

THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD.

JANAPATH, BHOINAGAR, BHUBANESWAR - 22

[Electrical Division]

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

NAME OF THE WORK :- UP-GRADATION OF SUB-STATION FROM 63 KVA TO 250 KVA FOR POWER SUPPLY TO ADMINISTRATIVE BLOCK OF SHRI JAGANNATH SANSKRIT UNIVERSITY, PURI.

BID REF NO :- 75/PM/ELECT/OPHWC/2022-23

NAME & ADDRESS OF THE FIRM	
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SCHEDULE OF WORKS

Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.	
				RATE IN RS.	AMOUNT IN RS.
1	11 KV CUT POINT WITH 90 DEGREE ANGLE				
1	WPB 160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	4	26516.95	106067.80
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 4 no's channel required =(4x9.56x1.2)	Kg	183.552	88.50	16244.35
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required	Kg	42.2912	88.50	3742.77
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 4 no's channel required =(42x9.56x0.306)	Kg	46.80576	88.50	4142.31
5	Danger Plate	No	4	94.40	377.60
6	Back clamp for Danger Plate 25x3 mm , flat of 0.59 Kg/Mtr. Flat of 0.51 Mtr Length 1 Nos.	Kg	1.2036	88.50	106.52
7	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	KG	12	94.40	1132.80
8	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.510)	Kg	4.8144	88.50	426.07
9	11 KV pin insulator polymer	Set	12	236.00	2832.00
10	H W fitting(B&S) 70KN, 3Bolt	No.	24	413.00	9912.00
11	Disc insulator (B&S) 70 KN polymer	No.	24	1357.00	32568.00
12	Earthing of Support (Coil Type)	EA	4	195.88	783.52
13	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	Kg	1.048	88.50	92.75
14	PG Clamp for 80 sq.mm AAA conductor	No.	24	625.40	15009.60
15	HT Stay Set (Complete)	Set	8	1239.00	9,912.00
16	HT Stay Insulator	No.	8	59.00	472.00
17	HT Stay Clamp(1.95 K.g/Pair)	Pair	8	147.50	1,180.00
18	7/10 SWG Stay Wire	KG	120	88.50	10,620.00
19	GI Nut , Bolt & Washer of different sizes (7.433 Kg each) Cut Pole	Kg	29.732	92.04	2736.53
20	Black Paint	K.g.	2	259.60	519.20
21	Yellow Colour Paint for Background	Ltr	8	259.60	2076.80

A		A. Sub total			2,20,954.63
B		B. Stock, Storage & Insurance @ 3% of A			6,628.64
C		Sub Total (C=A+B)			2,27,583.27
D		T&P @ 2% of C			4,551.67
E		Contingency @ 3% of C			6,827.50
F		Transportation @ 7.5% of C			17,068.74
		Erection Charges @ 5% on poles			5,462.49
G		Erection Charges @ 10%			9,548.39
H		Total			2,71,042.05
22	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 excvaton, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No	8	2250	18,000.00
23	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	Cu. Mtr	1.8	6500.00	11,700.00
24	Couping Ratio 1:1:5:3 with dimension(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cu. Mtr	0.45	6500	2,925.00
		Total Material + Services Cost (J+K)			3,03,667.05
B	11 KVPIN POINTS WITH WPB				
1	WPB 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No.	2	26,516.95	53033.90
2	11 KV V cross Arm (10.2 K.g. each)	No.	2	955.80	1911.60
3	Top bracket 100x50X6 mm GI channel (2kg each)	No.	2	177.00	354.00
4	Danger Plate, 1 no's. for each pole	No.	2	94.40	188.80
5	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	0.6	88.50	53.10
6	GI barbed wire anticlimbing device 3 Kg. Per support	Kg	6	94.40	566.40
7	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	2.41	88.50	213.29
8	11 KV pin insulator polymer, 3 Nos. required for each support	No.	6	236.00	1416.00
9	Earthing of Support (Coil Type)	No.	2	195.88	391.76
10	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	K.g.	0.52	88.50	46.02
11	GI Nut , Bolt & Washer of different sizes (1.45 Kg/ Pin Point)	K.g.	2.9	92.04	266.92
12	80 mm ² AAAC	K.M.	0.618	50,740.00	31357.32
13	Crimping type Midspan Compression Joint for 55 sq.mm AAA conductor	EA	0	267.48	0.00
14	Black Paint	Ltr	2	259.60	519.20
15	Yellow Colour Paint for Background	Ltr	4	259.60	1038.40

A	A. Sub total				91,356.70
B	B. Stock, Storage & Insurance @ 3% of A				2,740.70
C	Sub Total (C=A+B)				94,097.40
D	T&P @ 2% of C				1,881.95
E	Contingency @ 3% of C				2,822.92
F	Transportation @ 7.5% of C				7,057.31
	Erection Charges @ 5% on poles				2,731.25
G	Erection Charges @ 10%				3,947.28
H	Total				1,12,538.11
24	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	Cu. Mtr	0.9	6500.00	5,850.00
25	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cu. Mtr	0.225	6500	1,462.50
	Total Material + Services Cost (J+K)				1,19,850.61

II RENOVIATION AND UP-GRADATION OF EXISTING 63 KVA S/S TO 250 KVA S/S.

Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.	
				RATE IN RS.	AMOUNT IN RS.
1	WPB 160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	2	26516.95	53,033.90
2	Top channel GI 100x50x6 mm (9.56 kg/Mtr.,4 Nos.)Each channel length 1.2 Mtr.,4 Nos. channel required(4x9.56x3)	Kg	57.36	88.50	5,076.36
3	Fish Plate 50x6 mm ,2.36 Kg/Mtr.,each 0.280 Mtr., 6 nos. required	Kg	3.9648	88.50	350.88
4	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 2 no's channel required =(6x7.14x4.3)	Kg	42.84	88.50	3,791.34
5	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 4.927 mtr., 6 nos angle required = (6*4.5*4.927)	Kg	31.608	88.50	2,797.31
6	MU channel GI 75x40x4.8 mm(3000 MM Long)(7.14 Kg/Mtr.,2 Nos.)	Kg	42.84	88.50	3,791.34
7	AB switch mounting channel 75x40x4.8 mm GI channel (7.14 kg/mtr,2 Nos.)	Kg	42.84	88.50	3,791.34
8	AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.)	Kg	6.69	88.50	592.07
9	Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)	Kg	5.71	88.50	505.34
10	HG/DO fuse Mounting channel 75x40x4.8 mm GI channel(3000 mm Long) (7.14 kg/mtr,2 Nos.)	Kg	42.84	88.50	3,791.34
11	Cantilever suport channel75x40x4.8 mm GI channel(810 mm Long,2 Nos.)(7.14 kg/mtr,2 Nos.)	Kg	11.57	88.50	1,023.95
12	Cantilever suport angle 50x50x6 mm GI (1282 mm Long)(4.5 kg/mtr,2 Nos.)	Kg	11.54	88.50	1,021.29
13	Back clamp for danger plate25x3 mm ,flat 0.59 Kg/Mtr,flat of 0.510 Mtr. Length 2 Nos	Kg	0.601	88.50	53.19
14	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	Kg	154.82	88.50	13,701.57

15	250 KVA , 11/0.4 KV (CU) Transformer with Tap Changer BIS Energy Level-II	No	1	401000.00	4,01,000.00
16	LT Distrubution Box with MCCB, Aluminim Busbar for 3 Bay with kit kat Fuse for 250 KVA S/S.	No	1	56640.00	56,640.00
17	55 sq. mm All Alloy conductor-PVC insulated	Km	0.05	56000.00	2,800.00
18	1Cx400 sq. mm LT XLPE cable(Un Armoured)	Mtr	120	359.66	43,159.20
19	4Cx35 sq. mm LT XLPE cable	Mtr	0	213.38	-
20	11 KV AB switch (400 Amp, 3 pole)	Set	1	13983.00	13,983.00
21	11 KV HG Fuse (400 Amp, 3 pole)	Set	1	13605.00	13,605.00
22	PG Clamp for 55 sq. mm AAAC	No	6	566.40	3,398.40
23	H W fitting(B&S) 70KN, 3Bolt	No.	3	413.00	1239.00
24	Disc insulator (B&S) 70 KN polymer	No.	3	1357.00	4071.00
25	11 KV LA (11KV,10 KA)(station class, class-2)	No	3	4189.00	12,567.00
26	11 KV Pin insulator Polymer	No	3	236.00	708.00
27	HT Stay Set (Complete)	Set	2	1239.00	2,478.00
28	HT Stay Insulator	No.	2	59.00	118.00
29	HT Stay Clamp(1.95 K.g/Pair)	Pair	2	147.50	295.00
30	7/10 SWG Stay Wire	KG	30	88.50	2,655.00
31	GI Pipe for earthing 40mm dia 3mtr long	No	7	1239.00	8,673.00
32	GI Nut, Bolt & washers of different sizes	Kg	25	92.04	2,301.00
33	GI barbed wire/Anticlimbing device	No	6	94.40	566.40
34	Danger plate	Kg	2	94.40	188.80
35	Name Plate	No	1	94.40	94.40
36	Structure Numbering and marking				-
37	Yellow colour paint for Background	Ltr	2	259.60	519.20
38	Black colour paint for numbering	Ltr	1	259.60	259.60
A	A. Sub total				6,64,640.21
B	B. Stock, Storage & Insurance @ 3% of A				19,939.21
C	Sub Total (C=A+B)				6,84,579.41
D	T&P @ 2% of C				13,691.59
E	Contigency @ 3% of C				20,537.38
F	Transportation @ 7.5% of C				51,343.46
G	Erection Charges @ 5% for transformer and joist pole cost including stock, storage & insurance @3%				23,382.75
H	Erection Charges @ 10% for other materials				21,121.17
I	Total				8,14,655.76
39	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	Cum	0.9	6500.00	5,850.00
40	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.113 Cu. Mtr.	Cum	0.226	6500.00	1,469.00
41	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	2250.00	4,500.00
42	Installation of Earthpit ,charcoal,salt, etc including construction of earthing chamber (Size: 2'x2') and RCC slab cover	No	7	2407.00	16,849.00
43	LT DB Plinth	No	1	3000.00	3,000.00
44	DTR Plinth	No	1	25000.00	25,000.00
45	Supply and Erection of GI fencing with Gate	Sq. Mtr.	20	3600.00	72,000.00

