Bill of Quantity

Name of Work: Providing 11KV, Power Supply to Kechhobahal Railway Station Yard of OPGC for Transportation of coal.

	Transportation of coal.						
SI. 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 as per the instruction of Engineer -In- Charge.	KM	1.50				
2	Supply of 11 Meter 150x150mm RSJ Pole.	No	24.00				
3	Erection of RSJ pole of following lengths 11 meter of metallic pole(RSJ) 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	24.00				
4	Cost of transportation of RS joist pole from Road side to pole Pit (1/2 Km load) for erection of HT overhead line.	KM	1.50				
5	Supply of 9 meter long , PSC intermediate Pole for 11 KV line.	No	40.00				
6	Erection of 09 meter of PSC pole 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	40.00				
7	Cost of transportation of PSC Pole from Road side to pole Pit (1/2 Km load) for erection of HT overhead line.	Km	1.50				
	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	21.00				
9	Supply of two lengths of Channel Iron 75 mm x 40 mm x 6 mm (7.14 kg/mtr) DP Cross arm for three wire 11 KV overhead line conductor complete	Set	2.00				
10	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 (for 11 KV DP for Cut point and AB switch installation Substation)	Set	4.00				
11	Erection of Double Pole three wire cross arm for 11 KV line as reqd.	Each	2.00				

	Supplying and Erection 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	40.00	
	Supply & Erection of Channel Iron 75 x 40 x 6 (7.14 kg/mtr) V-shaped cross arm for two 11 kv overhead line conductors complete with 50 x 6 mm MS flat iron clamps, bolts & nuts including drilling holes for insulator pins, bolts etc	Each	20.00	
14	Supply and erection of 11 KV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	Set	60.00	
	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	42.00	
17	Erection of V shaped 2 wire cross arm	set	20.00	
16	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	3.00	
	Supply, installation and mounting of 11 KV, 400A, 3 Pole AB Switch on DP Mounting as per direction of EIC.	Set	2.00	
	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 dismentaling of HT overhead line.	Km	16.75	
19	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including acessories, 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	6.00	
20	Providing and fixing 25 mm X 5 mm G.I strip on surface or recess for connections etc. as required.	Mtr	45.00	
21	Supply of 3 core X 95 sq.mm, 11 KV, XLPE armoured underground cable.	Mtr	300.00	
22	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	300.00	
	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	20.00	

24	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all acessories 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	2.00				
25	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all acessories 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	2.00				
26	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 & Celling fan as required) with grill mess arrangement as per the requirement of WESCO.	Per Sq Ft Plinth area	196.00				
27	Supply of 80 sqmm AAA conductor for 11 KV line.(Route KM)	KM.	15.25				
28	Supply of 55 sqmm AAA conductor for 11 KV line.(Route KM)	KM	1.70				
29	3phase 4 wire, 3X240V, 100/5A, 0.5 class LTTV meter with 4 nos resin cast CTs with SMC BOX.	No	1.00				
30	3phase 4 wire,-/1 Amp,- /110 Volts, 0.2 class HTTV Meter with TP BOX.	No	1.00				
31	Supply and Erection of 8 SWG G.I. Wire for Cradle Guard (For 50 mtr span, length of cradle guard = $(5 \times 50) + (3 \times 50) = 400$ mtr (8mtr/kg)	Kg	257.04				
	Supply of Barbed Wire/Anti climbing device with danger board	Set	24.00				
33	Erection of Barbed Wire/Anti climbing device with danger board	Set	24.00				
	Total (A) in Rupees (Exclusive of GST)						
	GST@18%						
	<u>Cess@1%</u>						
Α	Total (A) including GST (in Rs.)						
В	Amount to be paid to WESCO towards Meter Cubicle and 6% Supervision charges.						
1	WESCO Overhead charges (Supervision Charges).	LS	1.00				
2	Commissioning and testing of Metering Cubicle.	LS	1.00				
3	Inspection fees for Metering Cubicle.	LS	1.00				
4	Processing fees	LS	1.00				
	Total (B) in Rupees (Exclusive of GST)						
	Grand Total (A+B) in Rupees (Exclusive of GST)						