

PRICE BID FOR THE WORK UNDER SL. NO :- 02 AS PER IFB

NAME OF THE WORK :- EXECUTION OF EXTERNAL ELECTRIFICATION WORK FOR POWER SUPPLY TO 28-F TYPE QTRS. AT OSAP, 6TH BN., CUTTACK IN THE DIST. OF CUTTACK.

BID REF NO :- 54/PM/ELECT/OPHWC/2024-25

**NAME &
ADDRESS OF
THE FIRM**

SCHEDULE OF WORKS

Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.	
				RATE IN RS.	AMOUNT IN RS.
1	11 KV LINE				
	11 KV CUT POINT WITH 90 DEGREE ANGLE				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	2	34153.68	68307.36
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 4 no's channel required =(4x9.56x1.2)	Kg	91.776	102.00	9361.15
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required	Kg	21.1456	102.00	2156.85
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 4 no's channel required =(42x9.56x0.306)	Kg	23.40288	102.00	2387.09
5	Danger plate	No	2	108.80	217.60
6	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.6018	102.00	61.38
7	GI barbed wire/Anticlimbing device	No	6	108.80	652.80
8	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	2.4072	102.00	245.53
9	11 KV pin insulator polymer	Set	10	272.00	2720.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	15	476.00	7140.00
11	Disc insulator (B&S) 70 KN polymer	No.	15	1564.00	23460.00
12	Earthing of Support (Coil Type)	No	2	225.76	451.52
13	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr.-2 Mtr. For connecting pole with coil earthing	Kg	0.524	102.00	53.45
14	Non metallic ties -11 KV 55 sq. mm AAAC	No	10	251.00	2510.00
15	IPC for 55 sq. mm AAAC(For covered conductor)	No	15	371.00	5565.00
16	HT Stay Clamp,50x8 mm , flat 3.14 kg/Mtr.,0.551 Length , 2Nos.	Pair	2	170.00	340.00
17	HT Stay Set (Complete)	Set	2	1428.00	2856.00
18	HT Stay Insulator	No.	2	68.00	136.00
19	7/10 SWG Stay Wire , 15 Kg/stay	KG	30	102.00	3060.00
20	GI Nut , Bolt & Washer of different sizes (7.433 Kg each cut pole)	Kg	14.868	106.08	1577.20
21	Yellow colour paint for Background(GIS Numbering & Zebra stripping)for Background	Ltr	4	167.46	669.84
22	Black paint (GIS Numbering & Zebra stripping)	Ltr	1	299.20	299.20
A				A. Sub total	1,34,227.98
B				B. Stock, Storage & Insurance @ 3% of A	4,026.84
C				Sub Total (C=A+B)	1,38,254.82
D				T&P @ 2% of C	2633.42
E				Contingency @ 3% of C	4,147.64
F				Transportation @ 7.5% of C	10,369.11
				Erection Charges @ 5% on poles	3,517.83
G				Erection Charges @ 10%	6,131.00

H				Total	1,65,053.83
23	Fixing of 11 KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5) Stay clamps with Nuts & bolts, including excavation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material .	No	2	2301.53	4603.06
24	Couping Ratio 1:1:5:3(500 mmx500mmx1800mm)=0.45 Cu. Mtr.	Cum	0.9	6648.85	5983.97
25	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cum	0.225	6648.85	1495.99
	Total Material + Services Cost (J+K)				1,77,136.84
B	11 KV PIN POINTS WITH WPB				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	2	34153.68	68307.36
2	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)for stud pole	No	1	34153.68	34153.68
3	11 KV V cross arm	No	2	1101.60	2203.20
4	Top Bracket 100x50x6 mm GI channel(2 Kg each)	No	2	204.00	408.00
5	Danger plate	No	2	108.80	217.60
6	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.6	102.00	61.20
7	GI barbed wire/Anticlimbing device	No	6	108.80	652.80
8	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	2.41	102.00	245.82
9	11 KV Pin Insulator Polymer,3 Nos.,required for each support	No	6	272.00	1632.00
10	Earthing of Support (Coil Type)	No	2	225.76	451.52
11	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr.-2 Mtr. For connecting pole with coil earthing	Kg	0.524	102.00	53.45
12	GI Nut , Bolt & Washer of different sizes (7.433 Kg each cut pole)	Kg	2.9	106.08	307.63
13	55 sq. mm XLPE AAAC Covered conductor	Mtr.	370.8	99.74	36983.59
14	Yellow colour paint for Background	Ltr	4	167.46	669.84
15	Black colour paint for numbering	Ltr	2	299.20	598.40
16	Non metallic ties -11 KV 55 sq. mm AAAC	No	6	251.00	1506.00
A	A. Sub total				1,48,452.09
B	B. Stock, Storage & Insurance @ 3% of A				4,453.56
C	Sub Total (C=A+B)				1,52,905.65
D	T&P @ 2% of C				3,058.11
E	Contingency @ 3% of C				4,587.17
F	Transportation @ 7.5% of C				11,467.92
	Erection Charges @ 5% on poles				5,276.74
G	Erection Charges @ 10%				4,737.08
H	Total				1,82,032.68
17	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	Cum	0.9	6648.85	5983.97
18	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.for stud pole	Cum	0.45	6648.85	2991.98
19	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cum	0.225	6648.85	1495.99
20	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cum	0.1125	6648.85	748.00
21	Dismantlling of PSC Pole	No	1	920.61	920.61
	Total Material + Services Cost (J+K)				1,94,173.23
II	INSTALLATION OF 250 KVA S/S.				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	2	34153.68	68307.36
2	Top Channel(GI) GI 100 X 50 X 6 MM (3000 mm long) (9.56Kg./Mtr, 2 No's.) (Each 2x3.000x9.56= 57.36 Kg)	Kg	57.36	102.00	5850.72
3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	Kg	3.9648	102.00	404.41

