIZED] (1.6 Kgs. each)	Pair	192.00	226.56	267.34	285.47
456	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[GALVANIZED] (1.2 Kgs. each)	Pair	159.62	188.35	222.26	237.32
457	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[ NON GALVANIZED] (1.2 Kgs. each)	Pair	144.00	169.92	200.51	214.10
458	Support Clamp for V Cross Arm for 8 mtr 200kg PSC pole[GALVANIZED] (1.08 Kgs. each)	Pair	143.66	169.52	200.03	213.59
459	Support Clamp for V Cross Arm for 8 mtr 200kg PSC pole[ NON GALVANIZED] (1.08 Kgs. each)	Pair	129.60	152.93	180.46	192.69
460	Support Clamp for V Cross Arm for Tubular Pole[GALVANIZED] (1.4 Kgs. each)	Pair	186.22	219.74	259.30	276.88



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461	Support Clamp for V Cross Arm for Tubular Pole[NON GALVANIZED] (1.4 Kgs. each)	Pair	168.00	198.24	233.92	249.78
462	Back Clamp-A for Belting Angle (50x8) (1.872 Kgs. each)	Pair	249.01	293.83	346.72	370.22
463	Back Clamp-B for Belting Angle (50x8) (1.872 Kgs. each)	Pair	224.64	265.08	312.79	333.99
464	Back clamp for 33 kV DP Special type V cross Arm [Galvanised] (3 Kgs. each)	Pair	199.53	235.44	277.82	296.65
465	Back Clamp (50x6 mm) Jointing/ Packing piece for 60kg Rail Pole [GALVANIZED] (3.7 Kgs.)	Pair	246.08	290.38	342.64	365.87
466	Back Clamp (50x6 mm) Jointing/ Packing piece for 60kg Rail Pole[ NON GALVANIZED] (3.7 Kgs.)	Pair	222.00	261.96	309.11	330.07
467	Clamp for Top Channel 50x6 mm flat for 60kg Rail Pole[GALVANIZED] (2.8 Kgs.)	Each	186.22	219.74	259.30	276.88
468	Clamp for Top Channel 50x6 mm flat for 60kg Rail Pole[ NON GALVANIZED] (2.8 Kgs.)	Each	168.00	198.24	233.92	249.78
469	Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Each	199.53	235.44	277.82	296.65
470	Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[ NON GALVANIZED] (3 Kgs.)	Each	180.00	212.40	250.63	267.62
471	Clamp for Top Channel 50x6 mm flat for 8 mtr 200kg PSC Pole[GALVANIZED] (2.8 Kgs.)	Each	186.22	219.74	259.30	276.88
472	Clamp for Top Channel 50x6 mm flat for 8 mtr 200kg PSC Pole[ NON GALVANIZED] (2.8 Kgs.)	Each	168.00	198.24	233.92	249.78
473	Clamp for Top Channel 50x6 mm flat for Tubular Pole[GALVANIZED] (2 Kgs.)	Each	133.02	156.96	185.21	197.77
474	Clamp for Top Channel 50x6 mm flat for Tubular Pole[ NON GALVANIZED] (2 Kgs.)	Each	120.00	141.60	167.09	178.42
475	Clamp for AB Switch Base Channel(50x6 mm) for 60kg Rail Pole[GALVANIZED] (2.4 Kgs.)	Each	159.62	188.35	222.26	237.32
476	Clamp for AB Switch Base Channel(50x6 mm) for 60kg Rail Pole[ NON GALVANIZED] (2.4 Kgs.)	Each	144.00	169.92	200.51	214.10



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477	Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED]	Each	186.22	219.74	259.30	276.88
478	Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ NON GALVANIZED]	Each	168.00	198.24	233.92	249.78
479	Clamp for AB Switch Base Channel (50x6 mm) for 8 mtr 200kg PSC Pole[ GALVANIZED]	Each	172.92	204.05	240.78	257.10
480	Clamp for AB Switch Base Channel (50x6 mm) for 8 mtr 200kg PSC Pole[ NON GALVANIZED]	Each	156.00	184.08	217.21	231.94
481	Clamp for AB Switch Base Channel (50x6 mm) for tublar Pole [GALVANIZED]	Each	139.67	164.81	194.47	207.66
482	Clamp for AB Switch Base Channel (50x6 mm) for tublar Pole [NON GALVANIZED]	Each	126.00	148.68	175.44	187.34
483	MS Channel (75x40x6 mm)for supporting H.G fuse & L.A [GALVANIZED] (19.3 Kgs.)	Each	1283.61	1514.66	1787.30	1908.48
484	MS Channel (75x40x6 mm)for supporting H.G fuse & L.A [ NON GALVANIZED] (19.3 Kgs.)	Each	1158.00	1366.44	1612.40	1721.71
485	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.)	Each	212.83	251.14	296.34	316.43
486	Clamp (50 x 6 mm) for Transformer base channel [NON GALVANIZED] (3.2 Kgs.)	Each	212.83	251.14	296.34	316.43
487	Clamp (50 x 6 mm) for Transformer belting [ GALVANIZED] (1.872 Kgs.)	Each	124.50	146.91	173.36	185.11
488	Clamp (50 x 6 mm) for Transformer belting [NON GALVANIZED] (1.872 Kgs.)	Each	112.32	132.54	156.39	167.00
489	Clamp (50 x 6 mm) for LT bus & H.G fuse set [GALVANIZED] (1.872 Kgs.)	Each	124.50	146.91	173.36	185.11
490	Clamp (50 x 6 mm) for LT bus & H.G fuse set [NON GALVANIZED] (1.872 Kgs.)	Each	112.32	132.54	156.39	167.00
491	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	299.29	353.16	416.73	444.98



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492	D.P Channel support clamp (50x6 mm) for 60kg Rail Pole [NON GALVANIZED] (2.25 Kgs. each)	Each	270.00	318.60	375.95	401.44
493	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 1 set ) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.5 Kgs. each)	Each	199.53	235.44	277.82	296.65
494	D.P Channel support clamp (50x6 mm)for 9 mtr 400kg PSC Pole[NON GALVANIZED] (1.5 Kgs. each)	Each	180.00	212.40	250.63	267.62
495	l) D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 1 set ) for 8 mtr 200kg PSC Pole[GALVANIZED] (1.1 Kgs. each)	Each	146.32	172.66	203.73	217.55
496	D.P Channel support clamp (50x6 mm) for 8 mtr 200kg PSC Pole [NONGALVANIZED] (1.1 Kgs. each)	Each	132.00	155.76	183.80	196.26
497	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 1 set ) for Tubular Pole[GALVANIZED] (4.5 Kgs. each)	Each	299.29	353.16	416.73	444.98
498	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 1 set ) for Tubular Pole [NON GALVANIZED] (4.5 Kgs. each)	Each	270.00	318.60	375.95	401.44
499	D P Channel Clamp ( 40x6 mm ) flat for 60 kg Rail Pole[GALVANIZED] (1.92 Kgs.)	Each	127.70	150.68	177.80	189.86
500	D P Channel Clamp ( 40x6 mm ) flat for 60 kg Rail Pole[ NON GALVANIZED] (1.92 Kgs.)	Each	115.20	135.94	160.40	171.28
501	D P Channel Clamp ( 40x6 mm ) flat 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Each	127.70	150.68	177.80	189.86
502	D P Channel Clamp ( 40x6 mm ) flat 9 mtr 400kg PSC Pole[ NON GALVANIZED] (1.92 Kgs.)	Each	115.20	135.94	160.40	171.28
503	D P Channel Clamp ( 40x6 mm ) flat 8 mtr 200kg PSC Pole[GALVANIZED] (1.08 Kgs.)	Each	71.83	84.76	100.01	106.80
504	D P Channel Clamp ( 40x6 mm ) flat 8 mtr 200kg PSC Pole[ NON GALVANIZED] (1.08 Kgs.)	Each	64.80	76.46	90.23	96.34
505	D P Channel Clamp ( 40x6 mm ) flat for Tubular Pole[GALVANIZED] (1.8 Kgs.)	Each	119.72	141.26	166.69	177.99



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506	D P Channel Clamp ( 40x6 mm ) flat for Tubular Pole[ NON GALVANIZED] (1.8 Kgs.)	Each	108.00	127.44	150.38	160.57
507	33kv Cross Bracing for D P Structure (50x50x6) [GALVANIZED] (64.3 Kgs.)	Each	4276.49	5046.26	5954.59	6358.29
508	33 KV Cross bracing for DP Channel[ NON GALVANIZED] (64.3 Kgs.)	Each	3858.00	4552.44	5371.88	5736.07
509	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Each	3438.49	4057.42	4787.75	5112.34
510	11 KV Cross bracing for D P Structure[NON GALVANIZED] (51.7 Kgs.)	Each	3102.00	3660.36	4319.22	4612.05
511	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	249.01	293.83	346.72	370.22
512	Clamp for cross bracing Set of 2 pair for 60kg Rail Pole[NON GALVANIZED] (1.872 Kgs. each)	Set	224.64	265.08	312.79	333.99
513	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[GALVANIZED] (1.3 Kgs.)	Set	172.92	204.05	240.78	257.10
514	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[ NON GALVANIZED] (1.3 Kgs.)	Set	156.00	184.08	217.21	231.94
515	Clamp for Cross bracing Set of 2 Pair for 8 mtr 200kg PSC pole[GALVANIZED] (1.2 Kgs.)	Set	159.62	188.35	222.26	237.32
516	Clamp for Cross bracing Set of 2 Pair for 8 mtr 200kg PSC pole NON [GALVANIZED] (1.2 Kgs.)	Set	144.00	169.92	200.51	214.10
517	Clamp for Cross Bracing Set of 2 pair for Tubular Pole[GALVANIZED] (1.75 Kgs.)	Set	232.78	274.68	324.12	346.10
518	Clamp for Cross Bracing Set of 2 pair for Tubular Pole[ NON GALVANIZED] (1.75 Kgs.)	Set	210.00	247.80	292.40	312.23
519	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	332.54	392.40	463.03	494.42
520	Support clamp for Cross Bracing for 60kg Rail Pole[ NON GALVANIZED] (2.5 Kgs. each)	Pair	300.00	354.00	417.72	446.04
521	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[GALVANIZED] (2.33 Kgs. each)	Pair	309.93	365.72	431.55	460.80



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522	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[ NON GALVANIZED] (2.33 Kgs. Each)	Pair	279.60	329.93	389.32	415.71
523	Support clamp for Cross Bracing for 8 mtr 200kg PSC Pole[GALVANIZED] (1.68 Kgs. each)	Pair	223.47	263.69	311.16	332.25
524	Support clamp for Cross Bracing for 8 mtr 200kg PSC Pole[NON GALVANIZED] (1.68 Kgs. each)	Pair	201.60	237.89	280.71	299.74
525	Support clamp for Cross Bracing for Tubular Pole[GALVANIZED] (2.1 Kgs. each)	Pair	279.34	329.62	388.95	415.32
526	Support clamp for Cross Bracing for Tubular Pole[NON GALVANIZED] (2.1 Kgs. each)	Pair	252.00	297.36	350.88	374.67
527	Angle/side Stay Clamp (50x8 mm) for 13 Mtr. STP Pole [GALVANIZED] (2.1 Kgs.)	Pair	139.67	164.81	194.47	207.66
528	Angle/side Stay Clamp (50x6 mm) for 60kg Rail Pole [GALVANIZED] (1.92 Kgs.)	Set	127.70	150.68	177.80	189.86
529	Angle /Side Stay clamp (50x6 mm) for 60kg Rail Pole [NON GALVANIZED] (1.92 Kgs.)	Set	115.20	135.94	160.40	171.28
530	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	127.70	150.68	177.80	189.86
531	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[ NON GALVANIZED] (1.92 Kgs.)	Set	115.20	135.94	160.40	171.28
532	Angle/side Stay Clamp ( 50x6 mm) for 8 mtr 200kg PSC Pole[GALVANIZED] (1.08 Kgs.)	Set	71.83	84.76	100.01	106.80
533	Angle/side Stay Clamp ( 50x6 mm) for 8 mtr 200kg PSC Pole[ NON GALVANIZED] (1.08 Kgs.)	Set	64.80	76.46	90.23	96.34
534	Angle/side Stay Clamp ( 50x6 mm) for Tubular Pole[GALVANIZED] (1.92 Kgs.)	Set	127.70	150.68	177.80	189.86
535	Angle/side stay clamp (50 x 6 mm)for Tubular Pole[ NON GALVANIZED] (1.92 Kgs.)	Set	115.20	135.94	160.40	171.28
536	clamp for G.I. Pipe (2.02 Kgs.)	Set	134.35	158.53	187.06	199.75
537	GI Flat (75x6 mm)[ GALVANIZED] (1.1 Kgs.)	Kg	73.16	86.33	101.87	108.77
538	MS Flat (75x6 mm)[ NON GALVANIZED] (1.1 Kgs.)	Kg	66.00	77.88	91.90	98.13



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539	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Set	119.72	141.26	166.69	177.99
540	Earth clamp for earthwire (50 x 6 mm)[ NON GALVANIZED] (1.8 Kgs.)	Set	108.00	127.44	150.38	160.57
541	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED]	Each	498.81	588.60	694.55	741.64
542	MS Angle for L T distribution bus (50x50x6 mm)[ NON GALVANIZED]	Each	450.00	531.00	626.58	669.06
543	LT Bracket Vertical formation	Each	432.31	510.12	601.94	642.75
544	LT Bracket for tapping point	Each	465.56	549.36	648.24	692.19
545	LT Angle Bracket (50x50x6 mm)[GALVANIZED]	Each	365.80	431.64	509.34	543.87
546	LT Angle bracket (50x50x6 mm)[ NON GALVANIZED]	Each	330.00	389.40	459.49	490.64
547	Pole clamp for I hook B type (0.8 Kgs. each)	Pair	106.41	125.57	148.17	158.22
548	LT Back clamp (50 x 6 mm) for LT angle[GALVANIZED] (0.55 Kgs. each)	Pair	73.16	86.33	101.87	108.77
549	LT Back clamp (50 x 6 mm) for LT angle[ NON GALVANIZED] (0.55 Kgs. each)	Pair	66.00	77.88	91.90	98.13
550	"U" clamp (40 x 6 mm)[GALVANIZED] (1.46 Kgs.)	Pair	48.55	57.29	67.60	72.19
551	"U" clamp (40 x 6 mm)[ NON GALVANIZED] (1.46 Kgs.)	Pair	43.80	51.68	60.99	65.12
552	50 x 6 mm Galvanized GI flat (risers)	Kg	66.50	78.47	92.59	98.87
553	25 x 3 mm Galvanized GI flat (risers)	Kg	66.50	78.47	92.59	98.87
	<b>Fuse</b>					
554	11 KV D.O. Fuse unit (polymer type)	Set	1454.08	1715.82	2024.67	2161.93
555	33 KV D.O. Fuse unit (polymer type)	Set	2081.0	2455.60	2897.61	3094.06
556	33 KV H.G. Fuse unit (polymer type)	Set	4948.3	5839.00	6890.02	7357.14
557	11 KV H.G. Fuse unit (polymer type)	Set	1515.3	1788.00	2109.84	2252.88
	<b>Electrical Conduit (Pipes)</b>					
558	GI Pipe 4" Medium duty (B Class)	Mtr	748.8	883.64	1042.70	1113.39
559	GI Pipe 6" Medium duty (B Class)	Mtr	1179.0	1391.25	1641.68	1752.98



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560	GI Pipe 8" Medium duty ( B Class)	Mtr	1543.8	1821.71	2149.62	2295.35
561	Hume Pipe - RCC Pipe 100 mm (NP2 Class)	Mtr	256.7	302.88	357.40	381.63
562	Hume Pipe - RCC Pipe 150 mm (NP2 Class)	Mtr	393.0	463.74	547.21	584.31
563	Hume Pipe - RCC Pipe 200 mm (NP3 Class)	Mtr	298.5	352.27	415.68	443.86
564	HDPE Pipe - 110 mm /4" PE 63 grade	Mtr	290.00	342.20	403.80	431.17
565	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	560.17	661.00	779.98	832.86
566	HDPE Pipe - 200 mm /8" PE 63 grade	Mtr	824.00	972.32	1147.34	1225.12
567	HDPE Pipe - 160 mm /6" PE 80 grade	Mtr	383.00	451.94	533.29	569.44
	<b>Heat Shrinkable Kit</b>					
568	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 400 mm2	Set	11028.8	13014.00	15356.52	16397.64
569	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 300 mm2	Set	11028.8	13014.00	15356.52	16397.64
570	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 240mm2	Set	11028.8	13014.00	15356.52	16397.64
571	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 185 mm2	Set	11028.8	13014.00	15356.52	16397.64
572	33 KV 3-core heat shrikable straight through Cable jointing kit for 150-95 mm2	Set	11028.8	13014.00	15356.52	16397.64
573	33 KV 3-core heat shrikable straight through Cable jointing kit for 70-35 mm2	Set	6536.4	7713.00	9101.34	9718.38
574	33 kV termination kit for 1Core x 400mm2	Set	3000.0	3540.00	4177.20	4460.40
575	33 KV 3-core heat shrinkable Out door type Cable termination kit for 400mm2	Set	4100.0	4838.00	5708.84	6095.88
576	33 KV 3-core heat shrinkable Out door type Cable termination kit for 300 mm2	Set	4100.0	4838.00	5708.84	6095.88
577	33 KV 3-core heat shrinkable Out door type Cable termination kit for 240 mm2	Set	4100.0	4838.00	5708.84	6095.88
578	33 KV 3-core heat shrinkable Out door type Cable termination kit for 185 mm2	Set	4100.0	4838.00	5708.84	6095.88



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579	33 KV 3-core heat shrinkable Out door type Cable termination kit for 120 mm2	Set	4100.0	4838.00	5708.84	6095.88
580	33 KV 3-core heat shrinkable Out door Cable termination kit for 95-70 mm2	Set	4100.0	4838.00	5708.84	6095.88
581	33 KV 3-core heat shrinkable Indoor Cable termination kit for 400mm2	Set	4100.0	4838.00	5708.84	6095.88
582	33 KV 3-core heat shrinkable Indoor Cable termination kit for 300 mm2	Set	4100.0	4838.00	5708.84	6095.88
583	33 KV 3-core heat shrinkable Indoor Cable termination kit for 240 mm2	Set	4100.0	4838.00	5708.84	6095.88
584	33 KV 3-core heat shrinkable Indoor Cable termination kit for 185 mm2	Set	4100.0	4838.00	5708.84	6095.88
585	33 KV 3-core heat shrinkable Indoor Cable termination kit for 120 mm2	Set	4100.0	4838.00	5708.84	6095.88
586	33 KV 3-core heat shrinkable Indoor Cable termination kit for 95-70 mm2	Set	4100.0	4838.00	5708.84	6095.88
587	33 KV 3-core heat shrinkable Indoor Cable termination kit for 50-25 mm2	Set	3500.0	4130.00	4873.40	5203.80
588	In door Heat Shrink type Cable Termination kit 11kV HT XLPE Cable-1Cx 630 sqmm (armoured)	Set	1828.00	2157.04	2545.31	2717.87
589	Out door Heat Shrink type Cable termination kit 11kV HT XLPE Cable-1Cx 630 sqmm (armoured)	Set	1828.00	2157.04	2545.31	2717.87
590	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 400 mm2	Set	3650.00	4307.00	5082.26	5426.82
591	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 300 mm2	Set	3650.00	4307.00	5082.26	5426.82
592	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 240 mm2	Set	3650.00	4307.00	5082.26	5426.82
593	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 185 mm2	Set	1019.49	1203.00	1419.54	1515.78
594	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 95-150 mm2	Set	810.00	955.80	1127.84	1204.31



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595	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 70-35 mm2	Set	810.00	955.80	1127.84	1204.31
596	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 400 mm2	Set	1481.69	1748.40	2063.11	2202.98
597	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 300 mm2	Set	1481.69	1748.40	2063.11	2202.98
598	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 240 mm2	Set	1481.69	1748.40	2063.11	2202.98
599	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 120-185 mm2	Set	1481.69	1748.40	2063.11	2202.98
600	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 95-50 mm2	Set	1481.69	1748.40	2063.11	2202.98
601	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 400 mm2	Set	1481.69	1748.40	2063.11	2202.98
602	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 300 mm2	Set	1481.69	1748.40	2063.11	2202.98
603	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 240 mm2	Set	1481.69	1748.40	2063.11	2202.98
604	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 120-185 mm2	Set	1481.69	1748.40	2063.11	2202.98
605	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 95-50 mm2	Set	1481.69	1748.40	2063.11	2202.98
	<b>UG Cables related material</b>					
606	Pillar Box Cum Consumer service distribution box-one time lock system (1 no. 3 ph 4 wire incoming and 5 nos. 3ph 4 wire outgoing)	Each	63547.8	74986.35	88483.89	94482.80
607	Cable Marker (Metal)	Each	110	129.80	153.16	163.55
	<b>AB Switch Contact</b>					
608	Male female contact of 33 KV AB Switch 600-630 Amp	Each	1231.4	1453.09	1714.65	1830.89
609	Male female contact of 33 KV AB Switch 400 Amp	Each	1023.8	1208.03	1425.48	1522.12
610	Male female contact of 33 KV AB Switch 200 Amp	Each	955.5	1127.49	1330.44	1420.64



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611	Male female contact of 11 KV AB Switch 800 Amp	Each	926.3	1092.98	1289.72	1377.15
612	Male female contact of 11 KV AB Switch 600 Amp	Each	780.0	920.40	1086.07	1159.70
613	Male female contact of 11 KV AB Switch 400 Amp	Each	686.4	809.96	955.75	1020.55
614	Male female contact of 11 KV AB Switch 200 Amp	Each	682.5	805.36	950.32	1014.75
	<b>Testing Equipment</b>					
615	Accucheck meter High accuracy (0.2% in director mode / 0.5% in clamp on mode) for kWh, kVArh and kVAh Maximum current up to 6A in direct mode and up to 500A in clamp on mode. LT+ : To test LT whole current single phase meters up to 60A	Set	57770.7	68169.41	80439.90	85893.46
616	Accucheck meter High accuracy (0.2% in director mode / 0.5% in clamp on mode) for kWh, kVArh and kVAh Maximum current up to 6A in direct mode and up to 500A in clamp on mode. LT+ : To test LT 3 phase & CT operated energy meters	Set	96284.5	113615.68	134066.50	143155.76
617	Accucheck meter High accuracy (0.2% in director mode / 0.5% in clamp on mode) for kWh for HT+ : To test meters suitable for HT, 3 phase, 3 wire and 4 wire systems	Set	105912.9	124977.25	147473.16	157471.34
618	EH-II Chain Electric Hoist (Capacity - 1 Ton, Standard Lift - 3 Mtr) with 1.5 HP motor	Set	73008.7	86150.23	101657.27	108549.29
619	Electronic weighing Machine with 1.2x1.2 mtr. Platform, suitable for weighing limit upto 2 tons	Set	61955.5	73107.49	86266.84	92115.44
620	Electronic weighing Machine with 2x2 mtr. Platform, suitable for weighing limit upto 4 tons	Set	115541.4	136338.82	160879.81	171786.91
621	Earth tester 200 Amp. 2000 Ohm (Digital)	Each	3281.34	3871.98	4568.94	4878.69
622	I) 500 V Megger	Each	3550.9	4190.11	4944.33	5279.54
623	2.5 / 5 KV Megger (Manual)	Each	4798.99	5662.81	6682.11	7135.14
624	Digital Clamp meter (Meco 3150)	Each	2361.9	2786.99	3288.65	3511.61



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625	Digital Tong tester (1000 Amp., 500 V) With associated accessories.	Set	2906.00	3429.08	4046.31	4320.64
626	Digital Multi meter (10 Amp along with mA range)	Each	2430.0	2867.40	3383.53	3612.92
627	2.5 kv motorised with range up to 20000 mega ohms	Each	16849.8	19882.74	23461.63	25052.25
628	2.5 kv motorised cum manual with range up to 20000 mega ohms	Each	19738.3	23291.21	27483.63	29346.92
629	5 kv motorised with range up to 100000 mega ohms	Each	25996.8	30676.23	36197.95	38652.05
630	5 kv motorised cum manual with range up to 100000 mega ohms	Each	28885.3	34084.70	40219.95	42946.72
<b>Tool Kit</b>						
631	Adhesive Insulation Tape	Each	239.5	282.61	333.48	356.09
632	High Temperature Tape	Each	672.0	793.00	935.74	999.18
633	Dicharge rod for 33 KV / 11KV	Set	417.67	492.85	581.56	620.99
634	Screw Driver set-840	Set	664.0	783.52	924.55	987.24
635	Screw Driver set-935	Set	42.0	49.58	58.50	62.47
636	Neon Tester 813	Each	32	37.76	44.56	47.58
637	Hammer 200 gm	Each	153.0	180.54	213.04	227.48
638	Hack Saw frame	Each	112.5	132.71	156.60	167.22
639	Hack saw blades	Each	32.3	38.14	45.01	48.06
640	Adjustable spanner	Each	497.9	587.56	693.32	740.32
641	wire Stripper	Each	47.4	55.94	66.01	70.48
642	Combinational Plier	Each	245.59	289.80	341.96	365.14
643	Side Cutting Plier	Each	173.5	204.70	241.55	257.92
644	Measuring tape	Each	344.8	406.85	480.08	512.63
645	Hand Drill Machine	Each	2898.5	3420.23	4035.87	4309.49
646	Punch	Each	45.3	53.40	63.01	67.28
647	Knife	Each	87.3	102.98	121.52	129.75
648	Spanner Set	Each	847.9	1000.50	1180.59	1260.63
649	Tool Bag	Each	775.8	915.43	1080.21	1153.44
650	Nose Plier	Each	201.5	237.75	280.55	299.57



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651	Drill Bit 3/10 Concrete (JK)	Each	91.6	108.07	127.52	136.17
652	Chain Pulley 5Ton with 15 meter Chain	Each	8050.8	9500.00	11210.00	11970.00
653	Max pulley 10 Ton	Each	19915.3	23500.00	27729.99	29609.99
<b>Civil Works</b>						
654	OPC Cement	Bag	326.3	385.00	454.30	485.10
655	Earth work in excavation in foundation trenches (along with disposal of excavated earth upto 50M, removing tree roots and shrubs) (For Normail soil)	mtrs3	151.8	179.15	211.39	225.73
656	Earth work in excavation in foundation trenches (along with disposal of excavated earth upto 50M, removing tree roots and shrubs) (For Rocky soil)	mtrs3	167.3	197.45	232.99	248.79
657	Filling in foundation trenches and Plenth in layers not exceeding 150 mm thick well watered, rammed fully compacted and fine dressed with earth obtained from excavation of foundation trenches within a lead of 50 M and lift of 1.5 M all complete as per building specification and direction of E/I	mtrs3	55.3	65.23	76.97	82.19
658	Providing coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150 mm thick with all leads and lifts including cost of all material labour, royalty and taxes all complete as per building specification and direction of E/I"	mtrs3	589.5	695.62	820.83	876.48
659	Brick Flat Soling	mtrs3	356.5	420.69	496.42	530.07
660	Providing P.C.C.M -150 in nominal mix(1:2:4) in foundation with quality of stone chips 20mm to 6mm size graded and clean coarse sand of F.M 2.5 to 3 including screening shuttering mixing cement concrete in mixer and placing in position vibrating,striking,curing,taxes and royalty all complete as perbuilding specification and direction of engineer in charge	mtrs3	4598.2	5425.91	6402.58	6836.65



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
661	Providing P.C.C.M -100 in nominal mix(1:3:6) in foundation with quality of stone chips 20mm to 6mm size graded and clean coarse sand of F.M 2.5 to 3 including screening shuttering mixing cement concrete in mixer and placing in position vibrating,striking,curing,taxes and royalty all complete as perbuilding specification and direction of engineer in charge	mtrs3	4125.4	4867.98	5744.22	6133.66
662	Providing P.C.C.M -75 in nominal mix(1:4:8) in foundation with quality of stone chips 20mm to 6mm size graded and clean coarse sand of F.M 2.5 to 3 including screening shuttering mixing cement concrete in mixer and placing in position vibrating,striking,curing,taxes and royalty all complete as perbuilding specification and direction of engineer in charge	mtrs3	3751.6	4426.94	5223.78	5577.94
663	Providing R.C.C.M-150 with nominal mix(1:2:4) in foundation and plinth and with quality stone chips 20mm to 6mm size graded and clean coarse sand of F.M. 2.5 to 3 including screening, shuttering, mixing cement concrete in mixer and placing in position, vibrating, striking, curing (but excluding the cost of reinforcement, taxed and royalty all complete, as per building specification and direction of E/I.)	mtrs3	6082.5	7177.29	8469.20	9043.39
<b>SCADA Related Materials</b>						
664	SCADA Server	Each	1188077.64	1401931.62	1654279.31	1766433.84
665	FEP Server with interface switches for RTUs and FRTUs	Each	1188077.64	1401931.62	1654279.31	1766433.84
666	ISR Server {Data Server}	Each	1199086.5	1414922.07	1669608.04	1782801.81
667	NMS Server {DMS Server}	Each	1188077.64	1401931.62	1654279.31	1766433.84
668	DTS Server (only at Ranchi)	Each	1188077.64	1401931.62	1654279.31	1766433.84
669	Developmental Server	Each	1188077.64	1401931.62	1654279.31	1766433.84



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
670	Communication Server	Each	1188077.64	1401931.62	1654279.31	1766433.84
671	Web/Directory Server	Each	1188077.64	1401931.62	1654279.31	1766433.84
672	Workstation with dual TFT Monitors	Each	315619.62	372431.15	439468.76	469263.25
673	LED based Video Projection system with 2X3 Module configuration with each module at least 67" diagonal with common projector	Set	8994545.64	10613563.86	12524005.35	13373090.46
674	33 kV OR 11 kV control and relay panel, SCADA compatable for feeder protection (1F)	Each	146483.17	172850.14	203963.17	217791.18
675	33 kV or 11 kV control and relay panel, SCADA compatable for transformer protection (IT) with o/c +e/f + Diff relay	Each	137142.00	161827.56	190956.52	203902.73
676	33 kV OR 11 kV control and relay panel, SCADA compatable for feeder protection (2F)	Each	286953.25	338604.84	399553.71	426642.10
677	Buchholz Relay contact	Each	7898.21	9319.89	10997.47	11743.06
678	Minimum Oil Gauge	Each	2888.53	3408.47	4021.99	4294.67
679	SCADA compatible winding temp. indicator	Each	9987.00	11784.66	13905.90	14848.67
680	SCADA compatible oil temp. indicator	Each	8897.00	10498.46	12388.18	13228.06
681	RTU Base equipment comprising panels, racks, sub racks, powe suppy modules, CPU, Analog and Digital input Control output Modules, interfacing MFT using RS - 485 MODBUS protocol and 2 ethernet ports + 4 serial ports (RS232/485), required A-D converters and all other accessories required	Each	563425.0	664841.50	784512.97	837700.29
682	DC Voltage transducer	Each	1376	1623.68	1915.94	2045.84
683	RTU Base and foundation (base should be capable of withstanding 200 kg. load)	Each	4614	5444.52	6424.53	6860.10
684	Multi function transducers ( 5 amps, 110 V with RS 485 modbus communication protocol)	Each	9238	10900.84	12862.99	13735.06
685	Type A FRTU for 5- way RMUs	Each	42312.9	49929.18	58916.43	62910.77
686	Type A FRTU for 4- way RMUs	Each	39191.3	46245.68	54569.90	58269.56
687	Type B FRTU for 3- way RMUs	Each	39191.3	46245.68	54569.90	58269.56
688	Type C FRTU for 2- way RMUs	Each	112000.0	132160.00	155948.80	166521.60



