

## Bill of Quantity

**Name of Work: Power Supply to Gidhaghara Railway Station Yard of OPGC for Transportation of coal.**

Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
1	Details alignment of survey and tree trimming work for erection of 11 KV Overhead line.....Engineer -In- Charge	Km	1		
2	Erection of 9 meter of metallic pole of following length in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. for pin point, cut point, DP structure of 11 KV Line as required.	No	20		
3	Cost of transportation of RS joist pole from Road side to pole Pit (1/2 Km load) for erection of HT overhead line	Km	1		
4	Supplying and erection of galvanised stay set for 11 KV over head line complete with 19/20 mm dia X 1.8 meters long stay rod, anchor plate of size 45 cm X 45 cm x 7.5 mm, thimble, stay clamp, turn buckle (20 mm X 600 mm ), 7/4.00 mm dia G.I stay wire and 11 KV strain insulator etc in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.	No	10		
5	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) pole top bracket/cross arm for single 11 KV over head line conductor complete with 50 mm X 6 mm flat iron clamp, bolts, nuts etc and washer including drilling holes for insulator pin, bolts and nuts etc and painting with primer and finish paint as required	No	16		
6	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) V shape cross arm for two 11 KV over head line conductor complete with 50 mm X 6 mm flat iron clamp, bolts, nuts including drilling holes for insulator pin, bolts and nuts and washer etc(as per drawing) and painting with primer and finish paint as required	No	14		
7	Supply and erection of 11 KV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	Set	42		
8	Supply and erection of 11 KV disc insulator for 11 KV over head line with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washer etc. as required.	Set	24		
9	Supplying of erection of a set of cross bracing frame work for 11 KV over head double pole structure having four member fabricated out of 50 mm X 50 mm X 6 mm angle iron to form a rectangle of minimum size 1400 mm width X 2500 mm height, complete with 50 mm X 6 mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc (as per drawing) and painting with primer and finish paint etc. as required <b>(for 11 KV DP for Cut point and AB switch installation Substation)</b>	Set	3		

Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
10	Supply and erection of three piece nonlinear register type lighting arrestor suitable for 3 wire, 11 KV overhead lines with rated voltage 9 KV(rms) with a nominal discharge current rating of 5 KV and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required. insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	Set	1		
11	Supply, installation and mounting of 11 KV, 400A, 3 Pole AB Switch on DP Mounting as per direction of EIC.	Set	1		
12	Cost of paving/ rolling, stringing/ removal of conductor, mounting of insulator & pin binding and cut pointing & jumpering of 11 KV, AAA conductor for erection and dismantling of HT overhead line.	Km	1		
13	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal and salt as required	No	6		
14	Providing and fixing 25 mm X 5 mm G.I strip on surface or recess for connections etc. as required	Mtr	60		
15	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required (up to 120 sqmm cable)	Mtr	50		
16	Providing, laying and fixing of 80 mm dia. G.I. pipe (medium class) in ground or on pole with G.I fittings including trenching (75 cm deep) and re-filling etc as required.	Mtr	10		
17	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core XLPE aluminium conductor cable of 11 KV grade as required (50 sqmm to 70 sqmm)	Set	2		
18	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core XLPE aluminium conductor cable of 11 KV grade as required (50 sqmm to 70 sqmm)	Set	2		
19	Construction of metering room 12' X 12' X 14' with all materials and electrical wiring (supply Installation of 4 waysub distribution boards, MCB, switch, sockets, wires, CFL Lamps & ceiling fan as required) with grill mess arrangement as per the requirement of WESCO	Per Sq Ft Plinth area	196		
20	Supply of 3 core X 50 sq.mm, 11 KV, XLPE armoured underground cable	Mtr	50		
21	Supply of 9 meter long , 150 X 150 R.S. joist Pole for 11 KV line	No	20		
22	Supply of 55 sqmm AAA conductor for 11 KV line	Km	3.5		
23	3phase 4 wire, 3X240V, 100/5A, 0.5 class LTTV meter with 4 nos resin cast CTs with SMC BOX.	No	1		
24	3phase 4 wire,-/1 Amp,- /110 Volts, 0.2 class HTTV Meter with TP BOX	No	1		
	<b>Total (in Rs.)</b>				
	<b>Rupees</b>				