4	M.U Channel(GI) GI 75x40x4.8 mm (3000 mm long)(7.14Kg./Mtr., 2 No's.) (Each 2x3.000x7.14= 42.84 Kg)	Kg	42.84	102.00	4369.68
5	AB Switch Mounting Channel(GI) 75x40x4.8 mm GI Channel(GI) (3000 mm long)(7.14Kg./Mtr., 2 No's.) (Each 2x3.000x7.14= 42.84 Kg)	Kg	6.69	102.00	682.38
6	AB Switch Side Support Channel(GI) 100X50X6mm,9.56 KG/Mtr., each Channel(GI) length 0.35 mtr., 2 no's Channel(GI) required =(9.56x2x0.35)	Kg	5.71	102.00	582.42
7	Channel(GI) Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 0.8 Mtr., 1 no's Channel(GI) required =(7.14x0.8x1)	Kg	42.84	102.00	4369.68
8	HG/ DO Fuse Mounting Channel(GI) 75x40x4.8 mm GI Channel(GI) (3000 mm long)(7.14Kg./Mtr., 2 No's.) (Each 2x3.000x7.14= 42.84 Kg)	Kg	11.57	102.00	1180.14
9	Cantilever Support Channel(GI) 75x40x4.8 mm GI Channel(GI) (810 mm long,2 No's.) (7.14Kg./Mtr., 2 No's.) (Each 2x0.810x7.14= 11.57 Kg)	Kg	11.54	102.00	1177.08
10	Cantilever Support Angle(GI) 50 X 50 X 6MM GI (1282 mm long) (4.5Kg./Mtr, 2 No's.) (Each 2x1.282x4.5= 11.54Kg)	Kg	42.84	102.00	4369.68
11	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 3.0 Mtr., 2 no's Channel(GI) required =(7.14x3x2)	Kg	31.61	102.00	3224.22
12	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (2.5x7 mtr. For mesh formation, 12 Mtr. For LA and 2.5 mtr. For raising, 11 mtr for AB switch, 2.8 mtr for HG Fuse, 5x2 mtr. for DTR Nutral, (1.3+4.5) mtr. For DTR Body, 0.500 mtr for LTDB & AB Switch operating handle, 3 mtr. for Fencing) (Each 65.6x 2.36= 154.81 Kg)	Kg	154.82	102.00	15791.64
13	250 KVA , 11/ 0.4 KV (Cu) Transformer with Tap Changer BIS Energy level II	No	1	601213.06	601213.06
14	LT Distribution Box with MCCB, Aluminium Busbar for 3 Bay with kit kat fuse for 250 KVA S/S	No	1	65280.00	65280.00
15	55mm ² ACSR - PVC Insulated (50 Mtr. Each Dtr.)	Mtr	50	55.24	2762.00
16	1 Cx 400 mm ² LT XLPE Cable(Un-Armoured)	Mtr	120	363.08	43569.60
17	LT Cable Supporting Channel(GI) 100 X 50 X 6 MM GI Channel(GI) (2000 mm long)(9.56 Kg./Mtr., 2 No's.) (Each 2x2x9.56= 28.56 Kg)	Mtr	38.24	102.00	3900.48
18	LT Cable Supproting Angle(GI), 50x50x6mm.GI 4.5Kg./mtr., each Angle(GI) length 2 mtr., 4 nos Angle(GI) required = (4.5x4x2)	Set	36	102.00	3672.00
19	AB Switch(11KV,200A.3pole,50Hz)	EA	1	9996.00	9996.00
20	H.G.Fuse(11KV.200A.3Pole)	EA	1	8323.20	8323.20
21	WEDGE CONNECTOR FOR 55 SQMM.CONDUCTOR	No	6	146.20	877.20
22	POLYCARBONATE BIRD GUARD	No	6	20.96	125.76
23	Disc insulator (B&S)70 KN polymer	No	3	1564.00	4692.00
24	H W fitting (B&S)70KN(3bolted)	No	3	476.00	1428.00
25	Lightning Arrester(12KV,10KA) Station Class 2	Set	3	4828.00	14484.00
26	11KV pin insulator polymer	No.	3	272.00	816.00
27	HT stay set complete	No	2	1428.00	2856.00
28	HT stay Clamp (1.9Kg/pair)	Pair	2	170.00	340.00
29	HT stay insulator TYPE-C	No	2	68.00	136.00
30	7/10 SWG GI stay wire, Grade -2 (15Kg./ Set)	Kg	30	102.00	3060.00
31	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 mtr .Long	No	7	1428.00	9996.00
32	GI Nuts & Bolts of Assorted size (25 Kg/ DSS DP)	Kg	25	106.08	2652.00
33	GI Barbed wire/Anticlimbing device (3Kg /Pole)	Kg	6	108.80	652.80
34	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 8 no's = (8x0.59x0.510)	Kg	2.4072	102.00	245.53
35	Danger plate 11kv	No	2	108.80	217.60