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
689	Routers 230 V AC, 2 GE Ports, 48xFE, WAN Speed 200 MBPS	Each	67879.00	80097.22	94514.72	100922.50
690	Ethernet Switch	Each	2769.00	3267.42	3855.56	4116.95
691	2 MBPS VPN link for connectivity for s/s with SCADA control center	Each	67523.00	79677.14	94019.03	100393.20
692	LDMS	Each	121148.00	142954.64	168686.48	180122.85
693	2 KVA ups (for LDMS) with 160 AH battery, 72 V battery set	Each	120825.00	142573.50	168236.73	179642.61
694	GSM/GPRS Modem along with Accessories	Each	3751.44	4426.70	5223.51	5577.64
695	B/W Laser printer for LDMS	Each	16824.00	19852.32	23425.74	25013.92
696	48 V DC Power supply system based on SMPS for RTU & Comm. Equipment with 80 AH Battery	Each	92612.00	109282.16	128952.95	137695.52
697	Cat 6 cable	Mtr	46.00	54.28	64.05	68.39
698	LDMS Software	Each	13843.00	16334.74	19274.99	20581.77
699	Numerical relay SCADA Compatible for power transformer protection	Each	37377.00	44104.86	52043.73	55572.12
700	Numerical relay SCADA Compatible for 33kV and 11 kV feeder protection	Each	37377.00	44104.86	52043.73	55572.12
701	MCU module card	Each	57588.00	67953.84	80185.53	85621.84
702	Power Module card	Each	7212.00	8510.16	10041.99	10722.80
703	DI Card	Each	14425.00	17021.50	20085.37	21447.09
704	DO Card	Each	14425.00	17021.50	20085.37	21447.09
705	AI Card	Each	14425.00	17021.50	20085.37	21447.09
706	COM 6 Card	Each	14425.00	17021.50	20085.37	21447.09
707	RMU - 3 way (1 incomer, 1 outgoing and 1 breaker) SCADA Compatible	Each	450971.6	532146.50	627932.87	670504.59
708	RMU - 5 way (1 incomer, 1 outgoing and 3 breakers) SCADA Compatible	Each	797066.1	940538.00	1109834.84	1185077.88
709	11 kV Sectionalizer	Each	342809.62	404515.35	477328.11	509689.34
710	11 kV Auto reclosure	Each	665494	785282.92	926633.85	989456.48
711	GPRS/CDMA/EDGE/3G Modem	Each	4162.4	4911.60	5795.69	6188.62



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712	Heavy Duty Relay for CB Trip / Close (48 V DC, 2 no, 1 NC)	Each	442.9	522.63	616.70	658.51
713	48 V DCPS at RTU Locations along with VRLA Batteries	Each	70457.00	83139.26	98104.33	104755.47
714	11 kV Stand alone fault passage indicator complete with GPRS enabled modem(SCADA Compatible)	Each	83586.00	98631.48	116385.15	124275.66
715	33 kV Stand alone fault passage indicator complete with GPRS enabled modem(SCADA Compatible)	Each	111059.3	131050.01	154639.01	165123.01
<b>Storage &amp; Backup Devices</b>						
716	External RAID Mass storage device (for 2 months online backup)	Each	916710.72	1081718.65	1276428.01	1362965.50
717	External DAT drive	Each	454364.1	536149.64	632656.57	675548.54
<b>Switches</b>						
718	Layer II Switch (SCADA/DMS LAN) (48 Ports)	Each	244419.54	288415.06	340329.77	363402.97
719	Layer Switch (Planning & Development system LAN) (24 Ports)	Each	219082.74	258517.63	305050.81	325732.22
<b>Other Active Devices</b>						
720	GPS Time synchronization system	Set	209439.66	247138.80	291623.78	311394.89
721	Time, day & date digital displays	Set	147560.34	174121.20	205463.02	219392.71
<b>Printers</b>						
722	A3 Colour Inkjet Printer	Set	119988.72	141586.69	167072.29	178399.23
723	B/W Laser printer	Set	138878.1	163876.16	193373.87	206483.96
724	Colour Laser printer	Set	636702.36	751308.78	886544.37	946649.07
<b>Security system (DMZ)</b>						
725	Web Server with load balancing	Each	1188077.64	1401931.62	1654279.31	1766433.84
726	Firewall & Network IDS/IPS in pair (2 Nos.)	Each	263937.24	311445.94	367506.21	392421.89
<b>Cabling System</b>						
727	Cable, Jacks, Hubs, etc.	Lot	185454.36	218836.14	258226.65	275733.54
728	ACDB for Control Centre	Set	185454.36	218836.14	258226.65	275733.54
729	KVM Switch	Each	167588.04	197753.89	233349.59	249169.90
730	Panels	Each	70346.34	83008.68	97950.24	104590.94



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	<b>Software for Control Centre</b>					
731	SCADA software	Lot	2580600	3045108.00	3593227.44	3836836.08
732	ISR Software	Lot	1935450	2283831.00	2694920.58	2877627.06
733	DMS software	Lot	3870900	4567662.00	5389841.16	5755254.12
734	DTS software	Lot	645150	761277.00	898306.86	959209.02
735	Developmental software	Lot	645150	761277.00	898306.86	959209.02
736	Network Management Software	Lot	645150	761277.00	898306.86	959209.02
737	GIS Adaptor/Engine for importing data from GIS system under IT system	Lot	645150	761277.00	898306.86	959209.02
	<b>RTU:RTU-Type B 33/11 kV Sub Stations</b>					
738	RTU base equipment comprising panels, racks, sub-racks, Power Supply modules, CPU, Analog and Digital input Control output Modules, interfacing equipments for interfacing MFTs using RS-485 MODBUS Protocol and 2 Eathernet Ports, required A-D Converters & all other required items/accessories including complete wiring for all modules for locations mentioned for Type B RTUs	Set	604410.18	713204.01	841580.73	898637.06
739	Multifunction Transducers (MFTs)	Each	3966.78	4680.80	5523.34	5897.81
740	Contact Multiplying Relays (CMRs)	Each	226.44	267.20	315.30	336.67
741	Heavy Duty Relays (HDRs) for CB Trip/Close and rise and lower of OLTC	Each	283.56	334.60	394.83	421.60
742	Weather transducer - Wind speed	Each	22666.44	26746.40	31560.75	33700.46
743	Weather transducer - Rainfall	Each	22666.44	26746.40	31560.75	33700.46
744	Weather transducer - Humidity	Each	22666.44	26746.40	31560.75	33700.46
745	Weather transducer -Temperature	Each	22666.44	26746.40	31560.75	33700.46
746	Weather transducer -Wind Direction	Each	22666.44	26746.40	31560.75	33700.46
747	Router for RTUs at DC power Supply	Each	161294.64	190327.68	224586.66	239812.87
748	OLTC Transducers	Each	4532.88	5348.80	6311.58	6739.49
749	DC Current Transducer	Each	1926.78	2273.60	2682.85	2864.74
750	DC Voltage Transducer	Each	1926.78	2273.60	2682.85	2864.74



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
751	ACDB with sufficient MCCBs	Each	5667.12	6687.20	7890.90	8425.87
	<b>TEST EQUIPMENTS for RTU</b>					
752	RTU Database Configuration & Maintenance Software tool	Each	39099.609	46137.54	54442.30	58133.30
753	Master Station cum RTU Simulator & Protocol analyzer software tool	Each	65167.188	76897.28	90738.79	96890.58
754	Laptop PC for above software tools along with interfacing hardware including Hub	Each	113333.22	133733.20	157805.18	168503.83
	<b>FRTU/FRTUs</b>					
755	Type-A FRTU for 5-Way RMUs	Each	105594.48	124601.49	147029.75	156997.87
756	Type-A1 FRTU for 4-Way RMUs	Each	92071.32	108644.16	128200.11	136891.64
757	Type-B FRTU for 3-Way RMUs	Each	92071.32	108644.16	128200.11	136891.64
758	Type-C FRTU for Sectionalizers	Each	71751.9	84667.24	99907.35	106680.72
759	MFTs	Each	3966.78	4680.80	5523.34	5897.81
760	Contact Multiplying Relays (CMRs)	Each	226.44	267.20	315.30	336.67
761	Heavy duty relays for CB trip/Close	Each	283.56	334.60	394.83	421.60
	<b>Test Equipments for FRTU</b>					
762	FRTU Database Configuration & Maintenance Software tool	Each	39099.609	46137.54	54442.30	58133.30
763	Master Station cum FRTU Simulator & Protocol analyzer software tool	Each	65167.188	76897.28	90738.79	96890.58
764	Laptop PC for above software tools along with interfacing hardware including Hub	Each	113333.22	133733.20	157805.18	168503.83
	<b>GPRS/CDMA/EDGE/3GModems</b>					
765	GPRS	Each	3966.78	4680.80	5523.34	5897.81
	<b>Auxiliary Power Supply System( APS)</b>					
766	20 kVA UPS (1+1) with VRLA Batteries to give 4 hrs back up	Set	4080000	4814400.00	5680992.00	6066144.00
767	DC Power Supply (DCPS) system based on SMPS (for 20 A load plus charging current@10% capacity) with VRLA Batteries to give 4 hrs back up.	Set	112200	132396.00	156227.28	166818.96



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
768	2 kVA UPS for RTU Locations/LDMS	Set	96625.62	114018.23	134541.51	143662.97
769	48 V DCPS at RTU Locations along with VRLA Batteries	Set	112200	132396.00	156227.28	166818.96
770	24/48 V DCPS for FRTU Locations along with VRLA Batteries	Set	20060.34	23671.20	27932.02	29825.71
	<b>Safety Equipment</b>					
771	Rechargeable LED hand torch	Each	558	658.44	776.96	829.63
772	Safety Helmet - PVC	Each	125.76	148.40	175.11	186.98
773	Safety Shoes (Electrical Safety)	Pair	539.82	636.99	751.65	802.60
774	Rubber hand Gloves(1.1KV) Commander	Pair	528.61	623.76	736.04	785.94
775	Safety double adjustable belts(Karam)	Each	539.83	637.00	751.66	802.62
776	Safety Items as per the requirement of electrical inspector as under First Aid Box, Shock treatment chart, Rubber mats 8 mm thick, 4 Fire buckets with sand & M.S. Hooks / stand, Helmet, Hand gloves and, Fire extinguisher (2 Nos)	LS	9312.6	10988.83	12966.82	13845.93
	<b>Fire extinguishers</b>					
777	1 kg Dry Chemical Powder (MAP 50%); Fire rating : 1A, 8B	Each	1395.0	1646.12	1942.42	2074.11
778	2 kg Dry Chemical Powder (MAP 50%); Fire rating: 2A, 8B	Each	1813.5	2139.96	2525.15	2696.35
779	4 kg Dry Chemical Powder (MAP 50%); Fire Rating : 2A, 21B	Each	2278.5	2688.67	3172.63	3387.72
780	6 kg Dry Chemical Powder (MAP 50%); Fire Rating: 3A, 34B	Each	2976.0	3511.73	4143.84	4424.78
781	9 kg Dry Chemical Powder (MAP 50%) Fire Rating: 4A, 55B	Each	3813.1	4499.41	5309.30	5669.26
782	6 ltr Water type; Fire Rating : 2A	Each	2325.0	2743.54	3237.38	3456.86
783	9 ltr Water type, Fire Rating: 3A	Each	2790.0	3292.25	3884.86	4148.24
784	I) 6 ltr Mechanical Foam type, Fire Rating: 2A, 21B	Each	2418.0	2853.28	3366.87	3595.13
785	9 ltr Mechanical Foam type, Fire Rating: 4A, 34B	Each	2976.0	3511.73	4143.84	4424.78



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
786	2 kg Carbon Dioxide Type, Fire Rating: 8B	Each	5076.6	5990.38	7068.65	7547.88
787	3 kg Carbon Dioxide Type, Fire Rating: 13B	Each	4882.6	5761.44	6798.50	7259.41
788	4.5 kg Carbon Dioxide Type, Fire Rating: 21B	Each	5533.6	6529.63	7704.96	8227.33
789	6.5 kg Carbon Dioxide Type, Fire Rating: 55B	Each	7412.2	8746.42	10320.78	11020.49
790	9 kg Carbon Dioxide Type, Fire Rating: 70B	Each	13072.03	15425.00	18201.50	19435.50
791	22.5 kg Carbon Dioxide Type, Fire Rating: 70B	Each	17949.3	21180.16	24992.59	26687.00
792	Gas Pressure CTC fire extinguisher	Each	1348.0	1590.61	1876.92	2004.17
793	Fire Buckets (Capacity 10 Ltrs.)	Each	61.02	72.00	84.96	90.72
	<b>Feeder Pillar / SMDB / Distribution Board</b>					
794	LT Mini Feeder Pillar (simple with fuse arrangement) (aluminium Bus)	Each	4185.1	4938.38	5827.29	6222.36
795	SMDB(1 in, 3 out ) with housing 5 nos 20 Amp SPN MCB,	Each	1891.2	2231.66	2633.36	2811.89
796	TPN Distribution Board 12 way, 50 Amp TPN MCB,	Each	12508.7	14760.27	17417.12	18597.94
797	TPN Distribution Board 12 way, 100 Amp TPN MCB,	Each	22795.6	26898.81	31740.60	33892.50
798	TPN Distribution Board 12 way, 150 Amp TPN MCB,	Each	36053.9	42543.60	50201.45	53604.94
799	LT Feeder Piller box for 1 phase 8 connection made of M.S.Sheet.	Each	4504.81	5315.68	6272.50	6697.76
800	LT Feeder Piller box for 1 phase 12 connection made of M.S.Sheet.	Each	5683.97	6707.09	7914.37	8450.93
801	LT Feeder Piller box for 3 phase 4 connection made of M.S.Sheet.	Each	12891.25	15211.68	17949.78	19166.72
802	LT Feeder Piller box for 3 phase 8 connection made of M.S.Sheet.	Each	13505.15	15936.08	18804.57	20079.46
803	LT Feeder Pillar (simple with fuse arrangement) (aluminium Bus)	Each	23250.4	27435.45	32373.83	34568.67
	<b>Aluminium End Terminal Lugs</b>					
804	10 Sq mm	Each	2.4	2.84	3.36	3.58
805	16 Sq mm	Each	2.4	2.84	3.36	3.58
806	25 Sq mm	Each	4.8	5.70	6.73	7.18
807	32 Sq mm	Each	6.0	7.12	8.40	8.97



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808	50 Sq mm	Each	9.7	11.41	13.46	14.38
809	70 Sq mm	Each	14.5	17.11	20.19	21.56
810	95 Sq mm	Each	18.1	21.39	25.24	26.96
811	119 sqmm	Each	25.4	29.95	35.34	37.73
812	150 Sq mm	Each	29.0	34.22	40.38	43.12
813	185 Sq mm	Each	45.9	54.19	63.94	68.27
814	225 Sq mm	Each	52.0	61.30	72.34	77.24
815	240 Sq mm	Each	74.9	88.41	104.32	111.39
816	299 sqmm	Each	88.2	104.10	122.84	131.17
817	399 Sq mm	Each	113.6	134.06	158.19	168.92
	<b>Other Misc. Equipment</b>					
818	Earthing G.I.Strip (65x6)mm2	Kg	78.9	93.13	109.89	117.34
819	Rain Coat	Each	667.56	787.72	929.51	992.53
820	Rubber mat along length of panel	Each	2821.99	3329.95	3929.34	4195.74
821	Aluminium pipe 40 mm dia	Mtr	162.7	192.00	226.56	241.92
822	400 watt/250 V HPSV Lamp fitting complete for 33/11 KV PSS Yard lightning	Set	4891.1	5771.54	6810.42	7272.14
823	30 V 80 AH Battery Charging unit complete with battery and stand	Set	58514.4	69047.04	81475.51	86999.27
824	30 Volts 100 AH lead Acid Battery with Battery Charger and Stand	Each	144745.76	170800.00	201544.00	215208.00
825	30V, 40 Amp. Float-cum-Boost Battery Charger with full wave rectification for 230 V, 1 phase, 50 Hz AC Input Supply as per technical specifications.	Set	39450	46551.00	54930.18	58654.26
826	Polycarbonate seal bit	Each	4.48	5.29	6.24	6.66
827	Sticker seal with Hologram	Each	2.48	2.93	3.46	3.69
828	Earth knob	Each	24.7	29.15	34.40	36.73
829	MS Earth Mat for switch yard	MT	67567.80	79730.00	94081.40	100459.80
830	Rail piece 44.64Kg/m 6.92 meter long for power transformer	Mtr	3520.1	4153.66	4901.32	5233.61
831	Aluminium binding wire	Kg	256.00	302.08	356.45	380.62



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832	GI Wire No. 6/8/10	Kg	71.2	84.00	99.12	105.84
833	T/C Fuse wire 12/ 14/ 16/ 18/ 22/ 28/ 32 SWG	Kg	727.45	858.39	1012.90	1081.57
834	M S Nuts & Bolts of different size	MT	65866.74	77722.75	91712.85	97930.67
835	Galvanised Nuts & Bolts(Assorted size)	MT	75602.00	89210.36	105268.22	112405.05
836	Jointing sleeves (Alumnium) suitable for 34/55 sq.mm	Each	96.00	113.28	133.67	142.73
837	Jointing sleeves (Alumnium) suitable for 70-100 sq.mm	Each	123.36	145.56	171.77	183.41
838	Jointing sleeves (Alumnium) suitable for 150-232 sq.mm	Each	178	210.04	247.85	264.65
839	Anticlimbing Device(Barbed wire) 2x12 SWG	Kg	61.92	73.07	86.22	92.06
840	Al paint	Litre	270.91	319.67	377.22	402.79
841	Red oxide paint	Litre	152.24	179.64	211.98	226.35
842	LT Phase Seperator	Set	26.17	30.88	36.44	38.91
843	3 mm Thick MS plate with weight of 0.36 kg Asset Tag	Each	19.76	23.32	27.52	29.38
844	Transformer oil (EHV Grade)	KL	127200	150096.00	177113.28	189120.96
845	Natural Ester Oil	KL	170000	200600.00	236708.00	252756.00
846	C-wedge Connector for 0.2sq Panther Conductor (Nominal Aluminum Area 200mm2)	Each	871.19	1028.00	1213.04	1295.29
847	Fault Locator Machine for UG cables (FLC) without vehicle	Each	3081103.33	3635701.93	4290128.28	4580984.43
848	Transformer Oil Testing Kit (220/230 AC )	Each	44290.86	52263.21	61670.59	65851.64
849	Transformer Oil Filter Machine (500 GPH)	Each	465000	548700.00	647466.00	691362.00
<b>Furniture</b>						
850	Thrive Mid Back Revolving Chair - Size:75cm(W) x 75cm(D) x 100cm-109cm(H) x 45cm-54cm (Seat Height).	Each	9880	11658.40	13756.91	14689.58
851	Thrive Non-Revolving Visitor Chair - Size:63.5cm(W) x 59.5cm(D) x 97.5cm(H) x 42.5cm (Seat Height).	Each	8280	9770.40	11529.07	12310.70



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852	Regency Non-Revolving Visitor Chair with armrest - Size:59cm(W) x 63cm(D) x 81.5cm(H) x 45cm (Seat Height).	Each	8832	10421.76	12297.68	13131.42
853	Regency Mid Back Revolving Chair - Size:76.3cm(W) x 76.3cm(D) x 78.5cm-90.5cm(H) x 44.2cm-54.2cm (Seat Height).	Each	15148	17874.64	21092.08	22522.05
854	Bravo Mid Back Revolving Chair - Size:76.3cm(W) x 76.3cm(D) x 85.5cm-97.5cm(H) x 42.5cm-54.5cm (Seat Height).	Each	7279	8589.22	10135.28	10822.42
855	High Back Revolving Chair - Size:76.1cm(W) x 76.1cm(D) x 114.5cm-131.5cm(H) x 44.5cm-54.5cm (Seat Height).	Each	29690	35034.20	41340.36	44143.09
856	Non-Revolving Visitor Chair - Size:60.9cm(W) x 64.7cm(D) x 98.2cm(H) x 46.2cm (Seat Height).	Each	21145	24951.10	29442.30	31438.39
857	Very High Back Revolving Chair - Size:77cm(W) x 77cm(D) x 134.9cm-143.9cm(H) x 49.9cm-58.9cm (Seat Height).	Each	52598	62065.64	73237.46	78202.71
858	Non-Revolving Visitor Chair - Size:59cm(W) x 68.5cm(D) x 89.5cm(H) x 46.5cm (Seat Height).	Each	28917	34122.06	40264.03	42993.80
859	Unlearn Single Seater CPU / Laptop Table for Computer Training Hall -Size: 90cm(W) x 60cm(D) x 68cm(H)	Each	17404	20536.72	24233.33	25876.27
860	Unlearn 2 Seater Laptop Table for Meeting Hall - Size:135cm(W) x 60cm(D) x 68cm(H)	Each	19600	23128.00	27291.04	29141.28
861	Unlearn 4 Seater Laptop Table for Meeting Hall - Size:270cm(W) x 60cm(D) x 68cm(H)	Each	38312	45208.16	53345.63	56962.28
862	Talk Unitised 4-Seater Round Table - Size:120cm dia x 75cm(H)	Each	31548	37226.64	43927.44	46905.57
863	Talk Modular Conference Table - Size:67.5cm(W) x 60cm(D) x 75cm(H)	Each	9378	11066.04	13057.93	13943.21
864	Enterprise Table with CPU hanger - Size:165cm(W) x 90cm(D) x 72.8cm(H)	Each	23797	28080.46	33134.94	35381.38



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865	Insight Table for Library - Size:180cm(W) X 90cm(D) X 74cm(H)	Each	10469	12353.42	14577.04	15565.31
866	Versatila V2 Table for Faculty Sitting Area - Size:150cm(W) x 89.4cm(D) x 75cm(H)	Each	17387	20516.66	24209.66	25850.99
867	) Executive Table with Right-Unit and Pedestal - Size:180cm(W) x 210cm(D) x 75cm(H)	Each	59638	70372.84	83039.95	88669.78
868	in Desk Table - Size: 180cm(W) x 90cm(D) x 75cm(H)	Each	61939	73088.02	86243.86	92090.91
869	Back Unit for Impress Desk Table - Size: 221.5cm(W) x 41cm(D) x 200cm(H)	Each	67637	79811.66	94177.76	100562.69
870	Display Unit TV Cabinet Walnut Colour - Size: 140cm(W) x 40cm(D) x 75.4cm(H)	Each	18348	21650.64	25547.76	27279.81
871	Time Out 4-Seater PU Coated Dining Table -Size: 113.5cm(W) x 117.5cm(D) x 75cm(H)	Each	15032	17737.76	20930.56	22349.58
872	Café Chair without Armrest - Size: 52.5cm(W) x 55.8cm(D) x 84.5cm(H) x 45cm (Seat Height)	Each	2503	2953.54	3485.18	3721.46
873	Apple Dining Table 6 Seater Glass Top - Size: 160cm(W) x 90cm(D) x 75cm(H)	Each	44686	52729.48	62220.79	66439.14
874	Silver Dining Chair - Size: 44.5cm(W) x 41.5cm(D) x 96cm(H)	Each	5136	6060.48	7151.37	7636.20
875	Dark Walnut Dining Chair - Size: 45cm(W) x 45cm(D) x 95cm(H)	Each	5280	6230.40	7351.87	7850.30
876	Coffee Table Walnut Colour - Size: 100cm(W) x 65cm(D) x 45cm(H)	Each	13274	15663.32	18482.72	19735.78
877	3-Seater Leatherite Sofa - Size: 205.5cm(W) x 92cm(D) x 82cm(H)	Each	29800	35164.00	41493.52	44306.64
878	2-Seater Leatherite Sofa - Size: 100cm(W) x 92cm(D) x 82cm(H)	Each	24340	28721.20	33891.02	36188.71
879	Single Seater Leatherite Sofa - Size: 86cm(W) x 92cm(D) x 82cm(H)	Each	18670	22030.60	25996.11	27758.56
880	Plain Almira - Size: 91.6cm(W) x 48.6cm(D) x 198cm(H)	Each	18687	22050.66	26019.78	27783.83



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881	Glass Door Storwel Almirah - Size: 91.6cm(W) x 48.6cm(D) x 198cm(H)	Each	23668	27928.24	32955.32	35189.58
882	Single Sided Wood & Steel Book Rack Base Unit - Size:90cm(W) x 30cm(D) x 189cm(H)	Each	18371	21677.78	25579.78	27314.00
883	All Steel Periodical Display Rack - Size:90cm(W) X 45cm(D) x 183cm(H)	Each	17210	20307.80	23963.20	25587.83
884	4 Door Bookcase (Without Top) - Size:91.4cmW x 32cm(D) x 174.2cm(H)	Each	23471	27695.78	32681.02	34896.68
885	White Board 4ft. X 3ft. With Stand	Each	3980	4696.40	5541.75	5917.46
886	L-Shaped Workstation made of 19mm thk white MDF board with pvc edges.Size:1800mm(L) + 1200mm(L)X 600mm(D)X 1200mm(H)	Each	41180	48592.40	57339.03	61226.42
887	Danger Board 33 kV/ 11 kV/ LT	Each	123	145.14	171.27	182.88
888	Route and Joint Indicator	Each	139	164.02	193.54	206.67
	<b>Meter Box</b>					
889	Poly carbonate weather proof outdoor type Meter cover boxes for single phase meter size 315mm x 265mm x 130mm along with zinc plated clamps	Each	254.19	299.94	353.93	377.93
890	Poly carbonate weather proof outdoor type Meter cover boxes for three phase meters 445mm x 345mm x 170mm along with zinc plated clamps	Each	396.69	468.09	552.35	589.80
891	Deep drawn M.S. sheet weather proof outdoor type Meter cover box for single phase Meter size 300mm x 250mm x 160mm along with Zinc plated clamps	Each	321	378.78	446.96	477.26
892	Deep drawn M.S. sheet weather proof outdoor type Meter cover box for three phase Meter size 500mm x 300mm x 160mm along with Zinc plated clamps	Each	1086.09	1281.59	1512.27	1614.80
893	Metal Box of CT 800/5 Amp	Each	8180.20	9652.64	11390.12	12162.33
894	Meter Box made of m/s sheet etc. CRCA Metal sheet each fitted with 4no. Racing cost CT ratio 400/5A	Each	2186.8	2580.37	3044.84	3251.27
895	Meter Box	Each	424.58	501.00	591.18	631.26



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896	Meter Box made of m/s sheet etc. CRCA Metal sheet each fitted with 4no. Racing cost CT ratio 800/5A	Each	2215.4	2614.17	3084.72	3293.85
897	Metal Box of CT 400/5 Amp	Each	8180.20	9652.64	11390.12	12162.33
	<b>Gas insulated Switchgear S/S</b>					
898	30kV, 10kA, Metal Oxide, station class, Surge Arrester (SCADA Compliant)(for 33kV Incoming Line, HT side of 2nos. Power Transformers and 33/0.433kV Station Transformer) - Outdoor Type with Surge Counter.	Set	13389.69	15799.84	18643.81	19907.80
899	33kV Indoor Gas Insulated Switchgear Panel (SCADA compliants) with: Breaker: 36KV, 1250 A, (25KA S.C. rating), 3-Ph, indoor type Breaker (with 30V DC tripping/closing coil and associated control) along with marshalling box, terminal connectors and required accessories complete as per applicable TS CT:36KV, 1-PH, 25KA (800^00-200/ 1-1 -1 A) indoor type Current Transformer, having three secondary cores (protection & metering & current differential protection) along with terminal connectors, junction box and required accessories etc. complete as per applicable TS ( 1 set = 3 nos.) PTs: 36KV, 1-PH, 33KV/110 V, single core outdoor type Potential Transformer along with terminal connectors, junction box and required accessories etc. complete as per applicable TS ( 1 set= 3 nos.) and digital Ammeter/voltmeter/Energy meter, O/C and E/F relay etc. The cable chamber shall have 3 nos., 20kV, 10 kA distribution class valve type lightning arresters and isolators of capacity given in TS. for Feeder Protection	Set	1700062.00	2006073.16	2367166.33	2527652.18
900	33kV Indoor Gas Insulated Switchgear Panel (SCADA compliants) consisting of 36 KV Breaker-	Set	1700062.00	2006073.16	2367166.33	2527652.18



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
	630A,25 KA for 3 sec,3 phase Single Busbar-1250A(Copper) , 36 KV single phase, (800-400-200/1-1 A) 3 Nos of Indoor type CT's,33 KV/110Volts Potential transformers, indoor mounting type control panel, Control cabelling between GIS and indoor control panel and required accessories,bi-metalic clamps,ammeter ,voltmeter,modem compatible DLMS compliant class 1 meter static tri-vector energy meter,relays and accessories complete for Bus Coupler protection.					
901	33kV Indoor Gas Insulated Switchgear Panel (SCADA compliants) consisting of 36 KV Breaker-630A,25 KA for 3 sec,3 phase Single Busbar-1250A(Copper) , 36 KV single phase, (800-400-200/1-1-1A) 3 Nos of Indoor type CT's,33 KV/110Volts Potential transformers, indoor mounting type control panel, Control cabelling between Breaker's and indoor control panel and required accessories,bi-metalic clamps,ammeter ,voltmeter,modem compatible DLMS compliant class 1 meter static tri-vector energy meter,relays and accessories complete for power transformer protection.	Set	1500055.00	1770064.90	2088676.58	2230281.77
902	11 KV indoor gas insulated switch gear panel (SCADA compliants) consisting of 1250 A, 25kA for 3 seconds, 3-ph, indoor type Breaker along with 12 kV, 1-Phase, 600-300/1-1-1-1 Amp 3 Nos indoor type Current Transformer, 11 kV/110 Volts Potential Transformers, indoor mounting type control panel for Transformer breaker, control cabling between Breaker and indoor control panel and required accessories, bi-metalic clamps, A-	Set	1260046.00	1486854.28	1754488.05	1873436.39



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
	meter, volt-meter, Modem compatible DLMS Complaint Class A Static Tri-Vector Energy Meter, Relay & accessories complete for transformer protection					
903	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor gas insulated switch gear panel (SCADA compliants) along with 12 kV, 1-Phase, 600-300/1-1-1-1 Amp 3 Nos indoor type Current Transformer, 11 kV/110 Volts Potential Transformers, indoor mounting type control panel for Transformer breaker, control cabling between Breaker and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, Modem compatible DLMS Complaint Class A Static Tri-Vector Energy Meter, Relay & accessories complete for bus coupler protection	Set	1260046.00	1486854.28	1754488.05	1873436.39
904	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor gas insulated switch gear panel (SCADA compliants) along with 12 kV, 1-Phase, 600-300/1-1-1-1 Amp 3 Nos indoor type Current Transformer, 11 kV/110 Volts Potential Transformers, indoor mounting type control panel for Transformer breaker, control cabling between Breaker and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, Modem compatible DLMS Complaint Class A Static Tri-Vector Energy Meter, Relay & accessories complete for feeder protection	Set	1216711.00	1435718.98	1694148.40	1809005.91
905	Remote Terminal Unit (RTU) & Accessories with PC & connections with 30 nos. analog points for voltage, frequency, MW, MVAR ; 3 positional analog points for OLTC and 28 digital points for breaker and isolator status.	Set	621957.51	733909.86	866013.63	924726.42