					1,28,668.00
				Sub total Rs	9,43,323.76
III	Construction and Laying of 4 core x 50 Sq. mm 1.1 KV LT UG XLPE cable for the route Length-0.42 Km				
	Length of 1.1 KV, 4C, 50 sq. mm cable(Open trench)	Km	0.42		
1	Supply of 4 core 50 sq. mm LT XLPE Cable(Armoured) for providing the power supply to the 10 Nos. 3 Phase Consumers.	Km	0.42	239540.00	1,00,606.80
3	Supply of 4 inch PVC pipe heavy duty(schedule-80) for service cable Laying)	Km	0.42	265071.00	1,11,329.82
4	63A LT Feeder Pillar Box	No	2	301461.00	6,02,922.00
5	GI Pipe for earthing 40mm dia 3mtr long	No	4	1239.00	4,956.00
6	50x6mm GI Flat for earthing, 2.36kg/mtr.	Kg	23.6	88.50	2,088.60
2	LT multimeter Panel for 10 Nos. Energy meter with accessories.	No	1	60000.00	60,000.00
7	Supply of UG cable service mains inside pvc pipes from the LT feeder pillar boxes to individual consumer				
8	Supply of clamps 8 Nos. for one No. service mains	No	80	63.90	5,112.00
9	Supply terminal connectors at meter end(4 Nos. per 1 Phase and 8 Nos./service main)	No	40	163.00	6,520.00
A	A. Sub total				8,93,535.22
	Laying , Commissioning ,Testing of 1.1 KV 4 core 50 sq. mm aluminium, XLPE insulation armoured(extruded type) UG cable by open trench method & HDD method				
1	Laying , Commissioning ,Testing of 11 KV 4 core 50 sq. mm aluminium XLPE cable insulation armoured(extruded type) UG cable by open trench method	Mtr	420	46.8	19,656.00
2	Erection of terminal connectors	No	40	56	2,240.00
3	Erection of 630 Amp Feeder Pillar	No	2	45000	90,000.00
5	BA will provide necessary Tools,Machinery,Manpower for Laying of 1.1 KV 4C/1C/2C XLPE cable(16 sq. mm to 63 sq. mm)in Trench/HDPE Pipe/Hum Pipe	Km	0.42	54000	22,680.00
4	Laying of 4 inch PVC pipe heavy duty (schedule-80) for service cable laying.	Km	0.42	16976	7,129.92
6	Erection of clamps 8 Nos for one no. service mains	No	80	19.8	1,584.00
					1,43,289.92