36	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 2 no's = (2x0.59x0.510)	Kg	0.6018	102.00	61.38
37	Name plate	No	1	108.80	108.80
38	Yellow colour paint for Background(GIS Numbering & Zebra stripping)for Background	Ltr	2	167.46	334.92
39	Black paint (GIS Numbering & Zebra stripping)	Ltr	1	299.20	299.20
A	A. Sub total				8,92,408.95
B	B. Stock, Storage & Insurance @ 3% of A				26,772.27
C	Sub Total (C=A+B)				9,19,181.22
D	T&P @ 2% of C				17,148.48
E	Contingency @ 3% of C				27,575.44
F	Transportation @ 7.5% of C				68,938.59
G	Erection Charges @ 5% for transformer and joist pole cost including stock, storage & insurance @3%				34,480.30
H	Erection Charges @ 20% on PSC Poles				
I	Erection Charges @ 10% for other materials				16,781.81
J	Total				10,84,105.83
40	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	i. Mtr	0.9	6648.85	5,983.97
41	Couping Ratio 1:1:5:3 with dimension(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	i. Mtr	0.226	6648.85	1,502.64
42	PCC ratio 1:3:6(M-10 Grade) For DSS Area (5X3X0.1)= 1.5 Cu. mtr.	i. Mtr	0.875	5247.48	4,591.55
43	Fixing of stay set with 0.5 cum cement concret foundation 1:3:6 size (900x 600x900 mm) using 40 mm BHG metal with all labour and material except stay wire, stay set,stay insulator.	No	2	2301.53	4,603.06
44	Construction of earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance,including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	No	7	3784.73	26,493.11
45	LT DB Plinth	No	1	6000.00	6,000.00
46	DTR Plinth	No	1	28000.00	28,000.00
47	Laying of 4Cx150 sq.mm LT XLPE cable	Mtr.	60	73.65	4,419.00
48	Laying of 1.1 KV cable from 400 to 1000 sq. mm	Mtr.	120	96.66	11,599.20
49	Supply and Erection of GI fencing with Gate	RM	18	3682.44	66,283.92
50	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr.	24	1496.91	35,925.84
51	Supply of AL Lugs suitable for 400 sq mm cable/conductor, Crimping with cable and Fixing/connecting include supply and erection of PVC Tape as per voltage requirement.	EA	16	322.21	5,155.36
52	Supply and erection of double Compression Flameproof Type Glanding for armored Cable 3.5/4C 300-1000 sqmm including making hole in Base plate and dressing of cable along with vermin proofing properly .Supply to be done as per TPCODL Spec and approved make dowells.	EA	8	1227.48	9,819.84
					2,10,377.48
	Sub total Rs				12,94,483.31
PART-III	Supply and Laying of 1.1 KV LT U/G Cable using 4 C x 150 Sq. mm of length 70 Mtr. Supply and Installation of 1 No Multimetering Panel with 1.1 KV 160 A MCCB & 30 Nos. of O/G 32 A MCB.				
	1.1 KV XLPE insulation armoured U/G cable along with Multimeter Panel and LT feeder Pillar.				