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
906	Flexible Cu. Earth bond 1cm dia & 500mm long, both end provision of socket suitable for M-16 bolts.	Set	562.66	663.94	783.45	836.56
907	G-3 GI Beam(5.05mtr long, consisting of 2 Nos 150X75 X5.7mm) for 33kV incoming line - (2 nos. Beam- one for Surge Arrester and other for Isolator, Nominal Unit Wt - 0.2 MT)	Set	15680.16	18502.59	21833.06	23313.26
908	GI Spikes with cone and GI ( 2 nos) base plate 10mm (50x2500 mm GI pipe) (Unit Wt=0.04 MT)	Set	3279.31	3869.58	4566.10	4875.67
909	12 kV, 630 A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), Gang Operated Isolator along with earth switch and Support Insulators, Operating Mechanism, Base Channel, down Pipe and all required accessories complete as per technical specifications, without earth switch for substation transformers.	Set	15081.25	17795.87	20999.13	22422.80
910	60 KG/mtr Rail pole pieces 5.4 mts ( 2.7x2) 44.62 kg per mtr/ Transformer (Unit Wt=0.240 MT)	Set	18138.75	21403.72	25256.39	26968.69
911	2 tier 2 rows cable trench (internal width 1500 mm,depth 680 mm, width 75X75X6 mm support angles fixed RCC column of 250 X 250 mm & with ladder type cable tray (45X45X5mm two angles at both side having welded flats of 25X5 mm at a gap of 150mm) for Power & control Cable	Set	3801.77	4486.09	5293.59	5652.47
912	Chequerred plate 1000X300X5.6mm thick for Cable Trench in side Control Room 12 Mtr	Mtr	65897.39	77758.92	91755.53	97976.24
913	Overhead hoist beam mounted remote operated for lifting of equipment of control room,capacity 5 tonnes	MT	1010987.03	1192964.69	1407698.33	1503135.51
914	6kV, 800 A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), motorised indoor floor mounted off load Isolator along with all required	Each	57812.53	68218.79	80498.17	85955.68



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
	accessories complete as per technical specifications, scope of works and approved					
915	External Electrification in switch yard area including power receptacles, station yard lighting with 6 Nos lighting pole (fitted with 2x100 watts LED flood light) made of 11 meters high Steel Tubular Poles (IS 2713 part I, II III) of designation 410 – SP - 60 and 6 nos light (1 X 250 W LED) on structure & control room complete as per technical specifications, approved drawings and scope of the work.	Set	508474.58	600000.00	708000.00	756000.00
916	Internal Electrification works of control room comprising of Main Distribution Board, Sub-distribution Boards, copper flexible multi conductor 2.5 sqmm wiring (for light & fan)/4 sqmm wiring(for power points), power and light points, conduits, fan/LED lamps/tube fittings, exhaust fans, switches, sockets, 2mm thick, PVC 25mm dia conduits pipes in recess, plugs, miniature circuit breakers, seperate independent earthing (2 Nos of 40mm GI Pipe/3-m long) etc as required including DC emergency lighting and auto-change-over switch as per technical specifications, approved drawings and scope of work.	Lumpsum	215042.77	253750.47	299425.55	319725.59
917	Head Distance to Fault Locator (Offline) with signature analyser. A)Accessories & Laptop as per latest technical specifications	Set	2550000.0	3009000.00	3550620.00	3791340.00
	<b>Tower line for river crossings</b>					
918	D Type Tower for 33kV, 11kV (Double Circuit line) (13.56MT each) with all related nuts and bolts including foundation nuts and bolts (G I type)	MT	76003.69	89684.36	105827.54	113002.29



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919	D Type Tower for 33kV, 11kV (four Circuit line) (15.14MT)(Double circuit tower +3meter extension each) with all related nuts and bolts including foundation nuts and bolts (G I type)	MT	76003.69	89684.36	105827.54	113002.29
920	Compression type tension hardware fitting for earth wire	Each	467.00	551.06	650.25	694.34
921	Vibration damper suitable for 7/3.15 mm GI Earth wire	Each	690.53	814.83	961.49	1026.68
922	25x500 mm flexible Cu. Earth bond.	Each	457.56	539.92	637.11	680.30
	<b>Covered Conductor &amp; accessories</b>					
923	ACSR covered Panther Conductor (200 sq. mm)	Mtr	1369.2	1615.65	1906.47	2035.72
924	ACSR covered Wolf Conductor (150 sq. mm)	Mtr	971.7	1146.65	1353.05	1444.78
925	ACSR covered Dog conductor (100 sq. mm)	Mtr	690.9	815.32	962.08	1027.30
926	Mid Span Joint(150 sq mm & 200 sq mm)	Each	1674.03	1975.36	2330.92	2488.95
927	Suspension ties((150 sq mm & 200 sq mm))	Each	1976.28	2332.01	2751.77	2938.33
928	Tension Clamp(Wedge type)((150 sq mm & 200 sq mm))	Each	2266.91	2674.95	3156.44	3370.44
929	Insulation piercing connector( Bare to Covered)((150 sq mm & 200 sq mm))	Each	3138.80	3703.78	4370.46	4666.76
930	Insulation piercing connector(Covered to covered)((150 sq mm & 200 sq mm))	Each	2906.30	3429.43	4046.73	4321.08
931	Insulation piercing connector with alumunium bail for Earthing((150 sq mm & 200 sq mm))	Each	4998.83	5898.62	6960.37	7432.26
932	Mid Span Joint(100 sq mm & 50 sq mm)	Each	1925.13	2271.65	2680.55	2862.28
933	Suspension ties((100 sq mm & 50 sq mm))	Each	2272.72	2681.81	3164.54	3379.08
934	Tension Clamp(Wedge type)((100 sq mm & 50 sq mm)	Each	2606.95	3076.20	3629.92	3876.01
935	Insulation piercing connector( Bare to Covered)(100 sq mm & 50 sq mm)	Each	3609.62	4259.35	5026.03	5366.78
936	Insulation piercing connector(Covered to covered)(100 sq mm & 50 sq mm)	Each	3342.24	3943.84	4653.73	4969.24



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937	Insulation piercing connector with Aluminium bail for Earthing (100 sq mm & 50 sq mm)	Each	5748.65	6783.41	8004.42	8547.10
	<b>LED Lights and related Items</b>					
938	LED light-190W	Each	To be adopted from Energy Department SoR			
939	LED light-120W	Each				
940	LED light-75W	Each				
941	LED light-40W	Each				
942	18 Watt LED Panel Bulb with outer 205x205x25 mm sq. and 180x180 mm inner	Each				
	<b>Diesel Generator sets(Three Phase) with AMF Panel</b>					
943	10KVA	Each	To be adopted from Energy Department SoR			
944	20KVA	Each				
945	30KVA	Each				
946	40KVA	Each				
947	50KVA	Each				
948	62.5KVA	Each				
949	82.5KVA	Each				
950	100KVA	Each				
951	160KVA	Each				
	<b>TRW Related Items</b>					
952	1/2 " L.T. Brass Studs	Each	157.5	185.85	219.30	234.17
953	1/2 " H.T. Brass Studs	Each	118.0	139.24	164.30	175.44
954	L.T Bushing 3347 250 AmP	Each	14.24	16.80	19.82	21.17
955	L.T. Bushing 250 Amp	Each	31.27	36.90	43.54	46.49
956	Kraft Paper 4 Mile	Kg	188.9	222.90	263.02	280.86
957	Insulating Paper Tap 2.0 mm	Kg	203.39	240.00	283.20	302.40
958	Press Board 1 mm	Kg	84.5	99.67	117.62	125.59
959	Bakelite Tube 3/8X1/2"	Mtr	5.85	6.90	8.14	8.69
960	Empire Sleeving size 4 mm	Mtr	4.24	5.00	5.90	6.30
961	R.C. Sheet 3 X2X1/2 mm	Kg	254.24	300.00	354.00	378.00



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
962	Inline Connector 6 mm	Each	4.24	5.00	5.90	6.30
963	Cotton Tap 1"	Roll	59.32	70.00	82.60	88.20
964	R.C. Strip	Mtr	50.85	60.00	70.80	75.60
965	R.C. Washer 50X28X2	Each	3.14	3.70	4.37	4.66
966	Silicagel Breather 200 KVA	Each	199.15	235.00	277.30	296.10
967	M.Seal	Kg	254.24	300.00	354.00	378.00
968	C.I.Cap 1" 8 1/2"	Each	6.78	8.00	9.44	10.08
969	Insulating Paper top 2.5 mil 20 mm	Kg	203.39	240.00	283.20	302.40
970	Crap Paper	Kg	303.39	358.00	422.44	451.08
971	G.P. Thinner	Litre	59.32	70.00	82.60	88.20
972	D.A. Gray Paint	Litre	228.81	270.00	318.60	340.20
973	White Paint	Litre	228.81	270.00	318.60	340.20
974	Nylon Washer 3/4"	Each	2.54	3.00	3.54	3.78
975	M.S. Plug	Kg	16.95	20.00	23.60	25.20
976	L.T. AL.Strip 6.50X4.50 mm	Kg	164.93	194.62	229.65	245.22
977	DPC Aluminum Winding wire	Kg	266.0	313.88	370.38	395.49
978	DPC Aluminum Winding Strip	Kg	266.0	313.88	370.38	395.49
979	Transformer testing bench panel for 10 kVA to 500 kVA distribution transformer with its Installation & Commissioning	Nos.	949375.0	1120262.50	1321909.75	1411530.75
	<b>Transformer Repairing Items</b>					
980	L.T Bushing Rod assembly of 750 KVA Transformer.	Set	6500	7670.00	9050.60	9664.20
981	H.T Bushing Rod assembly of 750 KVA Transformer.	Set	2000	2360.00	2784.80	2973.60
982	L.T Bushing insulator of 750 KVA Transformer.	Each	500	590.00	696.20	743.40
983	H.T Bushing insulator of 750 KVA Transformer.	Each	1500	1770.00	2088.60	2230.20
984	L.T Bushing gasket set of 750 KVA Transformer.	Each	1000	1180.00	1392.40	1486.80
985	H.T Bushing gasket set of 750 KVA Transformer.	Each	900	1062.00	1253.16	1338.12
986	Tank gasket set of 750 KVA Transformer.	Each	8500	10030.00	11835.40	12637.80
987	Silica gel breather of 750 KVA Transformer.	Each	2500	2950.00	3481.00	3717.00
988	Arching Horn of 750 KVA Transformer,	Each	250	295.00	348.10	371.70
989	L.T Bushing Rod assembly of 500 KVA Transformer	Set	4200	4956.00	5848.08	6244.56



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
990	H.T Bushing Rod assembly of 500 KVA Transformer	Set	1650	1947.00	2297.46	2453.22
991	L.T Bushing insulator of 500 KVA Transformer	Each	370	436.60	515.19	550.12
992	H.T Bushing insulator of 500 KVA Transformer	Each	1200	1416.00	1670.88	1784.16
993	L.T Bushing gasket set of 500 KVA Transformer	Each	650	767.00	905.06	966.42
994	H.T Bushing gasket set of 500 KVA Transformer	Each	550	649.00	765.82	817.74
995	Tank gasket set of 500 KVA Transformer	Each	5500	6490.00	7658.20	8177.40
996	Silica gel Breather of 500 KVA Transformer	Each	1800	2124.00	2506.32	2676.24
997	Arching Horn of 500 KVA Transformer	Each	200	236.00	278.48	297.36
998	L.T Bushing Rod assembly of 400 KVA Transformer	Set	3400	4012.00	4734.16	5055.12
999	H.T Bushing Rod assembly of 400 KVA Transformer	Set	1550	1829.00	2158.22	2304.54
1000	L.T Bushing insulator of 400 KVA Transformer	Each	350	413.00	487.34	520.38
1001	H.T Bushing insulator of 400 KVA Transformer	Each	1100	1298.00	1531.64	1635.48
1002	L.T Bushing gasket set of 400 KVA Transformer	Each	550	649.00	765.82	817.74
1003	H.T Bushing gasket set of 400 KVA Transformer	Each	480	566.40	668.35	713.66
1004	Tank gasket set of 400 KVA Transformer	Each	4800	5664.00	6683.52	7136.64
1005	Silica gel Breather of 400 KVA Transformer	Each	1800	2124.00	2506.32	2676.24
1006	Arching Horn of 400 KVA Transformer	Each	200	236.00	278.48	297.36
1007	L.T Bushing Rod assembly of 315 KVA Transformer	Set	3100	3658.00	4316.44	4609.08
1008	H.T Bushing Rod assembly of 315 KVA Transformer	Set	1450	1711.00	2018.98	2155.86
1009	L.T Bushing insulator of 315 KVA Transformer	Each	350	413.00	487.34	520.38
1010	H.T Bushing insulator of 315 KVA Transformer	Each	1100	1298.00	1531.64	1635.48
1011	L.T Bushing gasket set of 315 KVA Transformer	Each	500	590.00	696.20	743.40
1012	H.T Bushing gasket set of 315 KVA Transformer	Each	450	531.00	626.58	669.06
1013	Tank gasket set of 315 KVA Transformer	Each	4500	5310.00	6265.80	6690.60
1014	Silica gel Breather of 315 KVA Transformer	Each	1800	2124.00	2506.32	2676.24
1015	Arching Horn of 315 KVA Transformer	Each	200	236.00	278.48	297.36
1016	L.T Bushing Rod assembly of 250 KVA Transformer	Set	2900	3422.00	4037.96	4311.72
1017	H.T Bushing Rod assembly of 250 KVA Transformer	Set	950	1121.00	1322.78	1412.46
1018	L.T Bushing insulator of 250 KVA Transformer	Each	235	277.30	327.21	349.40
1019	H.T Bushing insulator of 250 KVA Transformer	Each	650	767.00	905.06	966.42
1020	L.T Bushing gasket set of 250 KVA Transformer	Each	325	383.50	452.53	483.21



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1021	H.T Bushing gasket set of 250 KVA Transformer	Each	350	413.00	487.34	520.38
1022	Tank gasket set of 250 KVA Transformer	Each	3250	3835.00	4525.30	4832.10
1023	Silica gel Breather of 250 KVA Transformer	Each	1500	1770.00	2088.60	2230.20
1024	Arching Horn of 250 KVA Transformer	Each	200	236.00	278.48	297.36
1025	L.T Bushing Rod assembly of 200 KVA Transformer	Set	2500	2950.00	3481.00	3717.00
1026	H.T Bushing Rod assembly of 200 KVA Transformer	Set	850	1003.00	1183.54	1263.78
1027	L.T Bushing insulator of 200 KVA Transformer	Each	200	236.00	278.48	297.36
1028	H.T Bushing insulator of 200 KVA Transformer	Each	650	767.00	905.06	966.42
1029	L.T Bushing gasket set of 200 KVA Transformer	Each	315	371.70	438.61	468.34
1030	H.T Bushing gasket set of 200 KVA Transformer	Each	350	413.00	487.34	520.38
1031	Tank gasket set of 200 KVA Transformer	Each	3000	3540.00	4177.20	4460.40
1032	Silica gel Breather of 200 KVA Transformer	Each	1500	1770.00	2088.60	2230.20
1033	Arching Horn of 200 KVA Transformer	Each	200	236.00	278.48	297.36
1034	L.T Bushing Rod assembly of 100 KVA Transformer	Set	890	1050.20	1239.24	1323.25
1035	H.T Bushing Rod assembly of 100 KVA Transformer	Set	850	1003.00	1183.54	1263.78
1036	L.T Bushing insulator of 100 KVA Transformer	Each	120	141.60	167.09	178.42
1037	H.T Bushing insulator of 100 KVA Transformer	Each	650	767.00	905.06	966.42
1038	L.T Bushing gasket set of 100 KVA Transformer	Each	290	342.20	403.80	431.17
1039	H.T Bushing gasket set of 100 KVA Transformer	Each	310	365.80	431.64	460.91
1040	Tank gasket set of 100 KVA Transformer	Each	1200	1416.00	1670.88	1784.16
1041	Silica gel Breather of 100 KVA Transformer	Each	1500	1770.00	2088.60	2230.20
1042	Arching Horn of 100 KVA Transformer	Each	200	236.00	278.48	297.36
1043	L.T Bushing Rod assembly of 63 KVA Transformer	Set	750	885.00	1044.30	1115.10
1044	H.T Bushing Rod assembly of 63 KVA Transformer	Set	750	885.00	1044.30	1115.10
1045	L.T Bushing insulator of 63 KVA Transformer	Each	90	106.20	125.32	133.81
1046	H.T Bushing insulator of 63 KVA Transformer	Each	650	767.00	905.06	966.42
1047	L.T Bushing gasket set of 63 KVA Transformer	Each	290	342.20	403.80	431.17
1048	H.T Bushing gasket set of 63 KVA Transformer	Each	310	365.80	431.64	460.91
1049	Tank gasket set of 63 KVA Transformer	Each	1050	1239.00	1462.02	1561.14
1050	Silica gel Breather of 63 KVA Transformer	Each	1200	1416.00	1670.88	1784.16
1051	Arching Horn of 63 KVA Transformer	Each	160	188.80	222.78	237.89



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1052	L.T Bushing Rod assembly of 25 KVA Transformer	Set	600	708.00	835.44	892.08
1053	H.T Bushing Rod assembly of 25 KVA Transformer	Set	750	885.00	1044.30	1115.10
1054	L.T Bushing insulator of 25 KVA Transformer	Each	90	106.20	125.32	133.81
1055	H.T Bushing insulator of 25 KVA Transformer	Each	650	767.00	905.06	966.42
1056	L.T Bushing gasket set of 25 KVA Transformer	Each	290	342.20	403.80	431.17
1057	H.T Bushing gasket set of 25 KVA Transformer	Each	310	365.80	431.64	460.91
1058	Tank gasket set of 25 KVA Transformer	Each	900	1062.00	1253.16	1338.12
1059	Silica gel Breather of 25 KVA Transformer	Each	1200	1416.00	1670.88	1784.16
1060	Arching Horn of 25 KVA Transformer	Each	160	188.80	222.78	237.89
	<b>AB Switch Repairing Item</b>					
1061	Jaw of Air Break Switch 600A	Each	1400	1652.00	1949.36	2081.52
1062	Blade of of Air Break Switch 600A	Each	1200	1416.00	1670.88	1784.16
1063	Post insulator of Air Break Switch 600A	Each	400	472.00	556.96	594.72
1064	Bearing of Air Break Switch 600A	Each	350	413.00	487.34	520.38
1065	Phase coupling pipe of Air Break Switch 600 A	Each	400	472.00	556.96	594.72
1066	Down Pipe of Air Break Switch 600 A	Each	900	1062.00	1253.16	1338.12
1067	Operating Handle of Air Break Switch 600 A	Each	600	708.00	835.44	892.08
1068	Operating leaver of Air Break Switch 600 A	Each	200	236.00	278.48	297.36
1069	Connector of Air Break Switch 600 A	Each	320	377.60	445.57	475.78
1070	Arching horn of Air Break Switch 600 A	Each	55	64.90	76.58	81.77
1071	Jaw of Air Break Switch 400A	Each	1300	1534.00	1810.12	1932.84
1072	Blade of of Air Break Switch 400A	Each	1100	1298.00	1531.64	1635.48
1073	Post insulator of Air Break Switch 400A	Each	400	472.00	556.96	594.72
1074	Bearing of Air Break Switch 400A	Each	350	413.00	487.34	520.38
1075	Phase coupling pipe of Air Break Switch 400 A	Each	400	472.00	556.96	594.72
1076	Down Pipe of Air Break Switch 400 A	Each	900	1062.00	1253.16	1338.12
1077	Operating Handle of Air Break Switch 400 A	Each	600	708.00	835.44	892.08
1078	Operating leaver of Air Break Switch 400 A	Each	200	236.00	278.48	297.36
1079	Connector of Air Break Switch 400 A	Each	320	377.60	445.57	475.78
1080	Arching horn of Air Break Switch 400 A	Each	55	64.90	76.58	81.77
1081	Jaw of Air Break Switch 200A	Each	1200	1416.00	1670.88	1784.16



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1082	Blade of of Air Break Switch 200A	Each	1000	1180.00	1392.40	1486.80
1083	Post insulator of Air Break Switch 200A	Each	400	472.00	556.96	594.72
1084	Bearing of Air Break Switch 200A	Each	350	413.00	487.34	520.38
1085	Phase coupling pipe of Air Break Switch 200 A	Each	400	472.00	556.96	594.72
1086	Down Pipe of Air Break Switch 200 A	Each	900	1062.00	1253.16	1338.12
1087	Operating Handle of Air Break Switch 200 A	Each	600	708.00	835.44	892.08
1088	Operating leaver of Air Break Switch 200 A	Each	200	236.00	278.48	297.36
1089	Connector of Air Break Switch 200 A	Each	320	377.60	445.57	475.78
1090	Arching horn of Air Break Switch 200 A	Each	55	64.90	76.58	81.77
	<b>VCB Repairing Item</b>					
1091	Trip Coil of 33KV VCB	Each	1250	1475.00	1740.50	1858.50
1092	Trip Coil of 11KV VCB	Each	1200	1416.00	1670.88	1784.16
1093	Closing Coil of 33KV VCB	Each	1250	1475.00	1740.50	1858.50
1094	Closing Coil of 11KV VCB	Each	1200	1416.00	1670.88	1784.16
1095	Push Button Switch 5A	Each	25	29.50	34.81	37.17
1096	Test Terminal Block 5A	Each	21	24.78	29.24	31.22
1097	33 KV Indoor current transformers of ratio as required suitable for metering and protection.	Each	8750	10325.00	12183.50	13009.50
1098	33 KV outdoor current transformers of ratio as required suitable for metering and protection.	Each	18450	21771.00	25689.78	27431.46
1099	11 KV Indoor current transformers of ratio as required suitable for metering and protection.	Each	3890	4590.20	5416.44	5783.65
1100	11 KV outdoor current transformers of ratio as required suitable for metering and protection.	Each	9890	11670.20	13770.84	14704.45
1101	33000/110 volts single phase voltage Transformer Indoor.	Each	8500	10030.00	11835.40	12637.80
1102	33000/110 volts single phase voltage Transformer outdoor.	Each	18400	21712.00	25620.16	27357.12
1103	11000/110 volts single phase voltage Transformer Indoor.	Each	16500	19470.00	22974.60	24532.20



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					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1104	11000/110 volts single phase voltage Transformer outdoor.	Each	9890	11670.20	13770.84	14704.45
1105	Flush type switchboard mounting pattern 96x96 sq.mm M.I. Voltmeter	Each	2600	3068.00	3620.24	3865.68
1106	Voltmeter phase selector switch.	Each	150	177.00	208.86	223.02
1107	Indicating lamps coloured red, amber and blue, white, green, etc.	Each	195	230.10	271.52	289.93
1108	Auxiliary switch having minimum of 8 contacts, 4 normally open and 4 normally closed	Each	940	1109.20	1308.86	1397.59
1109	Flush mounting pattern 96x96 sq.mm M.I. Ammeter	Each	2600	3068.00	3620.24	3865.68
1110	Ammeter selector switch to indicate phase current	Each	150	177.00	208.86	223.02
1111	Over current and Earth fault numerical relay	Each	30950	36521.00	43094.78	46016.46
1112	Automatic door illuminating lamps with Switch	Each	45	53.10	62.66	66.91
1113	240 V, 100 W, AC single phase anti / condensation heaters, with thermostat (0-60 deg. C) and switch.	Each	495	584.10	689.24	735.97
1114	Operation counter for VCB	Each	120	141.60	167.09	178.42
1115	Bus Bar Spout Epoxy casted R Phase of 33KV indoor VCB	Each	1925	2271.50	2680.37	2862.09
1116	Bus Bar Spout Epoxy casted Y Phase of 33KV indoor VCB	Each	1925	2271.50	2680.37	2862.09
1117	Bus Bar Spout Epoxy casted B Phase of 33KV indoor VCB	Each	1925	2271.50	2680.37	2862.09
1118	Circuit Spout Epoxy casted of 33KV indoor VCB	Each	1925	2271.50	2680.37	2862.09
1119	Housing for vacuum interrupter of 33KV indoor VCB	Each	1995	2354.10	2777.84	2966.17
1120	Drive Insulator 33KV VCB	Each	1350	1593.00	1879.74	2007.18
1121	Release Coil of 33KV indoor VCB	Each	485	572.30	675.31	721.10
1122	Bus Bar Spout Epoxy casted R Phase of 11KV indoor VCB	Each	825	973.50	1148.73	1226.61
1123	Bus Bar Spout Epoxy casted Y Phase of 11KV indoor VCB	Each	825	973.50	1148.73	1226.61



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1124	Bus Bar Spout Epoxy Casted B Phase of 11KV indoor VCB	Each	825	973.50	1148.73	1226.61
1125	Circuit Spout Epoxy casted of 11KV indoor VCB	Each	825	973.50	1148.73	1226.61
1126	Housing for vacuum interrupter of 11KV indoor VCB	Each	975	1150.50	1357.59	1449.63
1127	Drive Insulator of 11KV VCB	Each	460	542.80	640.50	683.93
1128	Release Coil of 11KV indoor VCB	Each	485	572.30	675.31	721.10
1129	Vacuum Interrupter of 33KV Outdoor Type	Each	38750	45725.00	53955.50	57613.50
1130	Vacuum Interrupter of 33KV Indoor Type	Each	38750	45725.00	53955.50	57613.50
1131	Vacuum Interrupter of 11KV Outdoor Type	Each	21250	25075.00	29588.50	31594.50
1132	Vacuum Interrupter of 11KV Indoor Type	Each	21250	25075.00	29588.50	31594.50
1133	Buzzer/ Hooter	Each	488	575.84	679.49	725.56
1134	T N C Switch	Each	485	572.30	675.31	721.10
<b>MRT Related Items</b>						
1135	Fully Automatic energy meter test bench with 0.02 Class, 10 Position, for testing of 1 Ph & 3 Ph Energy meters with 5 Years maintenance, accreditation from NABL and Software Updation.	Set	15090000	17806200.00	21011316.00	22435812.00
1136	Instrument Transformer (CT-PT) test system	Set	7265000	8572700.00	10115786.00	10801602.00
1137	Transformer turn ratio meter and measurement test kit	Set	359500	424210.00	500567.80	534504.60
1138	Transformer Oil filtering machine- 500 GPH	Set	465000	548700.00	647466.00	691362.00
1139	Circuit Breaker Operational Analyzer	Set	599000	706820.00	834047.60	890593.20
1140	3 Ph Relay Test kit with all necessary accessories	Set	2187000	2580660.00	3045178.80	3251631.60
1141	Primary Injection Kit-1000 A with relay testing facility	Set	345000	407100.00	480378.00	512946.00
1142	HT Coil winding Machine its installation, testing & commissioning	Set	95000	112100.00	132278.00	141246.00
1143	LT Coil winding Machine its installation, testing & commissioning	Set	112500	132750.00	156645.00	167265.00
1144	03 (Three) Phase Transformer winding resistance meter	Set	389500	459610.00	542339.80	579108.60



S. No.	Name of Materials/ Equipment	Unit	Proposed SOR Rate Jharkhand' 2022-23 Excl. GST	Proposed SOR Rate Jharkhand' 2022-23 Incl. GST	Turnkey Rates	
					<5 Crore project Value (118% of final rate) with GST	>5 Crore Project Value (126% of final rate) with GST
1145	Digital Multimeter, 750V	Set	9800	11564.00	13645.52	14570.64
1146	Capacitance Tan Delta Test Set for Transformer, motor and Switchgear	Set	2484000	2931120.00	3458721.60	3693211.20
1147	Capacitance Tan Delta Test Set for cables	Set	2443500	2883330.00	3402329.40	3632995.80
1148	Vaccum Interrupter Tester	Set	875000	1032500.00	1218350.00	1300950.00
1149	Secondary Injection kit	Set	1750000	2065000.00	2436700.00	2601900.00
1150	Digital HT Earth Tester	Set	89500	105610.00	124619.80	133068.60
1151	3 Ph Power Quality Analyser	Set	279000	329220.00	388479.60	414817.20
1152	05 KV insulation tester (Manual)	Set	89500	105610.00	124619.80	133068.60
1153	10 KV insulation tester (Motarized)	Set	235000	277300.00	327214.00	349398.00
1154	Digital Clamp meter; 20-1000A, 200 V DC	Each	19000	22420.00	26455.60	28249.20
1155	Digital Clamp meter; 20A (1mA-20A)	Each	7650	9027.00	10651.86	11374.02
1156	Discharge Rod (Make fibre)	Set	6900	8142.00	9607.56	10258.92
1157	Thermal Imaging Camera	Each	491000	579380.00	683668.40	730018.80
1158	Single Phase & Three Phase Meter Automatic Testing Bench for 20 positions (0.02S Class RSM)	Each	15090000	17806200.00	21011316.00	22435812.00
	<b>FRP FENCING</b>					
1159	Fiber Reinforced Plastic (FRP) Fencing for 11/0.433KV, 63/100/200/500 KVA Substation	Each	80000	94400.00	111392.00	118944.00



# Unit Rate Summary Sheet for JBVNL Cost Data

*The Cost Data estimates have been prepared based on different voltage level and equipment used.*

*The estimates are indicative in nature and are likely to change if any item in an estimate is replaced / added / deleted.*

## **UNIT RATE SUMMARY**

## 2. Unit rate summary sheet (JBVNL COST DATA BOOK 2022-23)

S. No.	Work Particular	Per Unit Cost		
		in INR	in INR Lacs	
1	1 no. 1 phase Service Connection (0 to 4 KW)	4,519	0.05	
2	1 no. 3 phase Service Connection (5 to 10 KW)	10,405	0.10	
3	1 no. 3 phase Service Connection (10 to 30 KW)	20,601	0.21	
4	1 no. 3 phase Service Connection (30 to 50 KW)	37,390	0.37	
5	1 no. 3 phase Service Connection (50 to 85 KW)	44,604	0.45	
6	1 no. 3 phase HT Service Connection (85 to 200 KVA)	1,45,122	1.45	
7	1 no. 1 phase U/G Service Connection (12 Flats Schemes)	69,057	0.69	
8	1 no. 3 phase Service Connection u/g 5 to 10 KW	31,585	0.32	
9	1 no. 3 phase Service Connection u/g upto 20 KW	42,421	0.42	
10	1 no. 3 phase Service Connection u/g 20 to 50 KW	76,321	0.76	
11	1 no. 3 phase Service Connection u/g 50 to 75 KW	1,04,149	1.04	
12	1 no. 3 phase HT Service Connection u/g 85 to 200 KVA	1,67,219	1.67	
13	New 33/11 KV PSS with 1x10 MVA Power T/F with two 33 KV incoming and Six 11 KV outgoing	<b>in Normal Soil</b>	2,98,81,773	298.82
		<b>In Hard Soil</b>	3,02,71,848	302.72
14	New 33/11 KV PSS with 2x5 MVA Power T/F with One 33 KV incoming, one 33 KV outgoing and four 11 KV outgoing	<b>in Normal Soil</b>	3,46,85,606	346.86
		<b>In Hard Soil</b>	3,51,41,768	351.42
15	1 KM 33KV Overhead DP Suspension line with 232 sq mm Panther Conductor on 13-meter 60kg/mtr Rail pole	<b>in Normal Soil</b>	3,826,787	38.27
		<b>In Hard Soil</b>	3,820,115	38.20
16	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 232 sq mm (Panther) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Starting & End)	<b>in Normal Soil</b>	2,896,585	28.96
		<b>In Hard Soil</b>	2,910,536	29.10
17	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 150 sq mm (Wolf) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Starting & End)	<b>in Normal Soil</b>	2,796,258	27.96
		<b>In Hard Soil</b>	2,810,209	28.10
s18	1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Starting & End)	<b>in Normal Soil</b>	2,512,635	25.13
		<b>In Hard Soil</b>	2,526,586	25.26
19	1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	12,948,241	129.48
		<b>In Hard Soil</b>	14,320,188	143.20
20	1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	12,188,338	121.88
		<b>In Hard Soil</b>	13,560,285	135.60
21	1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	10,526,679	105.26
		<b>In Hard Soil</b>	11,647,890	116.48
22	1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	7,139,637	71.39
		<b>In Hard Soil</b>	7,826,472	78.26
23	1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	6,723,437	67.23
		<b>In Hard Soil</b>	7,410,272	74.10