	Civil works with supply of all materials like cement, MS ton rod, bricks, course & fine aggregates and labour, T&P, etc for UG Cable trench				
1	Earth work excavation of soil(0.8 Mtr. Width x 0.6 mtr. Depth)				
2	Earth work excavation of soil	cum	141.12	700.00	98,784.00
3	Earth work excavation of hard rock	Cum	60.48	1720.00	1,04,025.60
4	Shifting of excavation soil to a lead distance of 10Km	Cum	120.96	171.55	20,750.69
5	Filling with fine river sand after laying of cable inside the trench	Cum	134.4	2500.00	3,36,000.00
6	Back filling with excavation soil outside and above the trench	Cum	67.2	202.00	13,574.40
7	Supply and erection of GI Pipe dia, 150 mm ,class-B(8 Mtr.)	Mtr.	16	1463.40	23,414.40
8	Supply and Erection of cable Route Marker along the cable route at an intervals of 30 Mtrs. With civil works	Nos	14	1012.00	14,168.00
9	Prefabricated RCC foundation for LT feeder pillar Box including supply of all materials	Nos	2	14312.70	28,625.40
10	civil work Fencing around each feeder pillar box	Sq. Mtr.	15	3600.00	54,000.00
				SubTotal	6,93,342.49
A				A. Sub total	8,93,535.22
B				B. Stock, Storage & Insurance @ 3% of A	26,806.06
C				Sub Total (C=A+B)	9,20,341.28
D				T&P @ 2% of C	
E				Contingency @ 3% of C	27,610.24
F				Transportation @ 7.5% of C	69,025.60
G				Total	10,16,977.11
H				Sub Total(Erection+civil)	8,36,632.41
I				Total Material + Services Cost (J+K)	18,53,609.52
IV	Construction of LT 4 core x 150 Sq. mm 1.1 KV LT UG cable for Route Length-0.14 Km				
	Length of 1.1 KV, 4C, 150 sq. mm cable(Open trench)	Km	0.6		
1	4 core 150 sq. mm LT XLPE cable(Armoured)	Km	0.28	732120.00	2,04,993.60
2	Supply of Indoor termination kits Heat Shrinkable type suitable for 1.1 KV, 4 core, 150 Sq. mm	Set	16	2350.70	37,611.20
3	Supply of HDPE PE 80-PN8 pipe of 110mm diameter(for 150 sq. mm HT cable Laying)	Km	0.28	520436.00	1,45,722.08
A				A. Sub total	3,88,326.88
	Laying , Commissioning ,Testing of 1.1 KV 4 core 150 sq. mm aluminium, XLPE insulation armoured(extruded type) UG cable by open trench method				

1	Laying , Commissioning ,Testing of 1.1 KV 4 core 150 sq. mm aluminium XLPE cable insulation armoured(extruded type) UG cable by open trench method	Mtr	280	72	20,160.00
2	Erection of Indoor termination kits Heat shrinkable type suitable for 11 KV 4 core 150 sq. mm aluminium UG cable kit for 3 core	Set	16	1900.8	30,412.80
3	Laying of 110 mm dia PE 80-PN8, HDPE pipe inside open trench	Km	0.28	104114.67	29,152.11
					79,724.91
	Civil works with supply of all materials like cement, MS ton rod, bricks, course & fine aggregates and labour, T&P, etc for UG Cable trench				
1	Earth work excavation of soil(0.8 Mtr. Width x 0.6 mtr. Depth)				
2	Earth work excavation of soil	cum	47.04	700.00	32,928.00
3	Earth work excavation of hard rock	Cum	20.16	1720.00	34,675.20
4	Shifting of excavation soil to a lead distance of 10Km	Cum	40.32	171.55	6,916.90
5	Filling with fine river sand after laying of cable inside the trench	Cum	44.8	2500.00	1,12,000.00
6	Back filling with excavation soil outside and above the trench	Cum	22.4	202.00	4,524.80
7	Supply and erection of GI Pipe dia, 150 mm ,class-B(8 Mtr.)	Mtr.	32	1463.40	46,828.80
8	Supply and Erection of cable Route Marker along the cable route at an intervals of 30 Mtrs. With civil works	Nos	5	1012.00	5,060.00
				SubTotal	2,42,933.70
A				A. Sub total	3,88,326.88
B				B. Stock, Storage & Insurance @ 3% of A	11,649.81
C				Sub Total (C=A+B)	3,99,976.69
D				T&P @ 2% of C	
E				Contingency @ 3% of C	11,999.30
F				Transportation @ 7.5% of C	29,998.25
G				Total	4,41,974.24
H				Sub Total(Erection+civil)	3,22,658.60
I				Total Material + Services Cost (J+K)	7,64,632.84
V	LABOUR CHARGES FOR DISMANTALLING)				
1	Dismantalling of 8 mtr. Long 200 KG PSC Pole	No	13	900	11,700.00
2	Dismantalling of 55 sq mm AAAC	Mtr	650	8.1	5,265.00
3	Dismantalling of RSJ/WPB Pole(150x150)mm	No	2	1350	2,700.00
4	Dismantalling of 11 KV Disc Insulator with Hardware	No	3	8.1	24.30

5	Dismantalling of MS channel	Kg	595	7.92	4,712.40
6	Dismantalling of OD LTDB for 63 KVA Transformer including removal of HT/LT leads,earth connection	EA	1	1800	1,800.00
	Total Rs.				26,201.70
	Sub Total Rs.				40,11,285.48
	Cess @1%				40,112.85
	Total Estimated Cost				40,51,398.34
	Total Estimated Cost in Figures				40,51,398.00
EXCESS	<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/-
Asst. Project Manager (Elect) (Hqr)**

**Sd/-
Project Manager(Elect.)**