1	Supply of materials for 1.1 KV XLPE insulation armoured UG cable with accessories-Open trench (along with spare cable)				
a	Length of 1.1 KV, 4C, 150 sq. mm XLPE insulation armoured-Aluminium UG Cable(open trench)	Mtr.	70		
1.1	4 core 150 sq. mm XLPE insulation armoured - Aluminium UG Cable	Mtr	140	803.39	1,12,474.60
2	supply of 1.1 KV Multimeter Panel				
a	No. of 1.1 KV I/C -160 A & 20 Nos. of O/G 32 A	No	1		
2.1	Supply of 1.1 KV I/C-160 A & 20 Nos. of O/G 32A	No	1	207000.00	2,07,000.00
3	Earthing of Multimeter Panel				
3.1	Earthing conductor 50x6mm (2.4 Kg/Mtr.)GI flat for equipment ,structure etc.)	Kg	13.2	102.00	1,346.40
3.2	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 Mtr. Long	Nos	2	1428.00	2,856.00
A				A. Sub total	3,23,677.00
	Erection Portion				
1	Laying ,commissioning ,Testing of 1.1 KV , Aluminium, XLPE insulation armoured UG cable by open trench method				
1.1	Laying of 1.1 KV ,4 core 150 sq. mm XLPE insulation armoured-aluminium UG cable	Mtr	140	73.65	10,311.00
2	SITC of Gland /AL term				
2.1	Supply and erection of double compression flameproof type glanding for armoured cable 3.5/4 core ,120-185 sq. mm including making hole in Base plate and dressing of cable along with vermin proofing properly .supply to be done as per TPCODL specification and approved make dowells.	EA	4	920.61	3,682.44
					13,993.44
Civil Portion					
2	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for LT UG Cable Trench				
2.1	Earth work excavation of soil Trench Dimension(1.6 Mtr. Wx1.275 Mtr. D)	Cum	57.12	716.03	40,899.63
2.2	Earth work excavation of hard rock Trench Dimension(1.6 Mtr. Wx1.275 Mtr. D)	Cum	24.48	1,759.39	43,069.87
2.3	Back filling with excavated soil outside and above the trench	Cum	23.1	204.58	4,725.80
2.4	PCC(1:3:6) below trench (width 1100 mm ,thickness 100 mm throughout)	Cum	4.4999	5,247.48	23,613.14
2.5	Supply and Erection of material for RCC partition Slab 750 mmx100 mm(M-25 Grade)	Cum	3.9	7,483.54	29,185.81
2.6	Supply and Erection of material for RCC trench,150 mm thick(M-25 Grade)	Cum	18.6	7,483.54	1,39,193.84
2.6	Supply and erection of Rod ,bending ,cutting and binding of prefabricated RCC trench(0.6523 Quint/cum)Cast-in-SITU	Kg	1213.278	111.50	1,35,280.50
2.7	Supply and erection of Rod ,bending ,cutting and binding of prefabricated RCC slabs(0.678 Quint/cum)-ast-in-SITU	Kg	264.42	111.50	29,482.83
2.8	Concreting and shuttering of Mass Concrete	M2	156	307.89	48,030.84
2.9	Structural steel work riveted Channel (GI-75x40x4.8 mm)GI Flat -75x6 mm	Kg	113.88	130.00	14,804.40
3	Civil works for Prefabricated RCC foundation with supply of all materials				

3.1	Construction of earthing chamber including installation of earthing pipe. Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance, including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	Set	2	3,784.73	7,569.46
Sub Total (Civil Portion) (in Rs.)					5,15,856.11
A	Sub Total (Supply Portion)				3,23,677.00
B	Stock, Storage & Insurance @ 3 % of A				9,710.31
C	Sub Total (A+B)				3,33,387.31
D	Contingency @ 3 % of C				10,001.62
E	Tools & Plants Charges @ 2% of C (considered for multimeter panel and earthing items)				4,291.94
F	Transportation @ 7.5% of C				25,004.05
G	Erection Charges @ 10% of earthing items and Multimeter Panel				21,459.68
H	Total (C+D+E+F+G)				3,94,144.60
I	Sub Total (Erection Portion + Civil Portion)				5,29,849.55
J	Total Cost (H+I)				9,23,994.15
	Sub Total Rs.				25,89,787.53
	Cess @ 1%				25,897.88
	Total Estimated Cost				26,15,685.41
	Total Estimated Cost in Figures				26,15,685.00
XCESS	<input type="checkbox"/> LESS <input type="checkbox"/> (Please Tick)	_____ %			
Quoted Amount in Figure					
Quoted Amount in word					

N:B- The Estimated cost is exclusive of GST.

Signature of Tenderer with seal

Sd/-
Asst. Project Manager (Elect)

Sd/-
D.M (Elect)

Sd/-
Project Manager (Elect.)