S. No.	Work Particular	Per Unit Cost		
			in INR	in INR Lacs
24	1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	5,876,100	58.76
		In Hard Soil	6,437,566	64.37
25	1 KM 33kV HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end)	In Normal Soil	9,779,916	97.79
		In Hard Soil	9,790,944	97.91
26	1 KM 33kV HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end)	In Normal Soil	10,143,100	101.43
		In Hard Soil	10,154,128	101.54
27	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center) and 2 Nos. DP ( Starting & End)	In Normal Soil	895,286	8.95
		In Hard Soil	900,883	9.01
28	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 80 sq mm (Raccoon) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center) and 2 Nos. DP ( Starting & End)	In Normal Soil	716,758	7.17
		In Hard Soil	722,355	7.22
29	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 50 sq mm (Rabbit) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center) and 2 Nos. DP ( Starting & End)	In Normal Soil	681,122	6.81
		In Hard Soil	686,719	6.87
30	1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 34 sq mm (Weasel) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center) and 2 Nos. DP ( Starting & End)	In Normal Soil	519,196	5.19
		In Hard Soil	524,793	5.25
31	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx95mm <sup>2</sup> +80mm <sup>2</sup> bare messenger	In Normal Soil	943,277	9.43
		In Hard Soil	948,230	9.48
32	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx50mm <sup>2</sup> +70mm <sup>2</sup> bare messenger	In Normal Soil	813,193	8.13
		In Hard Soil	818,147	8.18
33	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	10,487,734	104.88
		In Hard Soil	11,859,682	118.60
34	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	9,803,656	98.04
		In Hard Soil	11,175,604	111.76
35	1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	7,846,382	78.47
		In Hard Soil	8,967,593	89.67
36	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	5,806,286	58.06
		In Hard Soil	6,493,121	64.93
37	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	5,432,379	54.32
		In Hard Soil	6,119,214	61.19
38	1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)	In Normal Soil	4,382,278	43.82
		In Hard Soil	4,943,744	49.43
39	1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end)	In Normal Soil	7,810,053	78.10
		In Hard Soil	7,821,081	78.21



S. No.	Work Particular	Per Unit Cost		
		in INR	in INR Lacs	
40	1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end)	<b>in Normal Soil</b>	6,354,252	63.54
		<b>In Hard Soil</b>	6,365,281	63.65
41	1 KM LT Line of 34 sq mm (Weasel) conductor with 40 Mtr Average span	<b>in Normal Soil</b>	<b>410,620.57</b>	4.11
		<b>In Hard Soil</b>	<b>415,743.51</b>	4.16
42	1 KM LT Line of 50 sq mm (Rabbit) conductor with 40 Mtr Average span	<b>in Normal Soil</b>	<b>561,332.90</b>	5.61
		<b>In Hard Soil</b>	<b>566,455.84</b>	5.66
43	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx95+1Cx70 sq mm	<b>in Normal Soil</b>	<b>683,793.47</b>	6.84
		<b>In Hard Soil</b>	<b>688,915.47</b>	6.89
44	1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx50+1Cx35 sq mm	<b>in Normal Soil</b>	<b>642,866.84</b>	6.43
		<b>In Hard Soil</b>	<b>647,988.83</b>	6.48
45	11/.4 KV DSS With 25 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>282,978.80</b>	2.83
		<b>In Hard Soil</b>	<b>283,771.18</b>	2.84
46	11/.4 KV DSS With 63 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>333,470.40</b>	3.33
		<b>In Hard Soil</b>	<b>334,262.77</b>	3.34
47	11/.4 KV DSS With 100 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>391,193.05</b>	3.91
		<b>In Hard Soil</b>	<b>391,985.42</b>	3.92
48	11/.4 KV DSS With 200 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>521,326.98</b>	5.21
		<b>In Hard Soil</b>	<b>522,119.35</b>	5.22
49	11/.4 KV DSS With 315 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>910,249.95</b>	9.10
		<b>In Hard Soil</b>	<b>911,042.33</b>	9.11
50	11/.4 KV DSS With 500 KVA Distribution Transformer	<b>in Normal Soil</b>	<b>1,221,286.13</b>	12.21
		<b>In Hard Soil</b>	<b>1,222,078.51</b>	12.22





**SERVICE CONNECTIONS**



### 3. Single phase Service connection for Load up to 4 kW

S. No	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	GI service pipe 25 mm diameter 3 mtr length	Nos.	1	444	444
2	Service main anchor clamp for proper support of service cable	Pair	1	78	78
3	Hook Bolt	Nos.	2	20	40
4	G.I. wire SWG No. 8	Kg	4	84	336
5	Adhesive Insulation Tape	Nos.	1	283	283
6	Link clip	Pkt.	1	20	20
7	Teak wood Board	Nos.	1	30	30
8	Single Phase Electronic Meter, two wire, 5-30 Amp. class 1.0 accuracy with Box	Nos.	1	1,489	1,489
9	LT PVC Cable 2 Core 4 mm <sup>2</sup> (armoured)	Mtr	35	31	1,074
<b>(A) Total Material cost</b>					<b>3,793</b>
<b>(B) Contingency @ 3% of (A)</b>					114
<b>(C) Transportation Charge @ 4% of (A)</b>					152
<b>(D) Labour Charges</b>					334
<b>(E) Tools and Plants 2% of (A)</b>					76
<b>(F) Supervision Charge @ 15% of (D)</b>					50
<b>Grand total</b>					<b>4,519</b>



#### 4. Three phase Service connection for Load of 5 to 10 KW

Sl. No.	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	GI service pipe 40 mm diameter 3 mtr length	Nos.	1	524	524
2	Service main anchor clamp for proper support of service cable	Pair	1	78	78
3	Hook Bolt	Nos.	2	20	40
4	G.I. wire SWG No. 8	Kg	4	84	336
5	Adhesive Insulation Tape	Roll	1	283	283
6	Link clip	Pkt	1	30	30
7	Teak wood Board	Nos.	1	40	40
8	Three Phase 4 - wire AC static whole current meter, Electronic energy meter with box (10-60)Amp	Nos.	1	5,828	5,828
9	PVC Three Phase service cable 4 core 6 mm <sup>2</sup> (Armoured)	Mtr	35	48	1,692
<b>(A) Total Material cost</b>					<b>8,851</b>
<b>(B) Contingency @ 3% of (A)</b>					266
<b>(C) Transportation Charge @ 4% of (A)</b>					354
<b>(D) Labour Charges</b>					658
<b>(E) Tools and Plants 2% of (A)</b>					177
<b>(F) Supervision Charge @ 15% of (D)</b>					99
<b>Grand Total</b>					<b>10,405</b>



### 5. *LT Three phase Service connection for Load of 10 to 30 KW*

Sl. No.	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	GI service pipe 40 mm diameter 3 mtr length	Nos.	1	524	524
2	Service main anchor clamp for proper support of service cable	Pair	1	78	78
3	Hook Bolt	Nos.	2	20	40
4	G.I. wire SWG No. 8	Kg	4	84	336
5	Adhesive Insulation Tape	Roll	1	283	283
6	Link clip	Pkt	1	40	40
7	Teak wood Board	Nos.	1	40	40
8	Three Phase 4 - wire AC static whole current meter, Electronic energy meter with box (10-60)Amp	Nos.	1	5,828	5,828
9	LT XLPE Cable 3.5 Core 25mm <sup>2</sup> (Armoured)	Mtr	35	315	11,037
<b>(A) Total  Material cost</b>					<b>18,205</b>
<b>(B) Contingency @ 3% of (A)</b>					<b>546</b>
<b>(C) Transportation Charge @ 4% of (A)</b>					<b>728</b>
<b>(D) Labour Charges</b>					<b>658</b>
<b>(E) Tools and Plants 2% of (A)</b>					<b>364</b>
<b>(F) Supervision Charge @ 15% of (D)</b>					<b>99</b>
<b>Grand Total</b>					<b>20,601</b>



## 6. *LT Three phase Service connection for Load of 30 to 50 KW*

Sl. No.	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	GI Service pipe 60mm diameter 3 mtr length	Nos.	1	636	636
2	Service main anchor clamp for proper support of service cable	Pair	1	78	78
3	Hook Bolt	Nos.	2	20	40
4	G.I. wire SWG No. 8	Kg	4	84	336
5	Adhesive Insulation Tape	Roll	1	283	283
6	Link clip	Pkt	1	40	40
8	LTCT Electronic Meter (200/150/100/5) 3 Phase 4 Wire with meter box, Class 0.5s accuracy	Nos.	1	15,909	15,909
9	LT XLPE Cable 3.5 Core 50mm <sup>2</sup> (Armoured)	Mtr	35	409	14,320
<b>(A) Total Material cost</b>					<b>31,641</b>
<b>(B) Contingency @ 3% of (A)</b>					949
<b>(C) Transportation Charge @ 4% of (A)</b>					1,266
<b>(D) Labour Charges</b>					2,523
<b>(E) Tools and Plants 2% of (A)</b>					633
<b>(F) Supervision Charge @ 15% of (D)</b>					378
<b>Grand Total</b>					<b>37,390</b>



### 7. *LT Three phase Service connection for Load of 50 to 85 KW*

Sl. No.	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	GI Service pipe 60mm diameter 3 mtr length	Nos.	1	636	636
2	Service main anchor clamp for proper support of service cable	Pair	1	78	78
3	Hook Bolt	Nos.	2	20	40
4	G.I. wire SWG No. 8	Kg	4	84	336
5	Adhesive Insulation Tape	Roll	1	283	283
6	Link clip	Pkt	1	40	40
8	LTCT Electronic Meter (200/150/100/5) 3 Phase 4 Wire with meter box, Class 0.5s accuracy	Nos.	1	15,909	15,909
9	LT XLPE Cable 3.5 core 95 mm <sup>2</sup> (Armoured)	Mtr	35	598	20,938
<b>(A) Total Material cost</b>					<b>38,259</b>
<b>(B) Contingency @ 3% of (A)</b>					<b>1,148</b>
<b>(C) Transportation Charge @ 4% of (A)</b>					<b>1,530</b>
<b>(D) Labour Charges</b>					<b>2,523</b>
<b>(E) Tools and Plants 2% of (A)</b>					<b>765</b>
<b>(F) Supervision Charge @ 15% of (D)</b>					<b>378</b>
<b>Grand Total</b>					<b>44,604</b>



### 8. HT Three phase Service connection for Load of 85 to 200 KVA

Sl. No.	Description of material	Unit	Qty	Rate	Amt. (Rs.)
1	11 KV Metering Cubicle with PT ratio 11KV/ $\sqrt{3}$ /110V and CT ratio 20/5A, 30/5A, 60/5A, 100/5A, 200/5A, 400/5A, 0.5 accuracy class for both	Nos.	1	71,698	71,698
2	Angle 50 * 50 mm & Saddle for Cable support	Nos.	1	538	538
3	G.I. wire SWG No. 8	Kg	4	84	336
4	High Temperature Tape	Roll	2	793	1,586
5	Link clip	Pkt	1	40	40
6	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.5S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	16,132	16,132
7	2.5 mm <sup>2</sup> copper 10 core control cable (Armoured)	Mtr	30	183	5,479
8	11 KV XLPE Cable 3 Core 95mm <sup>2</sup> (Armoured)	Mtr	35	886	31,021
<b>(A) Total Material cost</b>					<b>1,26,830</b>
<b>(B) Contingency @ 3% of (A)</b>					<b>3,805</b>
<b>(C) Transportation Charge @ 4% of (A)</b>					<b>5,073</b>
<b>(D) Labour Charges</b>					<b>5,980</b>
<b>(E) Tools and Plants 2% of (A)</b>					<b>2,537</b>
<b>(F) Supervision Charge @ 15% of (D)</b>					<b>897</b>
<b>Grand Total</b>					<b>1,45,122</b>



9. *Single phase Service connection with UG Cable (Flat schemes having 12 flats)*

S. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Single Phase Electronic Meter,two wire, 5-30 Amp. class 1.0 accuracy with Box	nos	12	1,489	17,867
2	LT XLPE Cable 3.5 Core 50mm2 (Armoured)	mtr	50	409	20,456
3	SMDB(1 in, 3 out ) with housing 5 nos 20 Amp SPN MCB,	nos	1	2,232	2,232
4	Aluminium Lugs 50 sq. mm	nos	8	11.4	91
6	Meter Box with bus bar box having seals	nos	1	9,652.6	9,653
<b>A</b>	<b>Sub Total (in INR)</b>				<b>50,299</b>
<b>B</b>	Sundries Charges including nut bolts, pvc pipe etc. (in INR)		@	3%	1,509
<b>C</b>	Contigencies Charges (in INR)		@	3%	1,509
<b>D</b>	Store Charges (in INR)		@	3%	1,509
<b>E</b>	Transportation Cost (in INR)		@	4%	2,012
<b>F</b>	T & P Cost (in INR)		@	2%	1,006
<b>G</b>	Over head Cost (in INR)		@	10%	5,030
<b>H</b>	Excavation and Trench laying charges		LS		2,175
<b>I</b>	Labour Charges		LS	334	4,009
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>69,057</b>



**10. LT 1 no. 3 phase U/G Service Connection 5-10 KW**

S.No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Three Phase 4 - wire AC static whole current meter, Electronic energy meter with box (10-60)Amp	nos	1	5,828	5,828
2	LT PVC Cable 3.5 Core 10 mm <sup>2</sup> (Armoured)	mtr	35	68	2,391
3	TPN Distribution Board 12-way, 50 Amp TPN MCB,	nos	1	14,760	14,760
4	Aluminium Lugs 10 Sq. mm.	nos	8	2.8	22
<b>A</b>	<b>Sub Total (in INR)</b>				<b>23,002</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	690
<b>C</b>	Contingencies Charges (in INR)		@	3%	690
<b>D</b>	Store Charges (in INR)		@	3%	690
<b>E</b>	Transportation Cost (in INR)		@	4%	920
<b>F</b>	T & P Cost (in INR)		@	2%	460
<b>G</b>	Overhead Cost (in INR)		@	10%	2,300
<b>H</b>	Excavation and Trench laying charges		LS		2,175
<b>I</b>	Labour Charges		LS	658	658
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>31,585</b>



**11. LT 1 no. 3 phase U/G Service Connection 10 to 30 KW**

S. No	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Three Phase 4 - wire AC static whole current meter, electronic energy meter with box (10-60) Amp	nos	1	5,828	5,828
2	LT XLPE Cable 3.5 Core 25mm2 (Armoured)	mtr	35	315	11,037
3	TPN Distribution Board 12-way, 50 Amp TPN MCB,	nos	1	14,760	14,760
4	Aluminium Lugs 25 sq. mm	nos	8	5.7	46
<b>A</b>	<b>Sub Total (in INR)</b>				<b>31,670</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	950
<b>C</b>	Contingencies Charges (in INR)		@	3%	950
<b>D</b>	Store Charges (in INR)		@	3%	950
<b>E</b>	Transportation Cost (in INR)		@	4%	1,267
<b>F</b>	T & P Cost (in INR)		@	2%	633
<b>G</b>	Overhead Cost (in INR)		@	10%	3,167
<b>H</b>	Excavation and Trench laying charges		LS		2,175
<b>I</b>	Labour Charges		LS	658	658
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>42,421</b>



**12. LT 1 no. 3 phase U/G Service Connection 30 KW to 50 KW**

S. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	LTCT Electronic Meter (200/150/100/5) 3 Phase 4 Wire with meter box, Class 0.5s accuracy	nos	1	15,909	15,909
2	LT XLPE Cable 3.5 Core 50mm <sup>2</sup> (Armoured)	mtr	35	409	14,320
3	TPN Distribution Board 12-way, 100 Amp TPN MCB,	nos	1	26,899	26,899
5	Aluminium Lugs 95 sq. mm	nos	8	21.4	171
<b>A</b>	<b>Sub Total (in INR)</b>				<b>57,298</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	1,719
<b>C</b>	Contingencies Charges (in INR)	@		3%	1,719
<b>D</b>	Store Charges (in INR)	@		3%	1,719
<b>E</b>	Transportation Cost (in INR)	@		4%	2,292
<b>F</b>	T & P Cost (in INR)	@		2%	1,146
<b>G</b>	Overhead Cost (in INR)	@		10%	5,730
<b>H</b>	Excavation and Trench laying charges	LS			2,175
<b>I</b>	Labour Charges	LS		2,523	2,523
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>76,321</b>



**13. LT 1 no. 3 phase U/G Service Connection 50 KW to 85 KW**

S. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	LTCT Electronic Meter (200/150/100/5) 3 Phase 4 Wire with meter box, Class 0.5s accuracy	nos	1	15,909	15,909
2	LT XLPE Cable 3.5 core 95 mm <sup>2</sup> (Armoured)	mtr	35	598	20,938
3	TPN Distribution Board 12 way, 150 Amp TPN MCB,	nos	1	42,544	42,544
4	Alluminium Lugs 95 sq. mm	nos	8	21.4	171
<b>A</b>	<b>Sub Total (in INR)</b>				<b>79,561</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	2,387
<b>C</b>	Contingencies Charges (in INR)	@		3%	2,387
<b>D</b>	Store Charges (in INR)	@		3%	2,387
<b>E</b>	Transportation Cost (in INR)	@		4%	3,182
<b>F</b>	T & P Cost (in INR)	@		2%	1,591
<b>G</b>	Over head Cost (in INR)	@		10%	7,956
	Excavation and Trench laying charges	LS			2,175
<b>H</b>	Labour Charges	LS		2,523	2,523
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>1,04,149</b>



**14. HT 1 no. 3 phase U/G Service Connection 85 to 200 KVA**

S. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.5S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	nos	1	16,132	16,132
2	11 KV XLPE Cable 3 Core 95mm <sup>2</sup> (Armoured)	mtr	35	886	31,021
2	High Temperature Tape	Roll	2	793	1,586
3	2.5 mm <sup>2</sup> copper 10 core control cable (Armoured)	mtr	30	183	5,479
4	11 KV Metering Cubicle with PT ratio 11KV/ $\sqrt{3}$ /110V and CT ratio 20/5A, 30/5A, 60/5A, 100/5A, 200/5A, 400/5A, 0.5 accuracy class for both	nos	1	71,698	71,698
5	Alluminium Lugs 120 sq. mm	nos	2	29.9	60
<b>A</b>	<b>Sub Total (in INR)</b>				<b>125976</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	3779
<b>C</b>	Contingencies Charges (in INR)		@	3%	3779
<b>D</b>	Store Charges (in INR)		@	3%	3779
<b>E</b>	Transportation Cost (in INR)		@	4%	5039
<b>F</b>	T & P Cost (in INR)		@	2%	2520
<b>G</b>	Over head Cost (in INR)		@	10%	12598
<b>H</b>	Excavation and Trench laying charges		LS		3,769
<b>I</b>	Labour Charges		LS	5,980	5980
<b>J</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				<b>1,67,219</b>





# **LABOUR COSTING**



## 15. Service connection labour

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	New Labour rate as per Latest Govt. of Jharkhand daily labour wages (in INR)		Remarks/ Comments
				Normal Soil	Hard Soil	
A	B	C	D	F = E*(1+E)	G = F*1.5	H
<b>Installation of energy meter</b>						
1	Installation of Single-phase energy Meter	Per Service connection	256.29	334.06	334.06	Estimation based on no. of connections done in a day and per day labour cost involved.
2	Installation of Three phase Four wire whole current energy Meter	Per Service connection	502.59	658.13	658.13	
3	Installation of LTCT whole current energy Meter	Per Service connection	1,975.53	2,523.10	2,523.10	
4	Installation of HT Trivector energy Meter	Per Service connection	4,808.54	5,980.31	5,980.31	
<b>Shifting /Replacement of energy meter</b>						
5	Shifting / Replacement of Single phase energy Meter	Per Service connection	442.59	598.13	598.13	Estimation based on no. of connections done in a day and per day labour cost involved.
6	Shifting / Replacement of Three phase Four wire whole current energy Meter	Per Service connection	865.17	1,176.25	1,176.25	
7	Shifting / Replacement of LTCT whole current energy Meter	Per Service connection	3,178.06	4,273.20	4,273.20	
8	Shifting / Replacement of HT Trivector energy Meter	Per Service connection	7,717.08	10,060.62	10,060.62	
<b>Trench and Cable laying charges for LT cables</b>						
9	Excavation for LT cable laying 600 mm deep x 500 x1000 mm long trench	RMT	32.47	45.55	50.20	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 1st July 2016
10	Filling in foundation trenches and Plenth in layers not exceeding 150 mm thick well watered, rammed fully compacted and fine dressed with earth obtained from excavation of foundation trenches within a lead of 50 M and lift of 1.5 M all complete as per building	mtrs3	39.40	55.28	55.28	



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	New Labour rate as per Latest Govt. of Jharkhand daily labour wages (in INR)		Remarks/ Comments
				Normal Soil	Hard Soil	
	specification and direction of E/I					
<b>Trench and Cable laying charges for HT cables</b>						
11	Excavation for 33KV/11KV cable laying 1200 mm deep x 500x1000 mm long trench	RMT	64.94	91.09	100.40	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 1st July 2022
12	Filling in foundation trenches and Plenth in layers not exceeding 150 mm thick well watered, rammed fully compacted and fine dressed with earth obtained from excavation of foundation trenches within a lead of 50 M and lift of 1.5 M all complete as per building specification and direction of E/I	mtrs3	39.40	55.28	55.28	
<b>Fuse Call Charges</b>						
13	Labour Charges per fuse call attended by 3 teams per subdivision	per fuse call	84.78	116.74	116.74	Estimation based on no. of calls in a day and per day labour wages



## 16. 33 kV labour line

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Survey and investigation including pegging	Per route Km.	1,411.44	37.70%	1,943.50	1,943.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Pole pit excavation (for 52/60 kg 13 mtrs. Rail Pole)	Per Pit	355.54	37.70%	489.56	734.34	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Erection of Pole (Rail Pole 52 kg 13 mtrs.)						
	(a) Single pole with base plate.	Per Pole	1,175.65	37.70%	1,618.82	1,618.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate.	Per DP Complete	1,830.46	37.70%	2,520.47	2,520.47	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri pole with base plate with cross bracing on rail pole	Per TP Complete	2,642.77	37.70%	3,638.97	3,638.97	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	(d) Four pole with base plate.	Per FP Complete	4,702.59	37.70%	6,475.26	6,475.26	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
4	Erection of Pole (Rail Pole 60 kg 13 mtrs.)						
	(a) Single pole with base plate.	Per Pole	1,356.51	37.70%	1,867.86	1,867.86	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate.	Per DP Complete	2,112.08	37.70%	2,908.24	2,908.24	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri pole with base plate with cross bracing on rail pole	Per TP Complete	3,049.35	37.70%	4,198.82	4,198.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four pole with base plate	Per FP Complete	5,426.06	37.70%	7,471.44	7,471.44	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
5	Pole pit excavation (RS Joist Pole 9.3 meter (175x85mm) 19.6 kgs per mtr)	Per Pit	254.34	37.70%	350.22	525.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
6	Erection of Pole (RS Joist Pole 9.3 meter (175x85mm) 19.6 kgs per mtr)						
	(a) Single pole with base plate.	Per Pole	317.00	37.70%	436.50	436.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate.	Per DP Complete	634.02	37.70%	873.02	873.02	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri pole with base plate with cross bracing on rail pole	Per TP Complete	951.02	37.70%	1,309.52	1,309.52	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four pole with base plate	Per FP Complete	1,268.03	37.70%	1,746.02	1,746.02	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
7	Pole pit excavation (RS Joist Pole 9 meter (116x100mm) 23 kgs per mtr)	Per Pit	246.14	37.70%	338.93	508.39	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
8	Erection of Pole (RS Joist Pole 9 meter (116x100mm) 23 kgs per mtr)						



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	(a) Single pole with base plate.	Per Pole	360.00	37.70%	495.70	495.70	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate.	Per DP Complete	720.00	37.70%	991.40	991.40	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri pole with base plate with cross bracing on rail pole	Per TP Complete	1,080.00	37.70%	1,487.11	1,487.11	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four pole with base plate	Per FP Complete	1,439.99	37.70%	1,982.81	1,982.81	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
9	Pole pit excavation (H Beam Pole 11 meters (152x152mm) 37.1 kgs per mtr)	Per Pit	300.84	37.70%	414.24	621.35	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
10	Erection of Pole (H Beam Pole 11 meters (152x152mm) 37.1 kgs per mtr)						
	(a) Single pole with base plate.	Per Pole	709.73	37.70%	977.27	977.27	Escalation of 37.70 % on rate mentioned in



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							2018-19 cost data book
	(b) Double pole with base plate.	Per DP Complete	1,419.47	37.70%	1,954.54	1,954.54	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri pole with base plate with cross bracing on rail pole	Per TP Complete	2,129.21	37.70%	2,931.83	2,931.83	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four pole with base plate	Per FP Complete	2,838.94	37.70%	3,909.10	3,909.10	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
11	Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 20 cft	2,277.73		2,123.43	2,123.43	Ref_Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
		Per 40 cft	4,555.46		4,246.86	4,246.86	
		Per 60 cft	6,833.19		6,370.28	6,370.28	
		Per 80 cft	9,110.92		8,493.71	8,493.71	
12	Stay pit excavation	Per Pit	228.98	37.70%	315.30	472.95	Escalation of 37.70 % on rate



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							mentioned in 2018-19 cost data book
13	Erection of stay with stone /RCC stay plate and stay binding and fitting of stay clamps etc. and filling with earth and proper ramming thereof complete	Per Stay	488.85	37.70%	673.12	673.12	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
14	Concreting of stay with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per Stay (7.5 cft)	854.15		796.29	796.29	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022 Calculation: (INR 4428.8 per mtr <sup>3</sup> ) x 0.0283 (conversion factor for mtr <sup>3</sup> to cft) x [cft]
15	Fixing & fitting of V-cross arm	Nos.	116.53	37.70%	160.46	160.46	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
16	Fixing & fitting of line DP Channel	Set	260.68	37.70%	358.95	358.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
17	Fixing & fitting of cross bracing in DP	Per cross bracing	177.77	37.70%	244.78	244.78	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
18	Fitting of all brackets (including top bracket and guard bracket) on						
	a) Single pole	Per Pole	169.09	37.70%	232.82	232.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Double pole	Per DP	507.25	37.70%	698.46	698.46	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Tri pole	Per TP	676.33	37.70%	931.28	931.28	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	d) Four pole	Per FP	1,014.49	37.70%	1,396.91	1,396.91	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
19	a) Fitting of pin insulator on bracket on single pole	Per Pole	70.57	37.70%	97.18	97.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	b) Fitting of 70 KN disc insulator with hardware fitting including pin insulator where necessary (for piloting, etc)	Per six sets	239.95	37.70%	330.40	330.40	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
20	Laying out and sagging of Conductor Including mid jointing wherever necessary for the three phases						
	(i) For Dog (100 sq.mm.) Conductor	Per route Km.	10,240.78	37.70%	14,101.10	14,101.10	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(ii) For Wolf (150 sq.mm.) Conductor	Per route Km.	18,896.06	37.70%	26,019.05	26,019.05	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(iii) For Panther (232 sq.mm.) Conductor	Per route Km.	25,342.04	37.70%	34,894.88	34,894.88	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
21	Laying out and sagging of Dog conductor at River crossing (if span exceeds more than 400 feet and upto 500 feet)	Per running Km. (3 phase)	15,361.17	37.70%	21,151.66	21,151.66	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Laying out and sagging of Wolf conductor at River crossing (if span exceeds more than 400 feet and upto 500 feet)	Per running Km. (3 phase)	28,344.10	37.70%	39,028.58	39,028.58	



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	Laying out and sagging of Panther conductor at River crossing (if span exceeds more than 400 feet and upto 500 feet)	Per running Km. (3 phase)	38,013.07	37.70%	52,342.32	52,342.32	
22	Laying out and sagging of Dog conductor at River crossing (if span exceeds more than 500 feet)	Per running Km. (3 phase)	20,481.56	37.70%	28,202.21	28,202.21	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Laying out and sagging of Wolf conductor at River crossing (if span exceeds more than 500 feet)	Per running Km. (3 phase)	37,792.13	37.70%	52,038.10	52,038.10	
	Laying out and sagging of Panther conductor at River crossing (if span exceeds more than 500 feet)	Per running Km. (3 phase)	50,684.09	37.70%	69,789.77	69,789.77	
23	Pin Binding as per standard practice or as per direction of Engineer I/C	Per Pole	70.57	37.70%	97.18	97.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
24	Jumpering connection of conductors including earth wires at all cut points / D.P. as per direction of the Engineer I/C	Per DP	132.32	37.70%	182.20	182.20	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
25	Earthing including fixing of GI Pipe and wire as per direction of Engineer I/C (GI Pipe and wire to be supplied by Nigam)	Per earthing	566.04	37.70%	779.41	1,169.11	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
26	Laying out and sagging of GI wire (7/12 SWG) including fitting of earth clamp and in mid span jointing wherever necessary	Per route Km.	2,686.89	37.70%	3,699.72	3,699.72	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
27	Fixing and fitting of danger board on pole near Road corner wherever necessary as per direction of E/I	Per Board	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
28	Guarding of power line as per approved practices	Per Running Meter	47.05	37.70%	64.79	64.79	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
29	Cutting of Rails	Per cutting	117.61	37.70%	161.95	161.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
30	Erection of Rail pole beyond specified length including excavation of extra pole pit depth for special locations.	Rft. Of Pole length	29.41	37.70%	40.49	40.49	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
31	Jointing of rail pieces by welding by jointing fishplate's of M.S. channel and welding.	Per inch of welding	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
32	Drilling of hole in rail pole	Per Hole	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							mentioned in 2018-19 cost data book
33	Drilling of hole in V Cross / Clamp/ angle/ flat etc	per Hole	10.71	37.70%	14.74	14.74	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
34	Arc Welding of Flat / angle / channel etc	Per inch of welding	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
35	Fitting of MS angle on V cross arm with rail pole as tie	per V cross arm	47.79	37.70%	65.80	65.80	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
36	Binding of conductor	Per Pole	139.68	37.70%	192.33	192.33	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
37	Fitting of extra clamps	Each	47.79	37.70%	65.80	65.80	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
38	Installation of 33KV AB Switch	Each Set	1,742.24	37.70%	2,398.99	2,398.99	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
39	Tree branches trimming (for number of trees upto 10 nos. in one km)	LS / per km	367.57	37.70%	506.12	506.12	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
40	Tree branches trimming (for number of trees more than 10 nos. in one km)	LS / per km	708.20	37.70%	975.15	975.15	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
41	Testing and Commissioning	LS / per km	1,102.70	37.70%	1,518.37	1,518.37	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
42	Manual Transportation of all materials: Unskilled 24 Mandays + Skilled (Electrician Grade-I) 2 Mandays	Per KM	8,766.81	37.70%	12,071.51	12,071.51	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
43	Painting of Pole (with material) - Including scrubbing of old paint, applying 2 coats of alluminium paint over primer, and painting all the metal parts of the structure	Per M	80.74	37.70%	111.18	111.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



## 17. 11kV labour line

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
1	Survey and investigation including pegging	Per route Km.	1,411.44	37.70%	1,943.50	1,943.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Pole pit excavation (for 400 KG W.L 9 mtr. PSC pole)	Per Pit	244.66	37.70%	336.88	505.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Erection of Pole						
	(a) Single PSC Pole 400 KG W.L (9 mtr.)	Pole	395.21	37.70%	544.18	544.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double PSC Pole 400 KG W.L (9 mtr.)	Per DP	785.70	37.70%	1,081.87	1,081.87	
	(c) Tri PSC Pole 400 KG W.L (9 mtr.)	Per TP	1,185.62	37.70%	1,632.55	1,632.55	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
(d) Four PSC Pole 400 KG W.L (9 mtr.)	Per FP	1,580.83	37.70%	2,176.73	2,176.73		
4	a) Filling of half depth of Pole pit with Jhama chips/stone chips and proper ramming after filling with earth in case of PSC Pole (stone/Jhama chips to be supplied by the contractor)	Per Pole Pit	352.86	37.70%	485.88	485.88	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	+ b) Filling of Pole pit with earth in layers pouring water in each layer and ramming the earth	Per Pole Pit	91.89	37.70%	126.53	126.53	Escalation of 37.70 % on rate mentioned



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	properly as per standard practice of the Nigam.						in 2018-19 cost data book
	<b>(a+b) OR c</b>		-		-		
	c) Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixuture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 20 cft	2,506.70		2,123.43	2,123.43	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
5	Pole pit excavation (for Tubular pole 9 mtr)	Per Pit	203.82	37.70%	280.65	280.65	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
6	Erection of Pole (Tubular Pole 9 mtr)						
	(a) Single pole with base plate	Per Pole	345.07	37.70%	475.14	475.14	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate	Per DP Complete	690.14	37.70%	950.29	950.29	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
7	Pole pit excavation (for Tubular pole 11 mtr)	Per Pit	244.66	37.70%	336.88	505.32	Escalation of 37.70 % on rate mentioned



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							in 2018-19 cost data book
8	Erection of Pole (Tubular Pole 11mtr)						
	(a) Single pole with base plate	Per Pole	505.25	37.70%	695.71	695.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate	Per DP Complete	1,010.52	37.70%	1,391.44	1,391.44	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
9	Pole pit excavation (for Tubular pole 13 mtr)	Per Pit	355.54	37.70%	489.56	734.34	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
10	Erection of Pole (Tubular Pole 13mtr)						
	(a) Single pole with base plate	Per Pole	763.45	37.70%	1,051.23	1,051.23	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double pole with base plate	Per DP Complete	1,526.90	37.70%	2,102.48	2,102.48	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
11	Concreting of stay with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm)	Per 20 cft	2,277.73		2,123.43	2,123.43	Ref: Building Construction Department (Govt. of
		Per 40 cft	4,555.46		4,246.86	4,246.86	



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)						Jharkhand) w.e.f. 28th July 2022
12	Fitting of HT Brackets and Earths wire clamps:						
	a) For Single Pole	Per Pole	112.92	37.70%	155.48	155.48	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For Double Pole	Per DP	362.26	37.70%	498.82	498.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) For Tri Pole	Per TP	475.18	37.70%	654.30	654.30	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	d) For Four Pole	Per FP	724.52	37.70%	997.63	997.63	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
13	Stay Pit Excavation	Per Pit	228.98	37.70%	315.30	472.95	Escalation of 37.70 % on rate mentioned in 2018-19



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							cost data book
14	Erection of Stay with stone / RCC Stay plate, Stay binding by fitting stay clamps etc.	Per Stay	211.73	37.70%	291.54	291.54	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
15	Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 5 cft	569.43		530.86	530.86	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
16	Fixing & fitting of V-cross arm	Nos.	68.63	37.70%	94.50	94.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
17	Fixing & fitting of line DP Channel	Set	137.27	37.70%	189.02	189.02	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
18	Fixing & fitting of cross bracing in DP	Per cross bracing	137.27	37.70%	189.02	189.02	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
19	Fitting of all brackets (including top bracket and guard bracket) on						
	a) Single pole	Per Pole	169.09	37.70%	232.82	232.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Double pole	Per DP	507.25	37.70%	698.46	698.46	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Tri pole	Per TP	676.33	37.70%	931.28	931.28	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	d) Four pole	Per FP	1,014.49	37.70%	1,396.91	1,396.91	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
20	a) Fixing and fitting of Pin Insulators with Pin on Single Pole		70.57	37.70%	97.18	97.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Fixing of all Disc. Insulators with hardware including Pin Insulator (if necessary) on Double Pole structure	Per DP	239.95	37.70%	330.40	330.40	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
21	Laying out and sagging of conductor including termination at cut point / DP and Mid Span jointing for all the three phases wherever necessary.						
	(i) Dog (100 sq.mm.) Conductor	Per Route Km	10,240.78	37.70%	14,101.10	14,101.10	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(i) Racoon (80 sq.mm.) Conductor	Per Route Km	8,265.40	37.70%	11,381.10	11,381.10	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(ii) Weasel (34 sq.mm.) Conductor	Per Route Km	3,326.95	37.70%	4,581.07	4,581.07	
22	Laying out and sagging of Rabbit (55 sq.mm.) conductor including termination at cut point and Mid span jointing wherever necessary						
	a) Four Cut Point	Per Route KM	7,315.2	37.70%	10,072.76	10,072.76	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Three Cut Point	Per Route KM	6,583.7	37.70%	9,065.48	9,065.48	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Two Cut Point	Per Route KM	4,499.2	37.70%	6,195.25	6,195.25	Escalation of 37.70 % on rate mentioned in 2018-19



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							cost data book
	d) One Cut Point	Per Route KM	3,287.9	37.70%	4,527.33	4,527.33	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
23	Laying out and sagging of Dog conductor at River crossing (if span exceeds more than 400 feet and upto 500 feet)	Per running Km. (3 phase)	15,361.17	37.70%	21,151.66	21,151.66	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Laying out and sagging of Racocon conductor at River crossing (if span exceeds more than 400 feet and upto 500 feet)	Per running Km. (3 phase)	12,398.11	37.70%	17,071.65	17,071.65	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
24	Laying out and sagging of Dog conductor at River crossing (if span exceeds more than 500 feet)	Per running Km. (3 phase)	20,481.57	37.70%	28,202.22	28,202.22	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Laying out and sagging of Racocon conductor at River crossing (if span exceeds more than 500 feet)	Per running Km. (3 phase)	16,530.81	37.70%	22,762.20	22,762.20	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
25	Pin Binding as per standard practice or as per direction of Engineer I/C	Per Pole	70.57	37.70%	97.18	97.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
26	Jumpering connection of conductors including	Per DP	132.32	37.70%	182.20	182.20	Escalation of 37.70 % on



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	earth wires at all cut points / D.P. as per direction of the Engineer I/C						rate mentioned in 2018-19 cost data book
27	Earthing including fixing of GI Pipe and wire as per direction of Engineer I/C (GI Pipe and wire to be supplied by Nigam)	Per earthing	366.99	37.70%	505.33	505.33	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
28	Laying out and sagging of GI wire no. 7/14 as earth wire including jointing to earth clamp (per three phases)	Per route Km.	2,686.89	37.70%	3,699.72	3,699.72	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
29	Fixing and fitting of 11KV AB Switch on DP with all hardware fitting used for sectionalising of Line as per direction of Engineer I/C	Per Switch	1,256.18	37.70%	1,729.71	1,729.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
30	Fixing and fitting of danger board on pole near Road corner wherever necessary as per direction of E/I	Per Board	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
31	Guarding of power line as per approved practices	Per Running Meter	47.05	37.70%	64.79	64.79	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
32	Fitting of MS angle on V cross arm with PSC pole as tie (excluding back clamp on PSC Pole)	per V cross arm	47.79	37.70%	65.80	65.80	Escalation of 37.70 % on rate mentioned in 2018-19



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							cost data book
33	Fitting of extra clamps	Each	47.79	37.70%	65.80	65.80	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
34	Arc Welding of Flat / angle / channel etc	Per inch of welding	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
35	Tree branches trimming (for number of trees upto 10 nos. in one km)	LS / per km	367.57	37.70%	506.12	506.12	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
36	Tree branches trimming (for number of trees more than 10 nos. in one km)	LS / per km	708.20	37.70%	975.15	975.15	Escalation mentioned in 2018-19 cost data book
37	Testing and Commissioning	LS / per km	1,102.70	37.70%	1,518.37	1,518.37	Escalation mentioned in 2018-19 cost data book
38	Manual Transportation	Per KM	7,456.46	37.70%	10,267.21	10,267.21	Escalation mentioned in 2018-19 cost data book



Remark 1 - Manual transportation charges given above are meant for entire quantity of material required for erection of one km line. In case length of line is in fraction, then proportionate charges should be calculated. Similarly, if the entire material required for 1 km of line is not required to be transported actual man days required for such transportation should be considered for deciding transportation charges.

Remark 2 - The above rates are indicative in nature subject to the provision of the material used in the BoQ. For instance While preparing an estimate if Rail poles/STP are used instead of PSC Poles, then the cost of installation is going to be the same as that labour rates for erection and installation of Rail poles/STP used under labour charges for installation of new 33 kV lines. Similarly the case if the PSC 200 kg is used in estimate previously employing PSC 400kg, the respective labour rates would be used irrespective of voltage level under which they were considered to operate.



## 18. 33-11 kV PSS labour

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Erection of 33KV Gantry column and girder including concrete foundation and top muffing for complete structures with a two-legged gantry column (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	22,788.89	37.70%	31,379.30	47,068.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Erection of structure for 33KV / 11KV CT / PT including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	8,468.66	37.70%	11,660.97	11,660.97	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Construction of brick foundation plinth of 33KV breaker as per approved drawing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Foundation	20,476.91	37.70%	28,195.81	42,293.72	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
4	Erection of structure for 33KV Horn Gap fuse set including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	9,409.60	37.70%	12,956.61	12,956.61	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
5	Erection of structure for 33KV / 11KV swing bus including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	14,114.41	37.70%	19,434.93	29,152.39	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
6	Erection of pedestal support structure for 33KV / 11KV	Per Structure	1,797.39	37.70%	2,474.93	3,712.39	Escalation of 37.70 %



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	power bus including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)						on rate mentioned in 2018-19 cost data book
7	Construction of brick foundation plinth of 11KV breaker as per approved drawing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Foundation	13,360.91	37.70%	18,397.39	18,397.39	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
8	Erection of structure for 11KV Horn Gap fuse set including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	8,468.66	37.70%	11,660.97	17,491.45	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
9	Erection of terminals / take off structure of 11KV line including concrete foundation and top muffing (including supply of stone/jhama chips and without cement which is to be supplied by JBVNL)	Per Structure	15,055.37	37.70%	20,730.58	20,730.58	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
10	Erection and commissioning of 33KV/110V CTPT combined metering units of different capacity for feeder metering including installation of HT trivector meter with meter box and other allied works complete	Per CTPT	2,751.44	37.70%	3,788.61	5,682.91	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
11	Fixing and fitting of AB switch complete with operating, handling and making necessary connections to the equipment		-		-		
	a) For 33KV side	Per Set	1,915.00	37.70%	2,636.88	2,636.88	Escalation of 37.70 % on rate mentioned



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					Normal Soil	Hard Soil	
	b) For 11KV Side	Per Set	1,374.68	37.70%	1,892.87	1,892.87	in 2018-19 cost data book Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
12	Fixing and fitting of post insulator on pedestal support structure including fixing of lower bus bar (Al. pipe.), jumper connection to the lower bus bar and to the swing bus		-		-		
	a) For 33KV side	For All Three Phase	1,966.45	37.70%	2,707.72	2,707.72	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For 11KV Side	For All Three Phase	1,440.85	37.70%	1,983.99	1,983.99	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
13	Fixing of lightening arrester (one set consisting of 3LA one in each circuit) with connection to line and earth.		-		-	-	
	a) For 33KV side	Per Set	2,113.48	37.70%	2,910.16	2,910.16	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For 11KV Side	Per Set	1,440.85	37.70%	1,983.99	1,983.99	Escalation of 37.70 %



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							on rate mentioned in 2018-19 cost data book
14	Fixing and fitting of Horn Gap fuse set and fitting of HT pin insulator of Horn		-		-		
	a) For 33KV	Each	918.90	37.70%	1,265.29	1,265.29	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For 11KV	Each	657.94	37.70%	905.96	905.96	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
15	Erection and commissioning of 11KV/110V CTPT combined metering units of different capacity for feeder metering including installation of HT trivector meter with meter box and other allied works complete	Per CTPT	1,414.30	37.70%	1,947.44	1,947.44	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
16	Fixing of 33KV PT on the structure and its connections	Per Set	1,374.68	37.70%	1,892.87	1,892.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
17	Fixing of 33KV CT on the structure and its connections	Per Set	1,374.68	37.70%	1,892.87	1,892.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
18	Fitting of disc Insulator to swing bus structure with hardware fittings		-		-		
	a) For 33KV side (One set shall consist of three strain sets. Each strain set consisting of 3 nos of disc insulator)	Per Set	635.90	37.70%	875.60	875.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For 11KV side (One set shall consist of three strain sets of single disc insulator)	Per Set	211.97	37.70%	291.87	291.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
19	Stringing and sagging of all the three phase of swing bus with jumpering for 33KV & 11KV with		-		-		
	a) ACSR Panther (232 sq.mm.)	Per Horizontal Meter	205.84	37.70%	283.44	283.44	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) ACSR Dog (100 sq.mm.)	Per Horizontal Meter	183.77	37.70%	253.04	253.04	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
20	Construction of transformer brick concrete foundation with plinth of 33/11KV Power Transformers as per approved drawing	Per Foundation	37,112.81	37.70%	51,102.71	51,102.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
21	Placing of power transformer on the plinth with jumpering		-		-		



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	connections both on 33KV and 11KV						
	a) For 5 MVA Power Transformer	Per Transformer	37,167.94	37.70%	51,178.62	51,178.62	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) For 10 MVA Power Transformer	Per Transformer	55,751.90	37.70%	76,767.92	76,767.92	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
22	Erection of 33KV Breaker with structure, CT, PT and control & relay panel	Per Set	7,789.18	37.70%	10,725.35	10,725.35	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
23	Erection of 11KV Breaker with structure, CT, PT and control & relay panel	Per Set	7,789.18	37.70%	10,725.35	10,725.35	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
24	Laying of control cable in trenches with all connections	Per RMT	44.92	37.70%	61.86	61.86	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
25	Placing 11KV kiosk on plinth and jumpering connection to sub-station equipment	Per erected kiosk	3,793.25	37.70%	5,223.14	5,223.14	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



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					Normal Soil	Hard Soil	
26	(a) 3'x2'10' earth pit digging, laying of GI plate, GI Pipe, filling with charcoal and salt in proportionate quantity filling the earth pit with earth and taking out GI pipe for watering upto ground level and brick work for the same (charcoal, salt and brick to be supplied by the contractor)	Per Pit	3,690.32	37.70%	5,081.41	7,622.11	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Laying out M.S. flat (50x6mm) matting and earth connection with earthing pipe as per technical specification and painting the joints with anti corrosive paints.	Per Meter	84.53	37.70%	116.40	116.40	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Welding of M.S. flat to different structure of sub-station.	Per Point	22.04	37.70%	30.35	30.35	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
27	600 mm dia x 10 ft earth pit digging, laying of GI earthing pipe and filling of surrounding volume with Bentonite (45 kg as per IS 3043 - 1987) suspension formed by mixing bentonite with water in ratio 1:4 and taking out GI pipe for watering upto ground level and brick work for the same (brick and sand to be supplied by the contractor)	Per pit	4,649.76	37.70%	6,402.51	9,603.77	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
28	Connections of power transformer neutral with separate earth pit with copper flat of requisite size.	Each	1,227.66	37.70%	1,690.43	1,690.43	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
29	Earthing (Deep Bore of 30 meter) including 115/125 mm dia drill tubewell with supply of G.I. pipe 2" dia having nine holes per meter of G.I.Pipe at a gap of 11cm per holes all along around the pipe (including supply and filling charcoal, salt with intermittent layer or bentonite powder)	Per earthing	30,381.82	37.70%	41,834.43	62,751.64	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
30	Connecting G.I. flat for different structures/ equipment in the PSS	Per Meter	26.78	37.70%	36.88	36.88	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
31	Connecting Neutral / body of Power Transformer with earthing	Per Meter	32.13	37.70%	44.24	44.24	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
32	Painting of all structures with 2 coats of Red oxide paint and 2 coats of Al. paint (paint to be supplied by Nigam)	Lump sum	2,984.18	37.70%	4,109.08	4,109.08	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
33	Preparation of cable trench of 0.75 mtr. width and depth upto 1 mtr. With all associated works as per design (including cost of required material for civil works) and further depositing excavated material on bank upto a lead of 50 mtrs.	Per Meter	1,092.52	37.70%	1,504.35	1,504.35	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
34	Erection of 100KVA Substation Transformer	Nos.	24,150.62	37.70%	33,254.34	33,254.34	Escalation of 37.70 % on rate



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							mentioned in 2018-19 cost data book
35	Erection/Installation of Lighting system for 12 set	LS	1,729.47		2,381.46	2,381.46	Calculation on the basis of daily wages of semi-skilled and skilled labour (assuming 1 skilled and 1 semiskilled labour for 3 days)
36	Pole pit excavation (for Tubular pole 9 mtr) (for Lighting /Illumination)	Per Pit	203.82	37.70%	280.65	420.98	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
37	Erection of Single Pole with base plate (Tubular Pole 9 mtr) (for Lighting /Illumination)	Per Pole	345.07	37.70%	475.14	475.14	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



## 19. DSS Labour

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Pole pit excavation (for 400 KG W.L 9 mtr. PSC pole)	Per Pit	244.66	37.70%	336.88	505.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Erection of Pole						
	(a) Single PSC Pole 400 KG W.L (9 mtr.)	Pole	395.21	37.70%	544.18	544.18	Escalation rate mentioned in 2018-19 cost data book
	(b) Double PSC Pole 400 KG W.L (9 mtr.)	Per DP	785.70	37.70%	1,081.87	1,081.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri PSC Pole 400 KG W.L (9 mtr.)	Per TP	1,185.62	37.70%	1,632.55	1,632.55	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four PSC Pole 400 KG W.L (9 mtr.)	Per FP	1,580.83	37.70%	2,176.73	2,176.73	Escalation rate mentioned in 2018-19 cost data book
3	c) Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the	Per 20 cft	2,277.73		2,123.43	2,123.43	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	mixuture in position, vibrating, striking, curing, taxes and royalty all complete)						
8	Stay pit excavation	Per Pit	165.40	37.70%	227.75	341.62	Escalation rate mentioned in 2018-19 cost data book
9	Erection of Stay with stone / RCC Stay plate, Stay binding by fitting stay clamps etc.	Per Stay	211.73	37.70%	291.54	291.54	Escalation rate mentioned in 2018-19 cost data book
10	Concreting of stay with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 5 cft	569.43		530.86	530.86	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
11	Fixing of Sub-Station Top channel, AB switch base channel, Horn gap fuse set base channel, Transformer Base channel, etc complete.	Per DP complete Set	1,279.72	37.70%	1,762.11	1,762.11	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
12	Fixing and fitting of 11KV AB Switch complete set with handle etc. as per Tech. Specification and direction of E/I.	Per Set	1,256.18	37.70%	1,729.71	1,729.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
13	Fixing and fitting of 11KV Horn gap fuse set including making Horn gap for three phase as per approved design	Per Set	277.59	37.70%	382.23	382.23	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	and direction of the Engineer I/c.						
14	(a) Fixing and placing of the Transformer (25/63/100/200KVA) on Transformer base fixing with pole with proper clamps and Angle Iron, welding the transformer with transformer base channel and Transformer Angle Iron with clamps.	Per Transformer	2,013.65	37.70%	2,772.71	2,772.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Fixing and placing of the Transformer (500 KVA) on Transformer base fixing with pole with proper clamps and Angle Iron, welding the transformer with transformer base channel and Transformer Angle Iron with clamps.	Per Transformer	4,027.31	37.70%	5,545.43	5,545.43	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
15	Fixing and fitting of one set of Lightning Arrestor consisting of 3 Nos. Lighting Arrestor with its connections to the phase conductors and to Earth for all the three phase.	Per Set	795.11	37.70%	1,094.84	1,094.84	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
16	Jumpering through suitable lugs of clamps (including supply of lugs) from :- a) Line to AB switch b) AB Switch to HG Fuse Set. c) HG Fuse Set to HT Bushing of the transformer complete works for one sub-station. d) Making of LT busbar arrangement including	complete for each pole mounted sub-station	760.80	37.70%	1,047.59	1,047.59	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	fixing and fitting of LT insulators with fuse arrangements(one side/both side) with jumpering to LT line complete						
17	Earthing including fixing of GI pipe and wire as per direction of the Engineer O/C (GI Pipe and wire to be supplied by the Nigam)						-
	a) For Neutral of the Transformer as per approved practice and design including its connections.	Per Earthing	679.99	37.70%	936.31	936.31	Escalation rate mentioned in 2018-19 cost data book
	b) Transformer body and Lightning Arrestor as per approved drawings and design including its charcoal connections self. Etc. to supplied by the contractor.	Per Earthing	679.99	37.70%	936.31	936.31	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Painting of structure bracket etc. by two coats of Al. paint after one coat of Red oxide paint (Paints to be supplied by Nigam)	Each D/S/S	1,209.28	37.70%	1,665.12	1,665.12	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
18	Erection of LTCT Meter with meter box with Modem and SIM including connections complete as per Engineer- in- charge .	Each D/S/S	959.64	37.70%	1,321.39	1,321.39	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
19	Construction of platform (1.5x1.5x1.2) mtr in size stone, for erection of transformers/Heavy equipment including all materials, labour. Excavation of (1.5x1.5x1) mt pit for	Per Plinth	21,861.78	37.70%	30,102.71	30,102.71	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	foundation providing and laying cement concrete 1:4:8 for foundation laid in 1cm thick layers, well compacted curing etc., complete providing and construction of stone masonry 0.9m below ground level and 1.2m above ground level neatly hammer dressed in cement mortar 1:6 cutting complete providing pointing to stone masonry in cement mortar 1:3 after racking joint & nicely lining curing etc., plastering the concrete surfaces in cement mortar 1:4 including smooth rendering curing etc., curing at every stages completely.						



## 20. LT line labour

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks / Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Survey and investigating including pegging	Per route Km.	1,411.5	37.70%	1,943.5	1,943.5	Escalation rate mentioned in 2018-19 cost data book
2	Pole pit excavation (for 200 KG W.L 8 mtr. PSC pole)	Per Pit	244.7	37.70%	337.0	505.4	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Erection of Single PSC pole 200 KG W.L (8 mtr.)	Per Pole	351.3	37.70%	483.7	483.7	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
4	a) Filling of half depth of Pole pit with Jhama chips/stone chips and proper ramming after filling with earth in case of PSC Pole/Stone /Jhama chips to be supplied by the contractor	Per Pole Pit	352.8	37.70%	485.8	485.8	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Filling of Pole pit with earth in layers pouring water in each layer and ramming the earth properly as per standard practice of the Nigam.	Per Pole Pit	91.9	37.70%	126.5	126.5	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
5	Stay Pit Excavation	Per Pit	165.4	37.70%	227.8	341.6	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
6	Erection of Stay with stone / RCC Stay plate Binding of Stay wire fitting of Stay	Per Stay	211.7	37.70%	291.5	291.5	Escalation of 37.70 % on rate



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks / Comments
					Normal Soil	Hard Soil	
	clamps and "GUY" Insulator as required.						mentioned in 2018-19 cost data book
7	Concreting of stay with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 5 cft	569.4		530.86	530.9	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
8	Fitting and fixing of LT Horizontal Bracket and clamps, 8 pieces (if required) on Single Pole	Per Pole	197.6	37.70%	272.1	272.1	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
9	Fitting and fixing of LT Vertical Bracket and clamps for vertical formation from one to four as required	Per Pole	84.7	37.70%	116.6	116.6	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
10	Fitting and fixing of LT Pin / Shackle Insulator on bracket with its fixtures as required	Per Pole	42.3	37.70%	58.3	58.3	Escalation rate mentioned in 2018-19 cost data book
11	Earthing including fixing of GI Pipe and connecting GI wire to metal parts as per direction of the E/I (GI Pipe and wire to be supplied by the Nigam)	Per Earthing	367.0	37.70%	505.3	505.3	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
12	Laying out and sagging of Rabbit (55 sq.mm.) conductor including termination at cut point and Mid span jointing wherever necessary						



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks / Comments
					Normal Soil	Hard Soil	
	a) Four Cut Point	Per Route KM	7,315.2	37.70%	10,072.7	10,072.7	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Three Cut Point	Per Route KM	6,583.8	37.70%	9,065.5	9,065.5	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) Two Cut Point	Per Route KM	4,499.2	37.70%	6,195.2	6,195.2	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	d) One Cut Point	Per Route KM	3,288.0	37.70%	4,527.4	4,527.4	Escalation rate mentioned in 2018-19 cost data book
13	Laying out and sagging of Weasel (34 sq.mm.) conductor including termination at cut point and Mid span jointing wherever necessary						
	a) Four Cut Point	Per Route KM	4,375.4	37.70%	6,024.7	6,024.7	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) Three Cut Point	Per Route KM	3,937.9	37.70%	5,422.4	5,422.4	Escalation rate mentioned in 2018-19 cost data book
	c) Two Cut Point	Per Route KM	2,691.2	37.70%	3,705.6	3,705.6	Escalation rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks / Comments
					Normal Soil	Hard Soil	
	d) One Cut Point	Per Route KM	1,966.6	37.70%	2,708.0	2,708.0	Escalation rate mentioned in 2018-19 cost data book
14	Laying out and sagging of Earth wire (8 SWG) including termination and Mid span jointing.	Per Route KM	1,246.8	37.70%	1,716.7	1,716.7	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
15	Binding of LT Pin/ Shackle	Each	23.5	37.70%	32.4	32.4	Escalation rate mentioned in 2018-19 cost data book
16	Jumpering of LT Conductor/Earth Wire at Cut points	Each	47.1	37.70%	64.8	64.8	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
17	Guarding of power line as per approved practices	Per Running Meter	47.05	37.70%	64.79	64.79	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
18	Fixing and fitting of danger board on pole near Road corner wherever necessary as per direction of E/I	Per Board	36.75	37.70%	50.60	50.60	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
19	Fixing of Spacer where required	Each	42.3	37.70%	58.3	58.3	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
20	Tree branches trimming (for number of trees upto 10 nos. in one km)	LS / per km	367.57	37.70%	506.12	506.12	Escalation rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks / Comments
					Normal Soil	Hard Soil	
21	Tree branches trimming (for number of trees more than 10 nos. in one km)	LS / per km	708.20	37.70%	975.15	975.15	Escalation rate mentioned in 2018-19 cost data book
22	Testing and Commissioning	LS / per km	1,102.7	37.70%	1,518.4	1,518.4	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
23	Manual Transportation / Km unskilled 20 Nos. @ (Electrician Grade-I) 2 Nos.	Per KM	7,456.45	37.70%	10,267.2	10,267.20	Escalation rate mentioned in 2018-19 cost data book



**21. UG line labour**

S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Construction of driving and reception pits and laying of HDPE/GI/ HUME Pipes by HDD method as per required depth						
	a) 110/140 mm/4" HDPE	Per Meter	813.0	37.70%	1,119.49	1,679.23	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	b) 160 mm HDPE	Per Meter	995.1	37.70%	1,370.23	2,055.34	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) 200 mm HDPE	Per Meter	1,230.8	37.70%	1,694.71	2,542.06	
	a) 4" GI Pipe	Per Meter	857.0	37.70%	1,180.04	1,770.06	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	a) 6" GI Pipe	Per Meter	1,034.6	37.70%	1,424.58	2,136.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) 8" GI Pipe	Per Meter	1,497.2	37.70%	2,061.52	3,092.27	
	a) 100 mm HUME Pipe	Per Meter	1,537.4	37.70%	2,116.96	3,175.44	Escalation of 37.70 % on rate mentioned in 2018-19



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
							cost data book
	b) 150 mm HUME Pipe	Per Meter	2,203.4	37.70%	3,033.98	4,550.97	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	c) 200 mm Hume Pipe	Per Meter	2,971.6	37.70%	4,091.75	6,137.63	
2	Excavation for 33KV/11KV cable laying 1200 mm deep x 500x1000 mm long trench	RMT	61.26		91.09	100.40	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
3	Excavation for LT cable laying 600 mm deep x 500 x1000 mm long trench	RMT	30.63		45.55	50.20	
4	<b>Sand filling:</b> Providing coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150 mm thick with all leads and lifts including cost of all material labour, royalty and taxes all complete as per building specification and direction of E/I"	mtrs3	228.5		589.51	589.51	
5	Brick Flat Soling	mtrs2	241.7		356.52	356.52	
6	33 KV HT XLPE Cable laying Single Core 630mm <sup>2</sup> (Armoured) (4300 kg/km)	per KM	15,839.0	37.70%	21,809.61	21,809.61	
7	33 KV HT XLPE Cable laying 3 core 400 sq mm (Armoured) (13100 kg/km)	per KM	48,253.7	37.70%	66,443.22	66,443.22	Escalation of 37.70 % on rate mentioned



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
							in 2018-19 cost data book
8	33 KV HT XLPE Cable laying 3 Core 300mm <sup>2</sup> (Armoured) (11350 kg/km)	per KM	48,253.7	37.70%	66,443.22	66,443.22	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
9	33 KV HT XLPE Cable laying 3 Core 185mm <sup>2</sup> (Armoured) (9250 kg/km)	per KM	45,842.2	37.70%	63,122.76	63,122.76	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
10	33 KV HT XLPE Cable laying 3 Core 150mm <sup>2</sup> (Armoured) (8400 kg/km)	per KM	41,629.7	37.70%	57,322.29	57,322.29	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
11	33 KV HT XLPE Cable laying 3 Core 120mm <sup>2</sup> (Armoured) (7750 kg/km)	per KM	38,408.4	37.70%	52,886.64	52,886.64	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
12	33 KV HT XLPE Cable laying 3 Core 95mm <sup>2</sup> (Armoured) (7100 kg/km)	per KM	35,187.0	37.70%	48,450.98	48,450.98	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
13	11 KV XLPE Cable laying single core 630mm <sup>2</sup> (Armoured) (3200 kg/km)	per KM	15,858.9	37.70%	21,837.06	21,837.06	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
14	11KV HT XLPE cable laying 3 core, Armoured 400 sq mm (9100 kg/km)	per KM	45,098.9	37.70%	62,099.15	62,099.15	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
15	11KV HT XLPE cable laying 3 core, Armoured 300sq mm (7600 kg/km)	per KM	37,665.0	37.70%	51,863.02	51,863.02	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
16	11KV HT XLPE cable laying 3 core, Armoured 240sq mm (6600 kg/km)	per KM	32,709.1	37.70%	45,038.95	45,038.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
17	11KV HT XLPE cable laying 3 core, Armoured 185 sq mm (5650 kg/km)	per KM	28,000.9	37.70%	38,556.06	38,556.06	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
18	11KV HT XLPE cable laying 3 core, Armoured 150 sq mm (4900 kg/km)	per KM	24,284.0	37.70%	33,438.00	33,438.00	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
19	11KV HT XLPE cable laying 3 core, Armoured 120 sq mm (4400 kg/km)	per KM	21,806.0	37.70%	30,025.95	30,025.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
20	11KV HT XLPE cable laying 3 core,	per KM	19,080.3	37.70%	26,272.72	26,272.72	Escalation of 37.70 % on rate



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
	Armoured 95 sq mm (3850 kg/km)						mentioned in 2018-19 cost data book
21	11KV HT XLPE cable laying 3 core, Armoured 70 sq mm and below (3300 kg/km)	per KM	16,354.5	37.70%	22,519.47	22,519.47	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
22	LT XLPE cable laying 3.5 core, Armoured 400sq mm (6480 kg/km)	per KM	32,114.4	37.70%	44,220.05	44,220.05	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
23	LT XLPE cable laying 3.5 core, Armoured 300sq mm (5170 kg/km)	per KM	25,622.1	37.70%	35,280.50	35,280.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
24	LT XLPE cable laying 3.5 core, Armoured 240 sq mm (4290 kg/km)	per KM	21,260.9	37.70%	29,275.31	29,275.31	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
25	LT XLPE cable laying 3.5 core, Armoured 185 sq mm (3480 kg/km)	per KM	17,246.6	37.70%	23,747.80	23,747.80	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
26	LT XLPE cable laying 3.5 core, Armoured 150 sq mm (2840 kg/km)	per KM	14,074.8	37.70%	19,380.39	19,380.39	Escalation of 37.70 % on rate mentioned in 2018-19



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
							cost data book
27	LT XLPE cable laying 3.5 core, Armoured 120 sq mm (2460 kg/km)	per KM	12,191.6	37.70%	16,787.24	16,787.24	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
28	LT XLPE cable laying 3.5 core, Armoured 95 sq mm (2000 kg/km)	per KM	9,911.8	37.70%	13,648.17	13,648.17	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
29	LT XLPE cable laying 3.5 core, Armoured 70 sq mm (1610 kg/km)	per KM	7,979.0	37.70%	10,986.77	10,986.77	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
30	LT XLPE cable laying 3.5 core, Armoured 50 sq mm (1230 kg/km)	per KM	6,095.8	37.70%	8,393.62	8,393.62	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
31	LT XLPE cable laying 3.5 core, Armoured 35 sq mm (1030 kg/km)	per KM	5,104.6	37.70%	7,028.80	7,028.80	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
32	LT XLPE cable laying 3.5 core, Armoured 25 sq mm and below (870 kg/km)	per KM	4,311.6	37.70%	5,936.95	5,936.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
33	Cable Jointing, Straight Through Joint for 400 sq mm HT 3 core armoured cable	Per joint	2,056.4	37.70%	2,831.56	2,831.56	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
34	Cable Jointing Straight Through Joint 300/240/185/150 sq mm HT 3 core cable	Per joint	2,056.4	37.70%	2,831.56	2,831.56	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
35	Cable Jointing Straight Through Joint 120/95/70 sq mm HT 3 core cable	Per joint	1,190.5	37.70%	1,639.32	1,639.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
36	Cable Jointing, Termination joint, HT for 400/300 /240/150 sq mm 3 core armoured cable both ID & OD	Per joint	1,885.0	37.70%	2,595.59	2,595.59	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
37	Cable Jointing, Termination joint, HT for 120/95/70 sq mm 3 core armoured cable both ID & OD	Per joint	1,091.3	37.70%	1,502.70	1,502.70	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
38	Laying of Half Round pipe over cable each 2 meter long	Nos.	21.42	37.70%	29.50	29.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
39	Refilling of cable trench for 33KV / 11KV	RMT	53.56	37.70%	73.75	73.75	Escalation of 37.70 % on rate



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Latest Notification	Rate in INR		Remarks/ Comments
					Normal Soil	Hard Soil	
							mentioned in 2018-19 cost data book
40	Refilling of cable trench for LT	RMT	42.85	37.70%	59.00	59.00	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book

Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisions shall be made for both in the estimate and the bills shall be paid as per actual inventory taken.



**22. AB Cable overhead line Labour Cost Analysis**

Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Survey and investigation including pegging	Per route Km.	1,411.44	37.70%	1,943.50	1,943.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Pole pit excavation (for 400 KG W.L 9 mtr. PSC pole)	Per Pit	244.66	37.70%	336.88	505.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Erection of Pole						
	(a) Single PSC Pole 400 KG W.L (9 mtr.)	Pole	395.21	37.70%	544.18	544.18	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(b) Double PSC Pole 400 KG W.L (9 mtr.)	Per DP	785.70	37.70%	1,081.87	1,081.87	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(c) Tri PSC Pole 400 KG W.L (9 mtr.)	Per TP	1,185.62	37.70%	1,632.55	1,632.55	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	(d) Four PSC Pole 400 KG W.L (9 mtr.)	Per FP	1,580.83	37.70%	2,176.73	2,176.73	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
4	a) Filling of half depth of Pole pit with Jhama chips/stone chips and proper ramming after	Per Pole Pit	352.86	37.70%	485.88	485.88	Escalation of 37.70 % on rate mentioned in



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	filling with earth in case of PSC Pole (stone/Jhama chips to be supplied by the contractor)						2018-19 cost data book
	+						
	b) Filling of Pole pit with earth in layers pouring water in each layer and ramming the earth properly as per standard practice of the Nigam.	Per Pole Pit	91.89	37.70%	126.53	126.53	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	<b>(a+b) OR c</b>						
	c) Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 20 cft	2,277.73		2,123.43	2,123.43	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
5	Pole pit excavation (for 200 KG W.L 8 mtr. PSC pole)	Per Pit	244.66	37.70%	336.88	505.32	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
6	Erection of Single PSC pole 200 KG W.L (8 mtr.)	Per Pole	351.29	37.70%	483.72	483.72	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
7	a) Filling of half depth of Pole pit with Jhama chips/stone chips and proper ramming after	Per Pole Pit	352.86	37.70%	485.88	485.88	Escalation of 37.70 % on rate mentioned in



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	filling with earth in case of PSC Pole/Stone /Jhama chips to be supplied by the contractor						2018-19 cost data book
	<b>+</b>						
	b) Filling of Pole pit with earth in layers pouring water in each layer and ramming the earth properly as per standard practice of the Nigam.	Per Pole Pit	91.89	37.70%	126.53	126.53	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	<b>(a+b) OR c</b>						
	c) Concreting and top muffing of support with 1:4:8 mixture (including cost of approved quality of stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixture in position, vibrating, striking, curing, taxes and royalty all complete)	Per 20 cft	2,277.73		2,123.43	2,123.43	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
<b>8</b>	Stay Pit Excavation	Per Pit	165.40	37.70%	227.75	341.62	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
<b>9</b>	Erection of Stay with stone / RCC Stay plate Binding of Stay wire fitting of Stay clamps and "GUY" Insulator as required.	Per Stay	211.72	37.70%	291.53	291.53	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
<b>10</b>	Concreting of stay with 1:4:8 mixture (including cost of approved quality of	Per 5 cft	569.43		530.86	530.86	Ref: Building Construction Department (Govt. of



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	stone chips 20mm to 6mm size graded, clean coarse sand of F.M 2.5 to 3 grade and cement concrete along with cost of screening, shuttering, mixing, placing the mixuture in position, vibrating, striking, curing, taxes and royalty all complete)						Jharkhand) w.e.f. 28th July 2022
11	Fitting of Pre insulated mid span joint suitable for AB cable upto 50 sq. mm.	Each	68.63	37.70%	94.50	94.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
12	Fitting of Pre insulated mid span joint suitable for AB cable above 50 sq. mm.	Each	85.79	37.70%	118.13	118.13	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
13	<b>Laying and stringing of AB cable complete with all accessories (dead end clamp with eyehook, suspension clamp with eyehook, Stain fitting, Guy strip dead end, LT connectors, piercing connectors, satellite connectors, distribution/ service connection box, etc) as per requirement of the site:</b>						
	11 KV XLPE HT AB Cable 3Cx185mm <sup>2</sup> +240mm <sup>2</sup> bare messenger (2700 kg/km)	Per KM	39,174.57	37.70%	53,941.66	53,941.66	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	11 KV XLPE HT AB Cable 3Cx95mm <sup>2</sup> +80mm <sup>2</sup> bare messenger (2250 kg/km)	Per KM	32,645.47	37.70%	44,951.38	44,951.38	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	11 KV XLPE HT AB Cable 3Cx70mm <sup>2</sup> +70mm <sup>2</sup> bare messenger (1900 kg/km)	Per KM	27,567.29	37.70%	37,958.95	37,958.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	11 KV XLPE HT AB Cable 3Cx50mm <sup>2</sup> +70mm <sup>2</sup> bare messenger (1630 kg/km)	Per KM	23,649.83	37.70%	32,564.77	32,564.77	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	11 KV XLPE HT AB Cable 3Cx35mm <sup>2</sup> +70mm <sup>2</sup> bare messenger (1450 kg/km)	Per KM	21,038.19	37.70%	28,968.67	28,968.67	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	LT XLPE AB Cable 3Cx120+70mm <sup>2</sup> (1430 kg/km)	Per KM	20,748.01	37.70%	28,569.10	28,569.10	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	LT XLPE AB Cable 3Cx95+70mm <sup>2</sup> (1180 kg/km)	Per KM	17,120.74	37.70%	23,574.51	23,574.51	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	LT XLPE AB Cable 3Cx50+35mm <sup>2</sup> (1270 kg/km)	Per KM	18,426.56	37.70%	25,372.56	25,372.56	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	LT XLPE AB Cable 3Cx35+25mm <sup>2</sup> (802 kg/km)	Per KM	11,636.29	37.70%	16,022.66	16,022.66	Escalation of 37.70 % on rate mentioned in



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							2018-19 cost data book
	LT XLPE AB Cable 3Cx16+25mm <sup>2</sup> (610 kg/km)	Per KM	8,850.55	37.70%	12,186.82	12,186.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
<b>14</b>	<b>Fixing of and installation of AB Cable accessories (for Maintenance activities)</b>						
	Fixing of Suspension Clamp / Dead end Clamp	Per Pole	57.69	37.70%	79.43	79.43	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation / Fixing of 16 /25 kVA Distribution Box on DP, complete wiring, connecting LT cable on bushing and LT feeders	Per No.	323.04	37.70%	444.82	444.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation / Fixing of 63 kVA Distribution Box on DP, complete wiring, connecting LT cable on bushing and LT feeders	Per No.	403.81	37.70%	556.03	556.03	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation / Fixing of 100 kVA Distribution Box on DP, complete wiring, connecting LT cable on bushing and LT feeders	Per No.	432.66	37.70%	595.75	595.75	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation / Fixing of 200 kVA Distribution Box on DP, complete wiring, connecting LT cable on bushing and LT feeders	Per No.	496.16	37.70%	683.19	683.19	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation / Fixing of 315 kVA Distribution	Per No.	536.49	37.70%	738.72	738.72	Escalation of 37.70 % on



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	Box on DP, complete wiring, connecting LT cable on bushing and LT feeders						rate mentioned in 2018-19 cost data book
	Installation of insulating piercing connector for main to Street light. Main 16-95 sq mm, Tap 1.5 - 10 sqmm (EP95)	Per No.	55.76	37.70%	76.77	76.77	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation of insulating piercing connector for main to service line. Main 16-95 sq mm, Tap 4 - 35 sqmm (P2X95)	Per No.	79.50	37.70%	109.47	109.47	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation of insulating piercing connector for main to service line. Main 25-95 sq mm, Tap 25 - 95 sqmm (P3X95)	Per No.	79.50	37.70%	109.47	109.47	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation of insulating piercing connector for main to service line. Main 50-150 sq mm, Tap 4 - 35 sqmm (P4X150)	Per No.	79.50	37.70%	109.47	109.47	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Installation of Anchor Clamp 25 - 95 sq mm insulated messenger with braket	Per No.	159.01	37.70%	218.95	218.95	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Fixing of universal hook	Per No.	118.74	37.70%	163.50	163.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Pole clamp - 145 X 95 mm	Per No.	198.24	37.70%	272.97	272.97	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



Sl. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2017-18 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labor rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
	11 KV AB Cable T-joint installation for 3 - core	Per No.	1,068.66	37.70%	1,471.50	1,471.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	11 KV AB Cable Straight through joint installation for 3 - core	Per No.	854.93	37.70%	1,177.20	1,177.20	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Surge Arrestor for ABC	Per No.	110.48	37.70%	152.13	152.13	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Ground connection for Messenger wire	Per No.	26.85	37.70%	36.97	36.97	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book



**23. 33 kV DP suspension labour**

S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
A	B	C	D	E	F = E*(1+E)	G = F*1.5	H
1	Survey and investigation including pegging	Per route Km.	1,411.44	37.70%	1,943.50	1,943.50	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
2	Pole pit excavation (for 52/60 kg 13 mtrs. Rail Pole)	Per Pit	355.54	37.70%	489.56	734.34	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
3	Erection of Pole (Rail Pole 60 kg 13 mtrs.)	Per Pole	1,175.65	37.70%	1,618.82	1,618.82	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
4	Top channel for Rail Pole 60 kg 13 mtrs.	Set	260.68	37.70%	358.95	243.36	Escalation rate mentioned in 2018-19 cost data book
5	Laying out and sagging of Conductor Including mid jointing wherever necessary for the three phases of Panther (232 sq.mm.) Conductor with 5% sag	Per route Km.	25,342.04	37.70%	34,894.88	23,658.40	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
6	Insulator with Hardware for 232 sq.mm. ACSR Panther conductor						
	Single Suspension fittings with 3 Nos. 70KN insulators and Hardware.	Per Set	39.99	37.70%	55.06	55.06	Escalation of 37.70 % on rate mentioned



S. No.	Description of item of Work	Unit	Existing Rate as per Cost Data Book 2018-19 (in INR)	Percentage increase in average labour rates as per Government of Jharkhand Notification	New Labour rate as per Latest Govt. of Jharkhand Notification (in INR)		Remarks/ Comments
					Normal Soil	Hard Soil	
							in 2018-19 cost data book
	Single tension fittings with 3 Nos. 70KN insulator and hardware	Per Set	39.99	37.70%	55.06	55.06	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
7	Accessories for 232 sq.mm. ACSR Panther conductor						
	Fixing of Mid span compression joint	Nos.	374.91	37.70%	516.23	516.23	Escalation of 37.70 % on rate mentioned in 2018-19 cost data book
	Fixing of Repair Sleeves	Nos.	64.27	37.70%	88.50	88.50	
	Fixing of PG clamp	Nos.	192.81	37.70%	265.49	265.49	
	Fixing of Anti climbing devices	Nos.	803.37	37.70%	1,106.21	1,106.21	
8	Earthing including fixing of GI Pipe and wire as per direction of Engineer I/C (GI Pipe and wire to be supplied by Nigam)	Set	566.04	37.70%	779.41	779.41	Escalation rate mentioned in 2018-19 cost data book
9	Foundation of 60kg/mtr ,13 mtr long rail pole DP structures including excavation concreting, back filling and copping [2x{(600x600x1200mm concreting and 300x300x450 mm copping)}=.945 cubic meter complete for one DP]	Per DP	3,802.92		3,545.3	5,317.9	Ref: Building Construction Department (Govt. of Jharkhand) w.e.f. 28th July 2022
10	Concreting of stays for above DPs including excavation concreting, back filling etc. [per stay 600x600x1200 mm for one stay]	Per DP	1,738.48		1,620.7	2,431.1	





# **PSS COSTING**

**24. New 33/11 KV PSS with 2x5 MVA Power T/F with One 33 KV incoming, one 33 KV outgoing and four 11 KV outgoing**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV Lightning Arrester (30KV,10KA Class II, station type)(1set=3nos)	Nos.	6	12,625	75,752
2	Structure for 33kV Lightning Arrestor [Galvanized]	Set	2	37,002	74,005
3	33 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	2	27,572	55,144
4	Gantry Column, Girder structures for 33/11 KV PSS for single Transformer [Galvanized]	Set	2	51,211	1,02,422
5	'A' structures for top mounted AB switch on 33 KV Bus [Galvanized]	Set	2	37,003	74,005
6	'A' structures for top mounted AB switch on 11 KV Bus [Galvanized]	Set	8	34,432	2,75,457
7	33 KV/110V P.T Class 1.0 with 100VA Burden	Set	2	13,155	26,310
8	Structure for 33 KV PT [Galvanized]	Set	4	37,003	1,48,010
9	ACSR Panther Conductor (232 sq. mm)	KMs	1	1,85,302	1,85,302
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	18	452	8,144
11	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	36	566	20,376
12	33 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	2	27,572	55,144
13	Structure for 33 KV Isolator [Galvanized]	Set	4	17,750	70,999
14	Structure for 11 KV Isolator [Galvanized]	Set	8	17,750	1,41,999
15	33 KV Post Insulator 10 KN (Polymer)	Set	3	795	2,386
16	Structure for Post Insulator for 33 KV [Galvanized]	Set	3	4,447	13,340
17	Aluminium pipe 40 mm dia	Mtrs.	100	192	19,200
18	Aluminium pipe connector	Nos.	150	228	34,176
19	33 KV VCB, 1250 Amp., Outdoor Type, 26.3 KA for 1 sec rupturing capacity, with CR panel, & C.T. Ratio 1200-600-300/1-1A, 2 Core, 15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. PT 33KV / 110V, Accuracy class 0.5, VA Burden 50VA, with metering system in Panel with numeric Relay annunciator	Set	4	6,93,486	27,73,944
20	33/11 KV Power Transformer 05 MVA Copper Wound, CRGO Core (on load tap changer)	Nos.	2	45,17,040	90,34,080
21	Structure for Post Insulator for 33 KV [Galvanized]	Nos.	2	4,447	8,893
22	11 KV XLPE Cable 3 Core 240 mm <sup>2</sup> (Armoured)	Kms	0.06	1,483	89
23	11 KV VCB, Outdoor type, 630 A, 25 KA for 3 sec. rupturing capacity with C&R Panel. CT 600-300/5-5A or 400-200/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 11 KV/110V, Accuracy class 0.5, 30 VA	Nos.	6	3,85,600	23,13,601
24	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 240 mm <sup>2</sup>	Set	1	1,748	1,748
25	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 240 mm <sup>2</sup>	Set	1	1,748	1,748



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
26	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 95-50 mm2	Set	3	1,748	5,245
27	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 95-150 mm2	Set	3	956	2,867
28	11 KV XLPE Cable 3 Core 95mm2 (Armoured)	KMs	0.08	886	66
29	415V AC Power Distribution Board	Set	1	95,024	95,024
30	30V DC Distribution Board	Set	1	43,425	43,425
31	Earthing G.I.Strip (65x6)mm2	KG	60	93	5,588
32	Rubber mat along length of panel	Nos.	8	3,330	26,640
33	30 V 80 AH Battery Charging unit complete with battery and stand	Set	1	78	78
34	Rail piece 44.64Kg/m 6.92 meter long for power transformer	Mtr	2	4,154	8,307
35	2.5 mm2 copper 2 core control cable (Armoured)	Mtrs.	600	56	33,524
36	2.5 mm2 copper 4 core control cable (Armoured)	Mtrs.	1300	88	1,14,774
37	2.5 mm2 copper 6 core control cable (Armoured)	Mtrs.	600	116	69,667
38	2.5 mm2 copper 12 core control cable (Armoured)	Mtrs.	600	216	1,29,585
39	Fully automatic Capacitor bank with automatic control panel, isolator, indoor type suitable Vacuum Circuit Breaker, mounting structures etc as required as per technical specifications, drawings, scope of the works of following capacities: (Banks in Multiple of 600 KVAR as per Specification)-3600 KVAR	Set	2	15,46,432	30,92,864
40	Aluminium binding wire	KG	20	302	6,042
41	GI Wire No. 8	KG	24	84	2,016
42	M S Nuts & Bolts of different size	KG	75	77,723	58,29,206
43	Adhesive Insulation Tape	KG	20	283	5,652
44	Al paint	Ltrs.	80	320	25,574
45	Red oxide paint	Ltrs.	150	180	26,946
46	'A' Structures for 11 KV Take off with top mounted AB Switch and provision of Lightening Arrester [Galvanized]	Set	3	37,003	1,11,008
47	400 watt/250 V HPSV Lamp fitting complete for 33/11 KV PSS Yard lightening	Set	12	5,772	69,258
48	ACE CHEMROD (Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Set	12	15,210.2	1,82,522
49	Steel Tubular Pole (SP-28) of 9 meter	No.	6	7,934	47,604
A	<b>Sub Total (in INR)</b>				<b>2,54,49,761</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	7,63,493
C	Contingencies Charges (in INR)		@	3%	7,63,493



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
D	Store Charges (in INR)		@	3%	7,63,493
E	Transportation Cost (in INR)		@	4%	10,17,990
F	T & P Cost (in INR)		@	2%	5,08,995
G	Overhead Cost (in INR)		@	10%	25,44,976
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	28,73,405
				Hard Soil	33,29,567
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>3,46,85,606</b>
				Hard Soil	<b>3,51,41,768</b>



**25. New 33/11 KV PSS with 1x10 MVA Power T/F with two 33 KV incoming and Six 11 KV outgoing.**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV Lightning Arrester (30KV,10KA Class II, station type)(1set=3nos)	Nos.	6	12,625	75,752
2	Structure for 33kV Lightning Arrester [Galvanized]	Set	2	37,002	74,005
3	33 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	2	27,572	55,144
4	Gantry Column, Girder structures for 33/11 KV PSS for single Transformer [Galvanized]	Set	2	51,211	1,02,422
5	'A' structures for top mounted AB switch on 33 KV Bus [Galvanized]	Set	1	37,003	37,003
6	'A' structures for top mounted AB switch on 11 KV Bus [Galvanized]	Set	4	34,432	1,37,729
7	33 KV/110V P.T Class 1.0 with 100VA Burden	Set	2	13,155	26,310
8	Structure for 33 KV PT [Galvanized]	Set	4	37,003	1,48,010
9	ACSR Panther Conductor (232 sq. mm)	KMs	1	1,85,302	1,85,302
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	18	452	8,144
11	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	36	566	20,376
12	33 KV Isolator 400 Amp, 3 Phase, with Earth Switch	Set	2	27,572	55,144
13	Structure for 33 KV Isolator [Galvanized]	Set	2	17,750	35,500
14	Structure for 11 KV Isolator [Galvanized]	Set	4	17,750	70,999
15	33 KV Post Insulator 10 KN (Polymer)	Set	1	795	795
16	Structure for Post Insulator for 33 KV [Galvanized]	Set	1	4,447	4,447
17	Aluminium pipe 40 mm dia	Mtrs.	100	192	19,200
18	Aluminium pipe connector	Nos.	150	228	34,176
19	33 KV VCB, 1250 Amp., Outdoor Type, 26.3 KA for 1 sec rupturing capacity , with CR pannel, & C.T. Ratio 1200-600-300/1-1A, 2 Core, 15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. PT 33KV / 110V, Accuracy class 0.5, VA Burden 50VA, with metering system in Panel with numeric Relay annunciator	Set	3	6,93,486	20,80,458
20	33/11 KV Power Transformer 10 MVA Copper Wound, CRGO Core (on load tap changer)	Nos.	1	73,91,520	73,91,520
21	Earthing complete (Conventional) for Power Transformer	Nos.	1	20,469	20,469
22	11 KV XLPE Cable 3 Core 300mm2 (Armoured)	KMs	0.03	1,646	49
23	11 KV VCB, Outdoor type, 630 A, 25 KA for 3 sec. rupturing capacity with C&R Panel. CT 600-300/5-5A or 400-200/5-5A, 2 Core,15VA, 5P10 for protection, Accuracy 0.5, 10VA for metering. P.T. 11 KV/110V, Accuracy class 0.5, 30 VA	Nos.	7	3,85,600	26,99,201
24	11 KV XLPE Cable 3 Core 185mm2 (Armoured)	KMs	0.1	1,131	113
25	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 300 mm2	Set	2	1,748	3,497



26	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 300 mm2	Set	2	1,748	3,497
27	11 KV 3-core heat shrinkable Indoor Cable Jointing/termination kit 120-185 mm2	Set	6	1,748	10,490
28	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 120-185 mm2	Set	6	1,748	10,490
29	415V AC Power Distribution Board	Set	1	95,024	95,024
30	30V DC Distribution Board	Set	1	43,425	43,425
31	Earthing G.I.Strip (65x6)mm2	KG	60	93	5,588
32	Rubber mat along length of pannel	Nos.	4	3,330	13,320
33	30 V 80 AH Battery Charging unit complete with battery and stand	Set	1	78	78
34	Rail piece 44.64Kg/m 6.92 meter long for power transformer	Mtr	4	4,154	16,615
35	2.5 mm2 copper 2 core control cable (Armoured)	Mtrs.	600	56	33,524
36	2.5 mm2 copper 4 core control cable (Armoured)	Mtrs.	1300	88	1,14,774
37	2.5 mm2 copper 6 core control cable (Armoured)	Mtrs.	600	116	69,667
38	2.5 mm2 copper 12 core control cable (Armoured)	Mtrs.	600	216	1,29,585
39	Fully automatic Capacitor bank with automatic control panel, isolator, indoor type suitable Vacuum Circuit Breaker, mounting structures etc as required as per technical specifications, drawings, scope of the works of following capacities: (Banks in Muultiple of 600 KVAR as per Specification)-3600 KVAR	Set	1	15,46,432	15,46,432
40	Aluminium binding wire	KG	10	302	3,021
41	GI Wire No. 8	KG	24	84	2,016
42	M S Nuts & Bolts of different size	KG	75	77,723	58,29,206
43	Adhesive Insulation Tape	KG	20	283	5,652
44	Al paint	Ltrs.	75	320	23,976
45	Red oxide paint	Ltrs.	150	180	26,946
46	'A' Structures for 11 KV Take off with top mounted AB Switch and provision of Lightning Arrester [Galvanized]	Set	4	37,003	1,48,010
47	400 watt/250 V HPSV Lamp fitting complete for 33/11 KV PSS Yard lightning	Set	12	5,772	69,258
48	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Set	12	15,210.2	1,82,522
49	Steel Tubular Pole (SP-28 ) of 9 meter	No.	6	7,934	47,604
A	<b>Sub Total (in INR)</b>				<b>2,17,16,488</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	6,51,495



<b>C</b>	Contingencies Charges (in INR)	@	3%	6,51,495
<b>D</b>	Store Charges (in INR)	@	3%	6,51,495
<b>E</b>	Transportation Cost (in INR)	@	4%	8,68,660
<b>F</b>	T & P Cost (in INR)	@	2%	4,34,330
<b>G</b>	Overhead Cost (in INR)	@	10%	21,71,649
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil		27,36,163
		Hard Soil		31,26,238
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil		<b>2,98,81,773</b>
		Hard Soil		<b>3,02,71,848</b>





# **NETWORK LAYING COSTING**

**26. 1 KM 33KV Overhead DP Suspension line with 232 sq. mm. Panther Conductor on 13-meter 60kg/mtr Rail pole**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)	
1	Rail Pole 60 kgs 13 meter	Nos.	26	67,260	1,748,760.00	
2	ACSR Panther Conductor (232 sq. mm)	KMs	3.2	185,302	583,702.22	
3	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Set	48	4,066	195,158.78	
4	Suspension Hardware suitable for Panther Conductor	Nos.	60	2,197	131,836.68	
5	Tension Hardware suitable for Panther Conductor	Nos.	18	1,010	18,176.13	
6	Mid span compression Joints suitable for ACSR Panther conductor	Nos.	6.0	426	2,555.88	
7	Repairing Sleeve suitable for ACSR Panther conductor	Nos.	6.0	447	2,683.32	
8	P G clamp for 232/150 sq mm conductor	Nos.	18	181	3,264.66	
9	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	set	13	5,046	65,601.43	
10	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	26	294	7,639.56	
11	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	52	392	20,404.80	
12	Spike Earthing made of 20mm GI solid Rod	Each	26	589	15,301.65	
13	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	26	141	3,672.86	
14	GI Wire No. 8 for earthing	KG	65	84	5,460.00	
15	GI Base Plate for 33KV (500x500x10 mm) Avg weight 19.6kg/plate	Nos.	26	1,573	40,898.00	
16	Anticlimbing Device(Barbed wire) 2x12 SWG	Nos.	26.0	73	1,899.71	
17	Danger Board 33KV	Nos.	24	145	3,483.36	
<b>A</b>	<b>Sub Total (in INR)</b>				<b>2,850,499.04</b>	
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)			@	3%	85,514.97
<b>C</b>	Contingencies Charges (in INR)			@	3%	85,514.97
<b>D</b>	Store Charges (in INR)			@	3%	85,514.97
<b>E</b>	Transportation Cost (in INR)			@	4%	114,019.96
<b>F</b>	T & P Cost (in INR)			@	2%	57,009.98
<b>G</b>	Overhead Cost (in INR)			@	10%	285,049.90
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	263,663.48	
				Hard Soil	256,991.32	
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>3,826,787.28</b>	
				Hard Soil	<b>3,820,115.12</b>	



**27. 1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 232 sq mm (Panther) Conductor With 50 Mtr Average Span with 1 Cut Point DP**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Rail Pole 60 kgs 13 meter	Nos.	20	67,260	1,345,200.00
2	ACSR Panther Conductor (232 sq. mm) with 5% sagging	Kms.	3.15	185,302	583,702.22
3	33 kv Pole Top Bracket 65x65x6 mm [GALVANIZED] (3.58 Kgs.)	Nos.	18	281	5,057.25
4	Back clamp ( 50x6 mm) for 60kg Rail Pole[GALVANIZED] (3.2 Kgs.)	Nos.	18	1,546	27,829.01
5	33kv V Cross Arm for (100x50x6 mm)[GALVANIZED] (19.7 Kgs.)	Nos.	18	102	1,836.43
6	Back clamp ( 50x6 mm) for 60kg Rail Pole[NON GALVANIZED] (3.2 Kgs.)	Nos.	18	102	1,836.43
7	Support Clamp for V Cross Arm for 60kg Rail Pole[GALVANIZED] (1.6 Kgs. each)	set	18	204	3,672.86
8	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	57	452	25,789.08
9	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	6	566	3,396.00
10	33 KV 3 pin type, 3 Phase, AB switch 630 Amp (Polymer Type)	Set	0	20,916	0.00
11	support clamp for AB switch(for pipe and handle)	set	0	204	0.00
12	33 KV Lightening Arrester (30KV,10KA Class II, station type)(1set=3nos)	Set	0	12,625	0.00
13	GI stay set complete for D/s/s (1900x 20mm) with staywire 7/10 SWG and Guy insulator	Set	8	1,240	9,921.60
14	Angle/side Stay Clamp (50x6 mm) for 60kg Rail Pole [GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	P G clamp for 150mm <sup>2</sup>	Nos.	12	181	2,176.44
16	Aluminium binding wire	KG	10	302	3,020.80
17	GI Wire No. 8 for earthing	KG	50	84	4,200.00
18	GI Base Plate for 33KV (500x500x10 mm) Avg weight 19.6kg/plate	Nos.	20	1,573	31,460.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	60	73	4,383.94
20	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Set(1set =2 no)	1	4,066	4,065.81
21	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	235	470.88
22	33kv D P Channel ( 100x50x6 mm) 2200 mm Long [ GALVANIZED] (45.5 Kgs.) for AB Switch and LA	Set(1set =2 no)	0	3,571	0.00
23	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	353	706.32
24	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	set	1	5,046	5,046.26



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
25	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	2	294	587.66
26	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	4	392	1,569.60
27	Spike Earthing made of 20mm GI solid Rod	Each	20	589	11,770.50
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	20	141	2,825.28
29	Danger Board 33KV	Nos.	20	145	2,902.80
<b>A</b>	<b>Sub Total (in INR)</b>				<b>2,084,632.62</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	62,538.98
<b>C</b>	Contingencies Charges (in INR)		@	3%	62,538.98
<b>D</b>	Store Charges (in INR)		@	3%	62,538.98
<b>E</b>	Transportation Cost (in INR)		@	4%	83,385.30
<b>F</b>	T & P Cost (in INR)		@	2%	41,692.65
<b>G</b>	Overhead Cost (in INR)		@	10%	208,463.26
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		290,794.83
			Hard Soil		304,745.71
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>2,896,585</b>
			Hard Soil		<b>2,910,536.49</b>



**28. 1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 150 sq mm (Wolf) Conductor With 50 Mtr Average Span with 1 Cut Point DP**

S. No	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Rail Pole 60 kgs 13 meter	Nos.	20	67,260	1,345,200.00
2	ACSR Wolf Conductor (150 sq. mm) with 5% sagging	Kms.	3.15	166,923	525,807.41
3	33 kv Pole Top Bracket 65x65x6 mm [GALVANIZED] (3.58 Kgs.)	Nos.	18	281	5,057.25
4	Back clamp ( 50x6 mm) for 60kg Rail Pole[GALVANIZED] (3.2 Kgs.)	Nos.	18	1,546	27,829.01
5	33kv V Cross Arm for (100x50x6 mm)[GALVANIZED] (19.7 Kgs.)	Nos.	18	102	1,836.43
6	Back clamp ( 50x6 mm) for 60kg Rail Pole[NON GALVANIZED] (3.2 Kgs.)	Nos.	18	102	1,836.43
7	Support Clamp for V Cross Arm for 60kg Rail Pole[GALVANIZED] (1.6 Kgs. each)	set	18	204	3,672.86
8	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	57	452	25,789.08
9	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	6	566	3,396.00
10	33 KV 3 pin type, 3 Phase, AB switch 630 Amp (Polymer Type)	Set	0	20,916	0.00
11	Support clamp for AB switch(for pipe and handle)	set	0	204	0.00
12	33 KV Lightening Arrester (30KV,10KA Class II, station type)(1set=3nos)	Set	0	12,625	0.00
13	GI stay set complete for D/s/s (1900x 20mm) with staywire 7/10 SWG and Guy insulator	Set	8	1,240	9,921.60
14	Angle/side Stay Clamp (50x6 mm) for 60kg Rail Pole [GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	P G clamp for 150mm <sup>2</sup>	Nos.	12	181	2,176.44
16	Aluminium binding wire	KG	10	302	3,020.80
17	GI Wire No. 8 for earthing	KG	50	84	4,200.00
18	GI Base Plate for 33KV (500x500x10 mm) Avg weight 19.6kg/plate	Nos.	20	1,573	31,460.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	60	73	4,383.94
20	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Set(1set =2 no)	1	4,066	4,065.81
21	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	235	470.88
22	33kv D P Channel ( 100x50x6 mm) 2200 mm Long [ GALVANIZED] (45.5 Kgs.) for AB Switch and LA	Set(1set =2 no)	0	3,571	0.00
23	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	353	706.32
24	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	set	1	5,046	5,046.26



S. No	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
25	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	2	294	587.66
26	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	4	392	1,569.60
27	Spike Earthing made of 20mm GI solid Rod	Each	20	589	11,770.50
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	20	141	2,825.28
29	Danger Board 33KV	Nos.	20	145	2,902.80
<b>A</b>	<b>Sub Total (in INR)</b>				<b>2,026,737.82</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	60,802.13
<b>C</b>	Contingencies Charges (in INR)		@	3%	60,802.13
<b>D</b>	Store Charges (in INR)		@	3%	60,802.13
<b>E</b>	Transportation Cost (in INR)		@	4%	81,069.51
<b>F</b>	T & P Cost (in INR)		@	2%	40,534.76
<b>G</b>	Overhead Cost (in INR)		@	10%	202,673.78
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		262,835.96
			Hard Soil		276,786.84
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>2,796,258.23</b>
			Hard Soil		<b>2,810,209.12</b>



**29. 1 KM 33KV Overhead Line on 13 mtr Rail Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	Rail Pole 60 kgs 13 meter	Nos.	20	67,260	1,345,200.00
2	ACSR Dog conductor (100 sq. mm)	Kms.	3.15	104,991	330,722.68
3	33 kv Pole Top Bracket 65x65x6 mm [GALVANIZED] (3.58 Kgs.)	Nos.	18	281	5,057.25
4	Back clamp ( 50x6 mm) for 60kg Rail Pole[GALVANIZED] (3.2 Kgs.)	Nos.	18	1,546	27,829.01
5	33kv V Cross Arm for (100x50x6 mm)[GALVANIZED] (19.7 Kgs.)	Nos.	18	102	1,836.43
6	Back clamp ( 50x6 mm) for 60kg Rail Pole[NON GALVANIZED] (3.2 Kgs.)	Nos.	18	102	1,836.43
7	Support Clamp for V Cross Arm for 60kg Rail Pole[GALVANIZED] (1.6 Kgs. each)	set	18	204	3,672.86
8	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	57	452	25,789.08
9	33 kV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	6	566	3,396.00
10	33 KV 3 pin type, 3 Phase, AB switch 630 Amp (Polymer Type)	Set	0	20,916	0.00
11	support clamp for AB switch(for pipe and handle)	set	0	204	0.00
12	33 KV Lightning Arrester (30KV,10KA Class II, station type)(1set=3nos)	Set	0	12,625	0.00
13	GI stay set complete for D/s/s (1900x 20mm) with staywire 7/10 SWG and Guy insulator	Set	8	1,240	9,921.60
14	Angle/side Stay Clamp (50x6 mm) for 60kg Rail Pole [GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	P G clamp for 100mm <sup>2</sup>	Nos.	12	33	396.48
16	Aluminium binding wire	KG	10	302	3,020.80
17	GI Wire No. 8 for earthing	KG	50	84	4,200.00
18	GI Base Plate for 33KV (500x500x10 mm) Avg weight 19.6kg/plate	Nos.	20	1,573	31,460.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	60	73	4,383.94
20	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Set(1set=2 no)	1	4,066	4,065.81
21	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	235	470.88
22	33kv D P Channel ( 100x50x6 mm) 2200 mm Long [ GALVANIZED] (45.5 Kgs.) for AB Switch and LA	Set(1set=2 no)	0	3,571	0.00
23	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Pair	2	353	706.32
24	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	set	1	5,046	5,046.26



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
25	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	2	294	587.66
26	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	4	392	1,569.60
27	Spike Earthing made of 20mm GI solid Rod	Each	20	589	11,770.50
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	20	141	2,825.28
29	Danger Board 33KV	Nos.	20	145	2,902.80
<b>A</b>	<b>Sub Total (in INR)</b>				<b>1,829,873.12</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	54,896.19
<b>C</b>	Contingencies Charges (in INR)		@	3%	54,896.19
<b>D</b>	Store Charges (in INR)		@	3%	54,896.19
<b>E</b>	Transportation Cost (in INR)		@	4%	73,194.92
<b>F</b>	T & P Cost (in INR)		@	2%	36,597.46
<b>G</b>	Over head Cost (in INR)		@	10%	182,987.31
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		225,294.43
			Hard Soil		239,245.31
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>2,512,635.83</b>
			Hard Soil		<b>2,526,586.71</b>



**30. 1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

S. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 core 400 sq mm (Armoured)	Mtr	2200	2,732	6,010,547.36
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 400 mm2	Set	6	13,014	78,084.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 400mm2	Set	8	4,838	38,704.00
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	2000	661	1,322,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	5	167	834.61
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>8,003,239</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	240,097
<b>C</b>	Contingencies Charges (in INR)		@	3%	240,097
<b>D</b>	Store Charges (in INR)		@	3%	240,097
<b>E</b>	Transportation Cost (in INR)		@	4%	320,130
<b>F</b>	T & P Cost (in INR)		@	2%	160,065
<b>G</b>	Overhead Cost (in INR)		@	10%	800,324
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		2,944,192
			Hard Soil		4,316,140
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>12,948,241</b>
			Hard Soil		<b>14,320,188</b>



**31. 1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 300mm <sup>2</sup> (Armoured)	Mtr	2200	2,455	5,400,121.32
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 300 mm <sup>2</sup>	Set	6	13,014	78,084.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 300 mm <sup>2</sup>	Set	8	4,838	38,704.00
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	2000	661	1,322,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	5	167	834.61
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>7,395,317</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	221,860
<b>C</b>	Contingencies Charges (in INR)		@	3%	221,860
<b>D</b>	Store Charges (in INR)		@	3%	221,860
<b>E</b>	Transportation Cost (in INR)		@	4%	295,813
<b>F</b>	T & P Cost (in INR)		@	2%	147,906
<b>G</b>	Over head Cost (in INR)		@	10%	739,532
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	2,944,192
				Hard Soil	4,316,140
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>12,188,338</b>
				Hard Soil	<b>13,560,285</b>



**32. 1 KM 33kV HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 185mm <sup>2</sup> (Armoured)	Mtr	2200	2,325	5,115,418.00
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 185 mm <sup>2</sup>	Set	6	13,014	78,084.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 185 mm <sup>2</sup>	Set	8	4,838	38,704.00
4	HDPE Pipe - 110 mm /4" PE 63 grade	Mtr	2000	342	684,400.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	5	167	834.61
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>6,473,013</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	194,190
<b>C</b>	Contingencies Charges (in INR)		@	3%	194,190
<b>D</b>	Store Charges (in INR)		@	3%	194,190
<b>E</b>	Transportation Cost (in INR)		@	4%	258,921
<b>F</b>	T & P Cost (in INR)		@	2%	129,460
<b>G</b>	Overhead Cost (in INR)		@	10%	647,301
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		2,435,413
			Hard Soil		3,556,623
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>10,526,679</b>
			Hard Soil		<b>11,647,890</b>



**33. 1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 core 400 sq mm (Armoured)	Mtr	1200	2,732	3,278,480.38
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 400 mm <sup>2</sup>	Set	3	13,014	39,042.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 400mm <sup>2</sup>	Set	4	4,838	19,352.00
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	1000	661	661,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	10	167	1,669.23
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>4,516,262</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	135,488
<b>C</b>	Contingencies Charges (in INR)	@		3%	135,488
<b>D</b>	Store Charges (in INR)	@		3%	135,488
<b>E</b>	Transportation Cost (in INR)	@		4%	180,650
<b>F</b>	T & P Cost (in INR)	@		2%	90,325
<b>G</b>	Overhead Cost (in INR)	@		10%	451,626
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			1,494,310
		Hard Soil			2,181,145
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>7,139,637</b>
		Hard Soil			<b>7,826,472</b>



**34. 1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 300mm <sup>2</sup> (Armoured)	Mtr	1200	2,455	2,945,520.72
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 300 mm <sup>2</sup>	Set	3	13,014	39,042.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 300 mm <sup>2</sup>	Set	4	4,838	19,352.00
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	1000	661	661,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	10	167	1,669.23
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>4,183,302</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	125,499
<b>C</b>	Contingencies Charges (in INR)	@		3%	125,499
<b>D</b>	Store Charges (in INR)	@		3%	125,499
<b>E</b>	Transportation Cost (in INR)	@		4%	167,332
<b>F</b>	T & P Cost (in INR)	@		2%	83,666
<b>G</b>	Overhead Cost (in INR)	@		10%	418,330
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	1,494,310
				Hard Soil	2,181,145
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>6,723,437</b>
				Hard Soil	<b>7,410,272</b>



**35. 1 KM 33kV HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 185mm <sup>2</sup> (Armoured)	Mtr	1200	2,325	2,790,228.00
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 185 mm <sup>2</sup>	Set	3	13,014	39,042.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 185 mm <sup>2</sup>	Set	4	4,838	19,352.00
4	HDPE Pipe - 110 mm /4" PE 63 grade	Mtr	1000	342	342,200.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
11	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	10	167	1,669.23
20	33 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>3,709,209</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	111,276
<b>C</b>	Contingencies Charges (in INR)		@	3%	111,276
<b>D</b>	Store Charges (in INR)		@	3%	111,276
<b>E</b>	Transportation Cost (in INR)		@	4%	148,368
<b>F</b>	T & P Cost (in INR)		@	2%	74,184
<b>G</b>	Overhead Cost (in INR)		@	10%	370,921
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		1,239,588
			Hard Soil		1,801,055
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>5,876,100</b>
			Hard Soil		<b>6,437,566</b>



**36. 1 KM 33kV HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 185mm <sup>2</sup> (Armoured)	Mtr	2200	2,325	5,115,418.00
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 185 mm <sup>2</sup>	Set	3	13,014	39,042.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 185 mm <sup>2</sup>	Set	8	4,838	38,704.00
4	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
5	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
6	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
7	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
8	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
9	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
10	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
11	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
12	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
13	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	20	167	3,338.46
13	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
14	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	GI Wire No. 8	KG	15	89,210	1,338,155.40
16	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
17	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	918	5,508.59
18	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	20	167	3,338.46
19	33 KV Danger board	Nos	6	145	870.84
20	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>7,088,005</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	212,640
<b>C</b>	Contingencies Charges (in INR)	@		3%	212,640
<b>D</b>	Store Charges (in INR)	@		3%	212,640
<b>E</b>	Transportation Cost (in INR)	@		4%	283,520
<b>F</b>	T & P Cost (in INR)	@		2%	141,760
<b>G</b>	Overhead Cost (in INR)	@		10%	708,801
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			919,909
		Hard Soil			930,938
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>				
		Normal Soil			<b>9,779,916</b>
		Hard Soil			<b>9,790,944</b>



**37. 1 KM 33kV HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	33 KV HT XLPE Cable 3 Core 300mm <sup>2</sup> (Armoured)	Mtr	2200	2,455	5,400,121.32
2	33 KV 3-core XLPE UG cable Heat shrinkable straight through Jointing kit suitable for 300 mm <sup>2</sup>	Set	3	13,014	39,042.00
3	33 KV 3-core heat shrinkable Out door type Cable termination kit for 300 mm <sup>2</sup>	Set	8	4,838	38,704.00
4	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
5	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
6	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
7	33kv D P Channel ( 100x50x6 mm) 1.3 Meter Long [ GALVANIZED] (26.9 Kgs.)	Each	6	4,066	24,394.85
8	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
9	33 KV Polymer Pin Insulators 10 KN with GI PIN	Nos.	9	452	4,071.96
10	33 KV Cross bracing for DP Channel[GALVANIZED] (64.3 Kgs.)	Set	3	5,046	15,138.79
11	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
12	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
13	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
14	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	GI Wire No. 8	KG	15	89,210	1,338,155.40
16	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
17	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	918	5,508.59
18	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	20	167	3,338.46
19	33 KV Danger board	Nos	6	145	870.84
20	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>7,372,708</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	221,181
<b>C</b>	Contingencies Charges (in INR)		@	3%	221,181
<b>D</b>	Store Charges (in INR)		@	3%	221,181
<b>E</b>	Transportation Cost (in INR)		@	4%	294,908
<b>F</b>	T & P Cost (in INR)		@	2%	147,454
<b>G</b>	Overhead Cost (in INR)		@	10%	737,271
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	927,214
				Hard Soil	938,243
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>10,143,100</b>
				Hard Soil	<b>10,154,128</b>



**38. 1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 100 sq mm (Dog) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center)**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	22	4,496	98,907.60
2	ACSR Dog conductor (100 sq. mm) with 3% saging	Kms.	3.09	104,991	324,423.20
3	11kv Pole Top Bracket 50x8 mm [GALVANIZED] (2.2 Kgs.)	Nos.	20	173	3,453.12
4	11kv V Cross Arm (100x50x6 mm), [GALVANIZED] (19.7 Kgs.)	Nos.	20	1,546	30,921.12
5	Back clamp ( 50x6 mm) for V-cross arm [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
6	Back clamp ( 50x6 mm) for Top Bracket [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
7	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[GALVANIZED] (2.6 Kgs. each)(each set=2 no clamp)	set	20	204	4,080.96
8	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	63	330	20,815.20
9	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	12	531	6,372.00
10	11 KV 3 pin type, 3 Phase, AB switch 630 Amp (Porcelain Type) with operating GI pipe and handle	Set	1	20,916	20,915.50
11	support clamp for AB switch(for pipe and handle)	set	1	204	204.05
12	Lightening Arrestor (9kV 5KA) Line type (polymer type)	Set	1	995	994.74
13	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	12	1,155	13,859.76
14	Angle/side Stay Clamp ( 50x10 mm) suitable for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	12	151	1,808.18
15	P G clamp for 100mm <sup>2</sup>	Nos.	12	33	396.48
16	Aluminium binding wire	KG	11	302	3,322.88
17	GI Wire No. 10 for earthing	KG	55	84	4,620.00
18	Stone Base plate for 11 KV line	Nos.	22	223	4,906.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	44	73	3,214.89
20	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Set(1set=2 no)	1	3,241	3,241.22
21	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Pair	2	235	470.88
22	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) for LA and AB switch	Set(1set=2 no)	1	3,241	3,241.22
23	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 2no ) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.5 Kgs. each)	Pair	2	235	470.88
24	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	set	1	4,057	4,057.42
25	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[GALVANIZED] (1.3 Kgs.)	Set	2	204	408.10
26	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[GALVANIZED] (2.33 Kgs. each)	Pair	4	366	1,462.87
27	Spike Earthing made of 20mm GI solid Rod	Each	22	589	12,947.55
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	22	141	3,107.81



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
29	Danger Board 11KV	Nos.	22	145	3,193.08
<b>A</b>	<b>Sub Total (in INR)</b>				<b>579,897.66</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	17,396.93
<b>C</b>	Contigencies Charges (in INR)		@	3%	17,396.93
<b>D</b>	Store Charges (in INR)		@	3%	17,396.93
<b>E</b>	Transportation Cost (in INR)		@	4%	23,195.91
<b>F</b>	T & P Cost (in INR)		@	2%	11,597.95
<b>G</b>	Over head Cost (in INR)		@	10%	57,989.77
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	170,414.01
				Hard Soil	176,011.48
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>895,286.08</b>
				Hard Soil	<b>900,883.55</b>



**39. 1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 80 sq mm (Raccoon) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center)**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	22	4,496	98,907.60
2	Racoon conductor (80 sq. mm) with 3% saging	Kms.	3.09	72,204	223,109.05
3	11kv Pole Top Bracket 50x8 mm [GALVANIZED] (2.2 Kgs.)	Nos.	20	173	3,453.12
4	11kv V Cross Arm (100x50x6 mm), [GALVANIZED] (19.7 Kgs.)	Nos.	20	1,546	30,921.12
5	Back clamp ( 50x6 mm) for V-cross arm [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
6	Back clamp ( 50x6 mm) for Top Bracket [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
7	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[GALVANIZED] (2.6 Kgs. each)(each set=2 no clamp)	set	20	204	4,080.96
8	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	63	330	20,815.20
9	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	12	531	6,372.00
10	11 KV 3 pin type, 3 Phase, AB switch 630 Amp (Porcelain Type) with operating GI pipe and handle	Set	1	20,916	20,915.50
11	support clamp for AB switch(for pipe and handle)	set	1	204	204.05
12	Lightening Arrestor (9kV 5KA) Line type (polymer type)	Set	1	995	994.74
13	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	12	1,155	13,859.76
14	Angle/side Stay Clamp ( 50x10 mm) suitable for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	12	151	1,808.18
15	P G clamp for 80mm <sup>2</sup>	Nos.	12	33	396.48
16	Aluminium binding wire	KG	11	302	3,322.88
17	GI Wire No. 10 for earthing	KG	55	84	4,620.00
18	Stone Base plate for 11 KV line	Nos.	22	223	4,906.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	44	73	3,214.89
20	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Set(1set=2 no)	1	3,241	3,241.22
21	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Pair	2	235	470.88
22	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) for LA and AB switch	Set(1set=2 no)	1	3,241	3,241.22
23	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 2no ) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.5 Kgs. each)	Pair	2	235	470.88
24	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	set	1	4,057	4,057.42
25	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[GALVANIZED] (1.3 Kgs.)	Set	2	204	408.10
26	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[GALVANIZED] (2.33 Kgs. each)	Pair	4	366	1,462.87
27	Spike Earthing made of 20mm GI solid Rod	Each	22	589	12,947.55



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	22	141	3,107.81
29	Danger Board 11KV	Nos.	22	145	3,193.08
<b>A</b>	<b>Sub Total (in INR)</b>				<b>478,583.50</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	14,357.51
<b>C</b>	Contingencies Charges (in INR)		@	3%	14,357.51
<b>D</b>	Store Charges (in INR)		@	3%	14,357.51
<b>E</b>	Transportation Cost (in INR)		@	4%	19,143.34
<b>F</b>	T & P Cost (in INR)		@	2%	9,571.67
<b>G</b>	Overhead Cost (in INR)		@	10%	47,858.35
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		118,528.64
			Hard Soil		124,126.11
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>716,758.02</b>
			Hard Soil		<b>722,355.49</b>



**40. 1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 50 sq mm (Rabbit) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center)**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	22	4,496	98,907.60
2	Rabbit conductor (50 sq. mm) with 3% saging	Kms.	3.09	59,767	184,680.03
3	11kv Pole Top Bracket 50x8 mm [GALVANIZED] (2.2 Kgs.)	Nos.	20	173	3,453.12
4	11kv V Cross Arm (75x40x6 mm), [GALVANIZED] (14.6 Kgs.)	Nos.	20	1,146	22,916.16
5	Back clamp ( 50x6 mm) for V-cross arm [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
6	Back clamp ( 50x6 mm) for Top Bracket [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
7	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[GALVANIZED] (2.6 Kgs. each)(each set=2 no clamp)	set	20	204	4,080.96
8	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	63	330	20,815.20
9	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	12	531	6,372.00
10	11 KV 3 pin type, 3 Phase, AB switch 630 Amp (Porcelain Type) with operating GI pipe and handle	Set	1	20,916	20,915.50
11	support clamp for AB switch(for pipe and handle)	set	1	204	204.05
12	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Set	1	995	994.74
13	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	12	1,155	13,859.76
14	Angle/side Stay Clamp ( 50x10 mm) suitable for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	12	151	1,808.18
15	P G clamp for 50mm <sup>2</sup>	Nos.	12	40	480.00
16	Aluminium binding wire	KG	11	302	3,322.88
17	GI Wire No. 10 for earthing	KG	55	84	4,620.00
18	Stone Base plate for 11 KV line	Nos.	22	223	4,906.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	44	73	3,214.89
20	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Set(1set =2 no)	1	3,241	3,241.22
21	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Pair	2	235	470.88
22	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) for LA and AB switch	Set(1set =2 no)	1	3,241	3,241.22
23	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 2no ) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.5 Kgs. each)	Pair	2	235	470.88
24	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	set	1	4,057	4,057.42



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
25	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[GALVANIZED] (1.3 Kgs.)	Set	2	204	408.10
26	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[GALVANIZED] (2.33 Kgs. each)	Pair	4	366	1,462.87
27	Spike Earthing made of 20mm GI solid Rod	Each	22	589	12,947.55
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	22	141	3,107.81
29	Danger Board 11KV	Nos.	22	145	3,193.08
<b>A</b>	<b>Sub Total (in INR)</b>				<b>432,233.05</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	12,966.99
<b>C</b>	Contingencies Charges (in INR)		@	3%	12,966.99
<b>D</b>	Store Charges (in INR)		@	3%	12,966.99
<b>E</b>	Transportation Cost (in INR)		@	4%	17,289.32
<b>F</b>	T & P Cost (in INR)		@	2%	8,644.66
<b>G</b>	Over head Cost (in INR)		@	10%	43,223.30
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		140,831.04
			Hard Soil		146,428.51
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>681,122.35</b>
			Hard Soil		<b>686,719.82</b>



**41. 1 KM 11KV Overhead Line on 9 mtr PSC Pole with Polymer insulators & 34 sq mm (Weasel) Conductor With 50 Mtr Average Span with 1 Cut Point DP (Center)**

S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 200 KG W.L (8 mtr.)	Nos.	22	2,634	57,938.76
2	Weasel conductor (34 sq. mm) with 3% saging	Kms.	3.09	31,060	95,975.06
3	11kv Pole Top Bracket 50x8 mm [GALVANIZED] (2.2 Kgs.)	Nos.	20	173	3,453.12
4	11kv V Cross Arm (75x40x6 mm), [GALVANIZED] (14.6 Kgs.)	Nos.	20	1,146	22,916.16
5	Back clamp ( 50x6 mm) for V-cross arm [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
6	Back clamp ( 50x6 mm) for Top Bracket [GALVANIZED] (1.3 Kgs.)	Nos.	20	102	2,040.48
7	Support Clamp for V Cross Arm for 9 mtr 400kg PSC pole[GALVANIZED] (2.6 Kgs. each)(each set=2 no clamp)	set	20	204	4,080.96
8	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	63	330	20,815.20
9	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	12	531	6,372.00
10	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type) with operating GI pipe and handle	Set	1	20,916	20,915.50
11	Support clamp for AB switch(for pipe and handle)	set	1	204	204.05
12	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Set	1	995	994.74
13	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	12	1,155	13,859.76
14	Angle/side Stay Clamp ( 50x10 mm) suitable for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	12	151	1,808.18
15	P G clamp for 30mm <sup>2</sup>	Nos.	12	40	480.00
16	Aluminium binding wire	KG	11	302	3,322.88
17	GI Wire No. 10 for earthing	KG	55	84	4,620.00
18	Stone Base plate for 11 KV line	Nos.	22	223	4,906.00
19	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	44	73	3,214.89
20	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Set(1set=2 no)	1	3,241	3,241.22
21	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.)	Pair	2	235	470.88
22	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) for LA and AB switch	Set(1set=2 no)	1	3,241	3,241.22
23	D P Channel Support Clamp ( 50x6 mm) feet ( 1 pair = 2no ) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.5 Kgs. each)	Pair	2	235	470.88
24	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	set	1	4,057	4,057.42
25	Clamp for Cross Bracing Set of 2 pair for 9 mtr 400kg PSC Pole[GALVANIZED] (1.3 Kgs.)	Set	2	204	408.10



S. No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
26	Support clamp for Cross Bracing for 9 mtr 400kg PSC Pole[GALVANIZED] (2.33 Kgs. each)	Pair	4	366	1,462.87
27	Spike Earthing made of 20mm GI solid Rod	Each	22	589	12,947.55
28	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	22	141	3,107.81
29	Danger Board 11KV	Nos.	22	145	3,193.08
<b>A</b>	<b>Sub Total (in INR)</b>				<b>302,559.24</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	9,076.78
<b>C</b>	Contingencies Charges (in INR)		@	3%	9,076.78
<b>D</b>	Store Charges (in INR)		@	3%	9,076.78
<b>E</b>	Transportation Cost (in INR)		@	4%	12,102.37
<b>F</b>	T & P Cost (in INR)		@	2%	6,051.18
<b>G</b>	Over head Cost (in INR)		@	10%	30,255.92
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		140,997.10
			Hard Soil		146,594.57
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>519,196.15</b>
			Hard Soil		<b>524,793.62</b>



**42. 1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx50 sq. mm.+70 sq. mm. bare messenger**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	24	4,496	107,899.20
2	11 KV XLPE HT AB Cable 3Cx50mm <sup>2</sup> +70mm <sup>2</sup> bare messenger	Mtrs.	1050	357	374,946.18
3	Suspension Clamp Suitable for 25 -70 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	22	342	7,528.40
4	Dead End Clamp Suitable for 25 -50 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	2	385	769.36
5	Stainless Steel Strip of 20mmX1mmx1000mm with Buckle Clip	Mtrs.	24	52	1,246.08
6	Pole clamp for I hook B type (0.8 Kgs. each)	Pair	24	126	3,013.63
7	Eye Hook	Nos.	24	96	2,293.92
8	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
9	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
10	Buckle for strap	Nos.	24	8	202.32
11	LT Pre insulated mid span joint suitable 95 mm <sup>2</sup> Phases	Nos.	3	185	555.85
12	Insulation piercing connector branching suitable for T Joints	Nos.	0	218	0.00
13	Service main anchor clamp for proper support of service cable	Nos.	20	78	1,555.60
14	GI Wire No. 8	KG	60	113	6,796.80
15	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	24	141	3,390.34
<b>A</b>	<b>Sub Total (in INR)</b>				<b>533,901.01</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	16,017.03
<b>C</b>	Contingencies Charges (in INR)		@	3%	16,017.03
<b>D</b>	Store Charges (in INR)		@	3%	16,017.03
<b>E</b>	Transportation Cost (in INR)		@	4%	21,356.04
<b>F</b>	T & P Cost (in INR)		@	2%	10,678.02
<b>G</b>	Over head Cost (in INR)		@	10%	53,390.10
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		145,817.37
			Hard Soil		150,770.92
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>813,193.64</b>
			Hard Soil		<b>818,147.19</b>



**43. 1 KM 11KV Overhead Line on 9 mtr PSC Pole 11 KV XLPE HT AB Cable 3Cx95 sq. mm.+80 sq. mm. bare messenger**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)	
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	24	4,496	107,899.20	
2	11 KV XLPE HT AB Cable 3Cx95mm <sup>2</sup> +80mm <sup>2</sup> bare messenger	Mtrs.	1050	445	467,685.33	
3	Suspension Clamp Suitable for 35 -95 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	22	378	8,314.47	
4	Dead End Clamp Suitable for 70 -95 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	2	425	849.60	
5	Stainless Steel Strip of 20mmX1mmx1000mm with Buckle Clip	Mtrs.	24	52	1,246.08	
6	Pole clamp for I hook B type (0.8 Kgs. each)	Pair	24	126	3,013.63	
7	Eye Hook	Nos.	24	96	2,293.92	
8	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28	
9	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45	
10	Buckle for strap	Nos.	24	8	202.32	
11	LT Pre insulated mid span joint suitable 95 mm <sup>2</sup> Phases	Nos.	3	185	555.85	
12	Insulation piercing connector branching suitable for T Joints	Nos.	0	218	0.00	
13	Service main anchor clamp for proper support of service cable	Nos.	20	78	1,555.60	
14	GI Wire No. 8	KG	60	113	6,796.80	
15	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	24	141	3,390.34	
<b>A</b>	<b>Sub Total (in INR)</b>				<b>627,506.47</b>	
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)			@	3%	18,825.19
<b>C</b>	Contingencies Charges (in INR)			@	3%	18,825.19
<b>D</b>	Store Charges (in INR)			@	3%	18,825.19
<b>E</b>	Transportation Cost (in INR)			@	4%	25,100.26
<b>F</b>	T & P Cost (in INR)			@	2%	12,550.13
<b>G</b>	Over head Cost (in INR)			@	10%	62,750.65
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil		158,894.20
				Hard Soil		163,847.75
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil		<b>943,277.28</b>
				Hard Soil		<b>948,230.84</b>



**44. 1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 core 400mm <sup>2</sup> (Armoured)	Mtr	2200	1,886	4,149,680.04
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 400 mm <sup>2</sup>	Set	3	4,307	12,921.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 400 mm <sup>2</sup>	Set	8	1,748	13,987.20
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	2000	661	1,322,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	20	105	2,099.83
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>6,044,745</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	181,342
<b>C</b>	Contingencies Charges (in INR)		@	3%	181,342
<b>D</b>	Store Charges (in INR)		@	3%	181,342
<b>E</b>	Transportation Cost (in INR)		@	4%	241,790
<b>F</b>	T & P Cost (in INR)		@	2%	120,895
<b>G</b>	Over head Cost (in INR)		@	10%	604,474
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		2,931,803
			Hard Soil		4,303,751
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>10,487,734</b>
			Hard Soil		<b>11,859,682</b>



**45. 1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 300mm2 (Armoured)	Mtr	2200	1,646	3,620,433.52
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 300 mm2	Set	3	4,307	12,921.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 300 mm2	Set	8	1,748	13,987.20
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	2000	661	1,322,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	20	105	2,099.83
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
A	<b>Sub Total (in INR)</b>				<b>5,515,498</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	165,465
C	Contingencies Charges (in INR)	@		3%	165,465
D	Store Charges (in INR)	@		3%	165,465
E	Transportation Cost (in INR)	@		4%	220,620
F	T & P Cost (in INR)	@		2%	110,310
G	Over head Cost (in INR)	@		10%	551,550
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	2,909,284
				Hard Soil	4,281,232
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>9,803,656</b>
				Hard Soil	<b>11,175,604</b>



**46. 1 KM 11kV HT Trenchless Double circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 185mm <sup>2</sup> (Armoured)	Mtr	2200	1,131	2,488,525.60
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 185 mm <sup>2</sup>	Set	3	1,203	3,609.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 185 mm <sup>2</sup>	Set	8	1,748	13,987.20
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	2000	661	1,322,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	20	105	2,099.83
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>4,374,278</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	131,228
<b>C</b>	Contingencies Charges (in INR)		@	3%	131,228
<b>D</b>	Store Charges (in INR)		@	3%	131,228
<b>E</b>	Transportation Cost (in INR)		@	4%	174,971
<b>F</b>	T & P Cost (in INR)		@	2%	87,486
<b>G</b>	Over head Cost (in INR)		@	10%	437,428
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	2,378,534
				Hard Soil	3,499,745
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>7,846,382</b>
				Hard Soil	<b>8,967,593</b>



**47. 1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 400 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 core 400mm <sup>2</sup> (Armoured)	Mtr	1200	1,886	2,263,461.84
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 400 mm <sup>2</sup>	Set	3	4,307	12,921.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 400 mm <sup>2</sup>	Set	4	1,748	6,993.60
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	1000	661	661,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (150 Sqmm ACSR Conductor)	Mtr	10	167	1,669.23
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>3,453,751</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	103,613
<b>C</b>	Contingencies Charges (in INR)	@		3%	103,613
<b>D</b>	Store Charges (in INR)	@		3%	103,613
<b>E</b>	Transportation Cost (in INR)	@		4%	138,150
<b>F</b>	T & P Cost (in INR)	@		2%	69,075
<b>G</b>	Over head Cost (in INR)	@		10%	345,375
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	1,489,097
				Hard Soil	2,175,932
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>5,806,286</b>
				Hard Soil	<b>6,493,121</b>



**48. 1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 300 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 300mm <sup>2</sup> (Armoured)	Mtr	1200	1,646	1,974,781.92
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 300 mm <sup>2</sup>	Set	3	4,307	12,921.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 300 mm <sup>2</sup>	Set	4	1,748	6,993.60
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	1000	661	661,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	10	105	1,049.91
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
A	<b>Sub Total (in INR)</b>				<b>3,164,452</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	94,934
C	Contingencies Charges (in INR)	@		3%	94,934
D	Store Charges (in INR)	@		3%	94,934
E	Transportation Cost (in INR)	@		4%	126,578
F	T & P Cost (in INR)	@		2%	63,289
G	Over head Cost (in INR)	@		10%	316,445
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	1,476,813
				Hard Soil	2,163,649
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>5,432,379</b>
				Hard Soil	<b>6,119,214</b>



**49. 1 KM 11kV HT Trenchless Single circuit cable laying 3 core, Armoured 185 sq mm with HDPE pipe (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 185mm <sup>2</sup> (Armoured)	Mtr	1200	1,131	1,357,377.6
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 185 mm <sup>2</sup>	Set	3	1,203	3,609.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 185 mm <sup>2</sup>	Set	4	1,748	6,993.60
4	HDPE Pipe - 160 mm /6" PE 63 grade	Mtr	1000	661	661,000.00
5	GI Pipe 6" Medium duty (B Class)	Mtr	25	1,391	34,781.25
6	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	8	196	1,569.60
7	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
8	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
9	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
10	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
11	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
12	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
13	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
14	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
15	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
16	GI Wire No. 8	KG	15	113	1,699.20
17	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
18	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	589	3,531.15
19	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	10	105	1,049.91
20	11 KV Danger board	Nos	6	145	870.84
21	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>2,537,736</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	76,132
<b>C</b>	Contingencies Charges (in INR)	@		3%	76,132
<b>D</b>	Store Charges (in INR)	@		3%	76,132
<b>E</b>	Transportation Cost (in INR)	@		4%	101,509
<b>F</b>	T & P Cost (in INR)	@		2%	50,755
<b>G</b>	Over head Cost (in INR)	@		10%	253,774
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	1,210,108
				Hard Soil	1,771,575
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>4,382,278</b>
				Hard Soil	<b>4,943,744</b>



**50. 1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 300 sq mm (1 riser in middle and cut point/riser at each end)**

Sr. No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 300mm <sup>2</sup> (Armoured)	Mtr	2200	1,646	3,620,433.52
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 300 mm <sup>2</sup>	Set	3	4,307	12,921.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 300 mm <sup>2</sup>	Set	8	1,748	13,987.20
4	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
5	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
6	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
7	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
8	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
9	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
10	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
11	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
12	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
13	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
14	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	GI Wire No. 8	KG	15	89,210	1,338,155.40
16	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
17	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	918	5,508.59
18	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	20	105	2,099.83
19	11 KV Danger board	Nos	6	145	870.84
20	Route and Joint Indicator	Nos.	20	164	3,280.40
<b>A</b>	<b>Sub Total (in INR)</b>				<b>5,531,932</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	165,958
<b>C</b>	Contingencies Charges (in INR)	@		3%	165,958
<b>D</b>	Store Charges (in INR)	@		3%	165,958
<b>E</b>	Transportation Cost (in INR)	@		4%	221,277
<b>F</b>	T & P Cost (in INR)	@		2%	110,639
<b>G</b>	Over head Cost (in INR)	@		10%	553,193
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			895,138
		Hard Soil			906,167
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>7,810,053</b>
		Hard Soil			<b>7,821,081</b>



**51. 1 KM 11kV HT Double circuit cable laying in Trench 3 core, Armoured 185 sq mm (1 riser in middle and cut point/riser at each end)**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	11 KV XLPE Cable 3 Core 185mm2 (Armoured)	Mtr	2200	1,131	2,488,525.60
2	11 KV 3-core heat shrinkable Straight through Cable Jointing kit 185 mm2	Set	3	1,203	3,609.00
3	11 KV 3-core heat shrinkable Outdoor Cable Jointing/termination kit 185 mm2	Set	8	1,748	13,987.20
4	GI Pipe 6" Medium duty (B Class)	Mtr	50	1,391	69,562.50
5	Clamp for supporting XLPE Cable for Rail pole (Round type with back clamp) 2.5 Kg	Set	16	196	3,139.20
6	Rail Pole 60 kgs 13 meter	Nos.	6	67,260	403,560.00
7	11kv D P Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.)	Each	6	3,241	19,447.34
8	D P Channel Support Clamp ( 50x6 mm) feet (1 pair = 1 set) for 60kg Rail Pole[GALVANIZED] (2.25 Kgs. each)	Each	12	353	4,237.92
9	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	9	330	2,973.60
10	11 KV Cross bracing for D P Structure[GALVANIZED] (51.7 Kgs.)	Set	3	4,057	12,172.25
11	Clamp for Cross Bracing Set of 2 pair for 60kg Rail Pole[GALVANIZED] (1.872 Kgs. each)	Set	6	294	1,762.97
12	Support clamp for Cross Bracing for 60kg Rail Pole[GALVANIZED] (2.5 Kgs. each)	Pair	12	392	4,708.80
13	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
14	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
15	GI Wire No. 8	KG	15	89,210	1,338,155.40
16	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
17	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	6	918	5,508.59
18	Jumpering wire (100 Sqmm ACSR Conductor)	Mtr	20	105	2,099.83
19	11 KV Danger board	Nos.	6	145	870.84
20	Route and Joint Indicator	Nos.	20	164	3,280.40
	<b>Sub Total (in INR)</b>				<b>4,390,712</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	131,721
C	Contingencies Charges (in INR)	@		3%	131,721
D	Store Charges (in INR)	@		3%	131,721
E	Transportation Cost (in INR)	@		4%	175,628
F	T & P Cost (in INR)	@		2%	87,814
G	Over head Cost (in INR)	@		10%	439,071
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	865,863
				Hard Soil	876,891
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>6,354,252</b>
				Hard Soil	<b>6,365,281</b>



**52. 1 KM LT Line of 34 sq. mm. (Weasel) conductor with 50 Mtr Average span**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 200 KG W.L (8 mtr.)	Nos.	25	2,634	65,839.50
2	ACSR Weasel conductor (34 sq. mm) with sagging	KMs	4.2	31,060	130,451.53
3	LT Pin insulator with Pin (Porcelain type)	Nos.	100	33	3,304.00
4	LT Angle Bracket (50x50x6 mm)[GALVANIZED]	Set	25	432	10,791.00
5	LT Phase Seperator	Set	72	31	2,223.36
6	LT Back clamp (50 x 6 mm) for LT angle[GALVANIZED] (0.55 Kgs. each)	Nos.	25	86	2,158.20
7	LT Stay set complete (1700x16 mm) with stay wire 7/12 SWG	Set	8	780	6,240.00
8	Angle/side Stay Clamp ( 50x6 mm) for 8 mtr 200kg PSC Pole[GALVANIZED] (1.08 Kgs.)	Pair	8	85	678.07
9	Danger Board LT	Nos.	10	145	1,451.40
10	Aluminium binding wire	KG	13	302	3,927.04
11	Stone Base plate for LT	Nos.	25	223	5,575.00
12	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	8	33	264.32
13	GI Wire No. 8	KG	20	84	1,680.00
14	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	8	141	1,130.11
15	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	25	73	1,826.64
<b>A</b>	<b>Sub Total (in INR)</b>				<b>237,540.17</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	7,126.21
<b>C</b>	Contingencies Charges (in INR)		@	3%	7,126.21
<b>D</b>	Store Charges (in INR)		@	3%	7,126.21
<b>E</b>	Transportation Cost (in INR)		@	4%	9,501.61
<b>F</b>	T & P Cost (in INR)		@	2%	4,750.80
<b>G</b>	Over head Cost (in INR)		@	10%	23,754.02
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		113,695.35
			Hard Soil		118,818.29
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>410,620.57</b>
			Hard Soil		<b>415,743.51</b>



**53. 1 KM LT Line of 50 sq. mm. (Rabbit) conductor with 50 Mtr Average span**

S. No	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 200 KG W.L (8 mtr.)	Nos.	25	2,634	65,839.50
2	ACSR Rabbit Conductor (50 mm <sup>2</sup> ) with sagging	KMs	4.2	59,767	251,021.40
3	LT Pin insulator with Pin (Porcelain type)	Nos.	100	33	3,304.00
4	LT Angle Bracket (50x50x6 mm)[GALVANIZED]	Set	25	432	10,791.00
5	LT Phase Seperator	Set	72	31	2,223.36
6	LT Back clamp (50 x 6 mm) for LT angle[GALVANIZED] (0.55 Kgs. each)	Nos.	25	86	2,158.20
7	LT Stay set complete (1700x16 mm) with stay wire 7/12 SWG	Set	8	780	6,240.00
8	Angle/side Stay Clamp ( 50x6 mm) for 8 mtr 200kg PSC Pole[GALVANIZED] (1.08 Kgs.)	Pair	8	85	678.07
9	Danger Board LT	Nos.	10	145	1,451.40
10	Aluminium binding wire	KG	13	302	3,927.04
11	Stone Base plate for LT	Nos.	25	223	5,575.00
12	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	8	33	264.32
13	GI Wire No. 8	KG	20	84	1,680.00
14	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	8	141	1,130.11
15	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	25	73	1,826.64
<b>A</b>	<b>Sub Total (in INR)</b>				<b>358,110.04</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	10,743.30
<b>C</b>	Contingencies Charges (in INR)		@	3%	10,743.30
<b>D</b>	Store Charges (in INR)		@	3%	10,743.30
<b>E</b>	Transportation Cost (in INR)		@	4%	14,324.40
<b>F</b>	T & P Cost (in INR)		@	2%	7,162.20
<b>G</b>	Overhead Cost (in INR)		@	10%	35,811.00
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		113,695.35
			Hard Soil		118,818.29
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>561,332.90</b>
			Hard Soil		<b>566,455.84</b>



**54. 1 KM LT Overhead Line on 8 mtr PSC Pole LT XLPE AB Cable  
3Cx95+1Cx70 sq. mm.**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	25	4,496	112,395.00
2	LT XLPE AB Cable 3Cx95+70mm2	Kms	1.03	204,057	210,179.12
3	Suspension Clamp Suitable for 35 -95 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	23	378	8,692.40
4	Dead End Clamp Suitable for 70 -95 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	2	425	849.60
5	Stainless Steel Strip of 20mmX1mmx1000mm with Buckle Clip	Mtrs.	15	52	778.80
6	Pole clamp for I hook B type (0.8 Kgs. each)	Pair	25	126	3,139.20
7	Eye Hook	Nos.	25	96	2,389.50
8	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
9	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
10	LT Pre insulated mid span joint suitable 95 mm2 Phases	Nos.	3	185	555.85
11	LT Pre insulated mid span joint suitable 70 mm2 Phases	Nos.	3	162	485.28
12	Insulation piercing connector-Type-II (main 16-95 mm2 & tap 16-95 sq mm)	Nos.	100	83	8,278.00
13	Spring loaded CP multi conn bus-bar in insulated box Single Phase 1 in 9 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Nos.	25	1,145	28,615.00
14	LT XLPE Single Core Cable 95 mm2 (Armoured)	Mtr.	125	95	11,875.00
15	Insulation piercing connector branching suitable for T Joints	Nos.	3	218	654.90
16	Service main anchor clamp for proper support of service cable	Nos.	25	78	1,944.50
17	GI Wire No. 8	KG	63	113	7,080.00
18	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
19	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	25	589	14,713.13
A	<b>Sub Total (in INR)</b>				<b>425,735.61</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	12,772.07
C	Contingencies Charges (in INR)		@	3%	12,772.07
D	Store Charges (in INR)		@	3%	12,772.07
E	Transportation Cost (in INR)		@	4%	17,029.42
F	T & P Cost (in INR)		@	2%	8,514.71
G	Overhead Cost (in INR)		@	10%	42,573.56
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		151,623.96
			Hard Soil		156,745.95
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>683,793.47</b>
			Hard Soil		<b>688,915.47</b>



**55. 1 KM LT Overhead Line on 8 mtr PSC Pole LT XLPE AB Cable 3x50+1Cx35**

Sr No.	Description of item of Work	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	25	4,496	112,395.00
2	LT XLPE AB Cable 3Cx50+35mm <sup>2</sup>	Km	1.03	174,874	180,120.22
3	Suspension Clamp Suitable for 25 -70 Sqmm Bare Messenger (Including 1 No. Suspension Clamp with Bracket + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	23	342	7,870.60
4	Dead End Clamp Suitable for 70 -95 Sqmm Bare Messenger (Including 1 No. Dead End Bracket + 1 No. Dead End + 1.5 Mtr SS Strap + 2 Nos. SS buckle)	Nos.	2	425	849.60
5	Stainless Steel Strip of 20mmX1mmx1000mm with Buckle Clip	Mtrs.	15	52	778.80
6	Pole clamp for I hook B type (0.8 Kgs. each)	Pair	25	126	3,139.20
7	Eye Hook	Nos.	25	96	2,389.50
8	Stay Set complete (1800x20mm) with stay wire 7/10 SWG & Guy Insulator (Galvanised)	Set	8	1,047	8,373.28
9	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.)	Set	8	151	1,205.45
10	LT Pre insulated mid span joint suitable 50 mm <sup>2</sup> Phases	Nos.	3	123	369.00
11	LT Pre insulated mid span joint suitable 70 mm <sup>2</sup> Phases	Nos.	3	162	485.28
12	Insulation piercing connector branching suitable for T joints	Nos.	100	218	21,830.00
13	Insulation piercing connector-Type-II (main 16-95 mm <sup>2</sup> & tap 16-95 sq mm)	Nos.	25	83	2,069.50
14	Spring loaded CP multi conn bus-bar in insulated box Single Phase 1 in 6 out (Dist. Box for fixing on pole suitable for AB XLPE Cable)	Nos.	25	1,003	25,075.00
15	XLPE Single Core Cable 50 mm <sup>2</sup> (Armoured)	Mtr.	3	89.93	269.80
16	Service main anchor clamp for proper support of service cable	Nos.	25	77.78	1,944.50
17	GI Wire No. 8	KG	63	113	7,080.00
18	Earth clamp for earthwire (50 x 6 mm)[GALVANIZED] (1.8 Kgs.)	Pair	25	141	3,531.60
19	Rod type Earthing (25 mm Dia MS Rod 3 mtr long)	Set	25	589	14,713.13
<b>A</b>	<b>Sub Total (in INR)</b>				<b>394,489.46</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)		@	3%	11,834.68
<b>C</b>	Contingencies Charges (in INR)		@	3%	11,834.68
<b>D</b>	Store Charges (in INR)		@	3%	11,834.68
<b>E</b>	Transportation Cost (in INR)		@	4%	15,779.58
<b>F</b>	T & P Cost (in INR)		@	2%	7,889.79
<b>G</b>	Over head Cost (in INR)		@	10%	39,448.95
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)		Normal Soil		149,755.02
			Hard Soil		154,877.01
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>		Normal Soil		<b>642,866.84</b>
			Hard Soil		<b>647,988.83</b>





# DSS COSTING



## 56. 11/.433 KV DSS with 25 KVA Distribution Transformer

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Rabbit Conductor (50 mm <sup>2</sup> )	KMs	0.1	59,767	5,976.70
3	P G clamp for 50mm <sup>2</sup>	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	BIS Energy Efficiency level-1 type tested, 11/.433 kv 25 kVA, Al. wd., stack type CRGO core, distribution transformer fitted completely self -protected (CSP)	Nos.	1	60,038	60,038.40
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for Transformer base Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Set contains 2 Nos)	Pair	2	235	470.88
17	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
18	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
19	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
20	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
21	LTDB for 25KVA, Isolator 63A, incoming MCCB 4P,63A,20KA, Outgoing MCCB 3P 32A,20KA	Nos.	1	18,956	18,956.00
22	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
23	XLPE Single Core Cable 50 mm <sup>2</sup> (Armoured)	Mtr	30	90	2,697.99
24	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18
25	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm)[GALVANIZED] (52.3 Kgs.) (1 Set contains 2 Nos)	Set	1	4,105	4,104.50



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
26	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.) (1 Pair contains 2 Nos)	Pair	2	251	502.27
27	Aluminium binding wire	KG	4	302	1,208.32
28	GI Wire No. 8	KG	8	84	672.00
29	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
30	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
31	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
32	Danger Board 11KV	Nos.	2	145	290.28
<b>A</b>	<b>Sub Total (in INR)</b>				<b>206,197.02</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@	3%		6,185.91
<b>C</b>	Contingencies Charges (in INR)	@	3%		6,185.91
<b>D</b>	Store Charges (in INR)	@	3%		6,185.91
<b>E</b>	Transportation Cost (in INR)	@	4%		8,247.88
<b>F</b>	T & P Cost (in INR)	@	2%		4,123.94
<b>G</b>	Over head Cost (in INR)	@	10%		20,619.70
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			25,232.52
		Hard Soil			26,024.90
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>282,978.80</b>
		Hard Soil			<b>283,771.18</b>



## 57. 11/.433 KV DSS with 63 KVA Distribution Transformer

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Rabbit Conductor (50 mm <sup>2</sup> )	KMs	0.1	59,767	5,976.70
3	P G clamp for 50mm <sup>2</sup>	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	BIS Energy Efficiency level-I, 11/0.433 kV 63 kVA, Al. wd., stack type CRGO core, distribution transformer fitted completely self-protected (CSP)	Nos.	1	105,315	105,315.00
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for Transformer base Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Set contains 2 Nos)	Pair	2	235	470.88
17	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
18	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
19	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
20	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
21	LT Distribution box suitable for 63 KVA transformer (200 A, isolator & 6 TP MCCB of 100 A)	Nos.	1	14,073	14,072.68
22	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
23	XLPE Single Core Cable 50 mm <sup>2</sup> (Armoured)	Mtr	30	90	2,697.99
24	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18
25	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm)[GALVANIZED] (52.3 Kgs.) (1 Set contains 2 Nos)	Set	1	4,105	4,104.50



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
26	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.) (1 Pair contains 2 Nos)	Pair	2	251	502.27
27	Aluminium binding wire	KG	4	302	1,208.32
28	GI Wire No. 8	KG	8	84	672.00
29	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
30	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
31	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
32	Danger Board 11KV	Nos.	2	145	290.28
<b>A</b>	<b>Sub Total (in INR)</b>				<b>246,590.30</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	7,397.71
<b>C</b>	Contigencies Charges (in INR)	@		3%	7,397.71
<b>D</b>	Store Charges (in INR)	@		3%	7,397.71
<b>E</b>	Transportation Cost (in INR)	@		4%	9,863.61
<b>F</b>	T & P Cost (in INR)	@		2%	4,931.81
<b>G</b>	Over head Cost (in INR)	@		10%	24,659.03
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			25,232.52
		Hard Soil			26,024.90
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>333,470.40</b>
		Hard Soil			<b>334,262.77</b>



**58. 11/.433 KV DSS with 100 KVA Distribution Transformer**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Rabbit Conductor (50 mm <sup>2</sup> )	KMs	0.1	59,767	5,976.70
3	P G clamp for 50mm <sup>2</sup>	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	BIS Energy Efficiency level-I, 11/0.433 kV 100 kVA, Al. wd., stack type CRGO core, distribution transformer fitted with completely self-protected (CSP)	Nos.	1	136,078	136,077.60
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for Transformer base Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Set contains 2 Nos)	Pair	2	235	470.88
17	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
18	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
19	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
20	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
21	LTDB for 100KVA, Isolator 250A, incoming MCCB 4P,200A,36KA, Outgoing MCCB 3P 100A,36KA	Nos.	1	29,488	29,488.20
22	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
23	XLPE Single Core Cable 50 mm <sup>2</sup> (Armoured)	Mtr	30	90	2,697.99
24	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18
25	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm)[GALVANIZED] (52.3 Kgs.) (1 Set contains 2 Nos)	Set	1	4,105	4,104.50
26	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.) (1 Pair contains 2 Nos)	Pair	2	251	502.27
27	Aluminium binding wire	KG	4	302	1,208.32
28	GI Wire No. 8	KG	8	84	672.00



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
29	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
30	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
31	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
32	Danger Board 11KV	Nos.	2	145	290.28
<b>A</b>	<b>Sub Total (in INR)</b>				<b>292,768.42</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@	3%		8,783.05
<b>C</b>	Contigencies Charges (in INR)	@	3%		8,783.05
<b>D</b>	Store Charges (in INR)	@	3%		8,783.05
<b>E</b>	Transportation Cost (in INR)	@	4%		11,710.74
<b>F</b>	T & P Cost (in INR)	@	2%		5,855.37
<b>G</b>	Over head Cost (in INR)	@	10%		29,276.84
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			25,232.52
		Hard Soil			26,024.90
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>391,193.05</b>
		Hard Soil			<b>391,985.42</b>



## 59. 11/.433 KV DSS with 200 KVA Distribution Transformer

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Dog conductor (100 sq. mm)	KMs	0.1	104,991	10,499.13
3	P G clamp for 50mm <sup>2</sup>	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	11/0.433 KV Distribution Transformer 200 KVA, Aluminium Winding, Stack type CRGO Core fitted, Completely Self Protected; 4 star - BEE rating ; BIS Level 1	Nos.	1	218,419	218,419.18
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for Transformer base Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Set contains 2 Nos)	Pair	2	235	470.88
17	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
18	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
19	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
20	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
21	LTDB for 200KVA, Isolator 400A, incoming MCCB 4P,400A,50KA, Outgoing MCCB 3P 100A,36KA	Nos.	1	46,579	46,579.32
22	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
23	LT XLPE Single Core Cable 95 mm <sup>2</sup> (Armoured)	Mtr	30	95	2,850.00
24	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
25	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm)[GALVANIZED] (52.3 Kgs.) (1 Set contains 2 Nos)	Set	1	4,105	4,104.50
26	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.) (1 Pair contains 2 Nos)	Pair	2	251	502.27
27	Aluminium binding wire	KG	4	302	1,208.32
28	GI Wire No. 8	KG	8	84	672.00
29	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
30	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
31	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
32	Danger Board 11KV	Nos.	2	145	290.28
<b>A</b>	<b>Sub Total (in INR)</b>				<b>396,875.56</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	11,906.27
<b>C</b>	Contingencies Charges (in INR)	@		3%	11,906.27
<b>D</b>	Store Charges (in INR)	@		3%	11,906.27
<b>E</b>	Transportation Cost (in INR)	@		4%	15,875.02
<b>F</b>	T & P Cost (in INR)	@		2%	7,937.51
<b>G</b>	Overhead Cost (in INR)	@		10%	39,687.56
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	25,232.52
				Hard Soil	26,024.90
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>521,326.98</b>
				Hard Soil	<b>522,119.35</b>



**60. 11/.433 KV DSS with 315 KVA Distribution Transformer**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Dog conductor (100 sq. mm)	KMs	0.1	104,991	10,499.13
3	P G clamp for 50mm <sup>2</sup>	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kv 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	11/0.433 KV Distribution Transformer 315 KVA, Copper wound, CRGO M4 Core ONAN; BIS Level 1	Nos.	1	526,136	526,136.00
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for Transformer base Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Set contains 2 Nos)	Pair	2	235	470.88
17	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
18	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
19	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
20	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
21	LTDB for 200KVA, Isolator 400A, incoming MCCB 4P,400A,50KA, Outgoing MCCB 3P 100A,36KA	Nos.	1	46,579	46,579.32
22	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
23	LT XLPE Cable 1Cx120 sqmm (Armoured)	Mtr	60	105	6,271.56
24	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18
25	Transformer belting (50x50x6 mm) & belting support (40x40x6 mm)[GALVANIZED] (52.3 Kgs.) (1 Set contains 2 Nos)	Set	1	4,105	4,104.50
26	Clamp (50 x 6 mm) for Transformer base channel [GALVANIZED] (3.2 Kgs.) (1 Pair contains 2 Nos)	Pair	2	251	502.27



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
27	Aluminium binding wire	KG	4	302	1,208.32
28	GI Wire No. 8	KG	8	84	672.00
29	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
30	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
31	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
32	Danger Board 11KV	Nos.	2	145	290.28
<b>A</b>	<b>Sub Total (in INR)</b>				<b>708,013.94</b>
<b>B</b>	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	21,240.42
<b>C</b>	Contingencies Charges (in INR)	@		3%	21,240.42
<b>D</b>	Store Charges (in INR)	@		3%	21,240.42
<b>E</b>	Transportation Cost (in INR)	@		4%	28,320.56
<b>F</b>	T & P Cost (in INR)	@		2%	14,160.28
<b>G</b>	Over head Cost (in INR)	@		10%	70,801.39
<b>H</b>	Labour Cost (as per respective labour cost analysis sheet) (in INR)			Normal Soil	25,232.52
				Hard Soil	26,024.90
<b>I</b>	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>			Normal Soil	<b>910,249.95</b>
				Hard Soil	<b>911,042.33</b>



**61. 11/.433 KV DSS with 500 KVA Distribution Transformer**

S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
1	PSC Pole 400 KG W.L (9 mtr.)	Nos.	2	4,496	8,991.60
2	ACSR Dog conductor (100 sq. mm)	KMs	0.1	104,991	10,499.13
3	P G clamp for 50mm2	Nos.	6	40	240.00
4	11 KV Pin Insulator 10 KN, OD 40 mm dia with Pin (Polymer Type) and nut & washer	Nos.	3	330	991.20
5	11 KV B&S type Disc Insulator (Polymer Type) 70 KN with H/W fitting	Nos.	3	531	1,593.00
6	11 KV 3 pin type, 3 Phase, AB switch 400 Amp (Porcelain Type)	Set	1	14,337	14,337.00
7	11 KV H.G. Fuse unit (polymer type)	Set	1	1,788	1,788.00
8	Lightening Arrestor (9kV 5KA) Line type (polymer type)	Nos.	1	995	994.74
9	11/0.433 KV Distribution Transformer 500 KVA, Copper wound, CRGO M4 Core ONAN; BIS Level 1	Nos.	1	759,887	759,887.23
10	11kv Top Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	3,241.22
11	Transformer base Channel (100x50x6 mm)[GALVANIZED] (52.63 Kgs.)(1Set contains 2 Nos)	Set	1	4,130	4,130.40
12	11kv Channel for AB Switch( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	6,482.45
13	11kv HG Fuse Channel ( 75x40x6 mm) [GALVANIZED] (41.3 Kgs.) (1Set contains 2 Nos)	Set	1	3,241	0.00
14	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	2	235	470.88
15	Support Clamp for Top Channel 50x6 mm flat for 9 mtr 400kg PSC Pole[GALVANIZED] (3 Kgs.) (1Pair contains 2 Nos)	Pair	0	235	0.00
16	Support Clamp for AB Switch Base Channel (50x6 mm) for 9 mtr 400kg PSC Pole[ GALVANIZED] (1Pair contains 2 Nos)	Pair	2	235	470.88
17	Support clamp & channel for AB Switch handle (1 Set contains 2 Nos)	Set	2	235	470.88
18	11 KV Stay Set Complete (1800x16 mm) with stay wire 7/10 SWG and guy insulator	Set	4	1,155	4,619.92
19	Angle/side Stay Clamp ( 50x10 mm) for 9 mtr 400kg PSC Pole[GALVANIZED] (1.92 Kgs.) (1Pair contains 2 Nos)	Pair	4	151	602.73
20	LT Distribution box suitable for 500 KVA transformer (800 A, isolator & 12 TP MCCB of 160 A)	Nos.	1	66,735	66,734.69
21	MS Angle for LT Distribution bus (50x50x6 mm) [GALVANIZED] (1Pair contains 2 Nos)	Pair	1	589	588.60
22	LT XLPE Cable 1Cx120 sqmm (Armoured)	Mtr	60	105	6,271.56
23	HT Electronic Trivector static meter, 3 phase 4 wire, Accuracy class 0.2S (-/110V & -/5A) (DLMS complaint) with compatible GPRS modem with Meter Box	Nos.	1	14,751	14,751.18



S.No.	Material	Unit	Qty.	Rate (in INR)	Amount (in INR)
24	Aluminium binding wire	KG	4	302	1,208.32
25	GI Wire No. 8	KG	8	84	672.00
26	Stone Base plate for 11 KV, DSS, LT	Nos.	2	223	446.00
27	Anticlimbing Device(Barbed wire) 2x12 SWG	KG	6	73	438.39
28	ACE CHEMROD ( Artificial Concept of Earthing by Chemical Rod ) :- ACE Chemrod Earthing Electrode (consisting mild steel galvanised pipe of size 2500 mm in length X 48 mm outer dia. X 2 mm thick, MS rod of size 2575 mm X 16 mm be welded with bottom. The epoxy insulator of not less than 100 mm length is to be fixed on top of mild steel galvanised pipe. A highly conductive substance is to be filled in residual gap between pipe and rod) with Highly conductive substances not less than 25 kg for soil treatment	Nos.	3	15,210	45,630.60
29	Danger Board 11KV	Nos.	2	145	290.28
A	<b>Sub Total (in INR)</b>				<b>956,842.89</b>
B	Sundries Charges including nut bolts, paint etc. (in INR)	@		3%	28,705.29
C	Contingencies Charges (in INR)	@		3%	28,705.29
D	Store Charges (in INR)	@		3%	28,705.29
E	Transportation Cost (in INR)	@		4%	38,273.72
F	T & P Cost (in INR)	@		2%	19,136.86
G	Over head Cost (in INR)	@		10%	95,684.29
H	Labour Cost (as per respective labour cost analysis sheet) (in INR)	Normal Soil			25,232.52
		Hard Soil			26,024.90
I	<b>TOTAL (I = A+B+C+D+E+F+G+H) (in INR)</b>	Normal Soil			<b>1,221,286.13</b>
		Hard Soil			<b>1,222,078.51</b>



# **COST ESCALATION**



## 62. Calculation of Labour Cost Escalation

Methodology Adopted for escalation factor calculation in JBVNL Cost Data Book 2022-23	Labour Category	Daily wages for FY 2018-19 (INR)			Daily wages for FY 2022-23 (INR)			Percent rise in labour rate (over 2017 rates)
		Basic Minimum	VDA	Total Minimum	Basic Minimum	VDA	Total Minimum	
	Unskilled	210	27.38	237.38	274.81	52.04	326.85	37.69%
	Semi-skilled	220	28.68	248.68	287.9	54.53	342.43	37.70%
	Skilled	290	37.81	327.81	379.51	71.88	451.39	37.70%
	Highly-skilled	335	43.68	378.68	438.39	83.03	521.42	37.69%
	<b>Average</b>							<b>37.70%</b>

"Reference: Rates as per Labour, Planning, Training and Skills Development department of Government of Jharkhand Notification No.2/MW-20-02/2015 L & E -1467 Ranchi, dated 14/08/15

(Basic minimum daily wages w.e.f. 14th August 2015) & No.2/MW-2071/2010 L & T -592 Ranchi, dated 26/03/18 (VDA w.e.f. 1st April 2018)"

Reference: Rates as per Labour, Planning, Training and Skills Development department of Government of Jharkhand Notification - No.2/MW-2071/2010 L & T -501 Ranchi, dated 13/04/22 (Basic minimum daily wages w.e.f. 1st April 2022)





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