

Bharat Heavy Electricals Limited
Ramachandrapuram : : Hyderabad – 502032
M&S – DIVISION
SCOPE OF WORK (ANNEXURE-I)

Tender No.: M&S/P&S/2021/12, Dt.: 10.07.2021

Name of Work: Electrical Works for FGD Slurry Pump Test Facility

DESCRIPTION OF WORK:

S. No	Work name	Unit	Qty.	Vendor's Acceptance
1	Disconnection of all cables, removal of gearbox coupling, dismantling of motor and base frame from the existing location	Nos	1	
2	Disconnection of all cables, earthing arrangement and dismantling of Soft starter	Nos	1	
3	Shifting and erection of base frame for 2.0MW, 6.6KV Motor on Machine Bed. The job includes levelling of the base frame up to the accuracy decided by site engineer/end user	Nos	1	
4	Shifting, Placing on the base frame and Alignment of 2.0MW, 6.6KV Induction Motor. Approx. weight: 10 Tons	Nos	1	
5	Shifting, Erection and alignment of base frame for 2.0MW gearbox. The job includes alignment with the base frame of motor. Approx. weight: 1 Tons	Nos	1	
6	Shifting, erection and assembly of softstarter for 2.0MW Soft starter. Approx. weight: 1.5 Tons	Nos	1	
7	Shifting, erection, testing and commissioning of 415V MCC Panel. Approximate size: 5000mmX2500mmX700mm. Approximate weight: 3 Tons	Nos	1	
8	Shifting and laying of the following HT power cables (UE). The job includes Dressing & Tagging, Fixing of free issued trefoil clamps for Single Core cable at 1mt interval etc. a) 1C X 300 sq.mm, 6.6KV (UE), Flexible copper cable	Mts	500	
9	The job includes making holes of sufficient size in the gland plates, adjusting the cables in the trench, relaying and adjustment of cable for upto 5 mtrs and providing mechanical support for the cables, sealing of cable entries with wall putty, tagging of cables. Supply of wall putty and cable tags are in contractor's scope. The tools required for the work are in contractors's scope. a) 1C X 300 sqmm, 6.6KV (UE), Copper Flexible cable	Nos	12	
10	Shifting & Earthing of Equipment from nearest Earth riser with 50x6mm/ 25x3mm GI flat	Mts	300	

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11	Shifting and laying of following LT cables			
	i) 3.5C X 300 sq.mm, 1.1KV, PVC FRLS	Mts	500	
	ii) 3.5C X 70 sq.mm, 1.1KV, PVC FRLS	Mts	250	
	iii) 3.5C X 50 sq.mm 1.1KV, PVC FRLS	Mts	500	
	iv) 3.5C X 35 sq.mm, 1.1KV, PVC FRLS	Mts	100	
	v) 4C X 16 sq.mm 1.1KV, PVC FRLS	Mts	250	
	vi) 4C X 4 sq.mm Copper, 1.1KV, PVC, FRLS, armoured	Mts	1100	
12	Termination of the following LT cables. The job includes supply of cable lugs and double compression glands			
	i) 3.5C X 300 sq.mm, 1.1KV, PVC FRLS	Nos	4	
	iii) 3.5C X 70 sq.mm, 1.1KV, PVC FRLS	Nos	8	
	iv) 3.5C X 50 sq.mm 1.1KV, PVC FRLS	Nos	8	
	v) 3.5C X 35 sq.mm, 1.1KV, PVC FRLS	Nos	8	
	vi) 4C X 16 sq.mm 1.1KV, PVC FRLS	Nos	6	
	vii) 4C X 4 sq.mm Copper, 1.1KV, PVC, FRLS, armoured	Nos	40	
13	Shifting, Fabrication and Erection of BHEL free issued structural steel for equipment/cable tray support	Tons	2	
14	Supply and Erection of Earth pits for Equipment body earthing with 65mm dia GI pipe Medium (class-B), strictly as per IS: 3043, 3000mm long with holes of 12mm dia at 150mm apart at random & 50x6x260mm MS Earthing plate welded to pipe as per drawing. The work includes supply of material for alternate layers of charcoal(75kgs), salt(150kgs) and making RCC/brick chambers with MS/cast iron cover. Contractor shall dig 300mm depth and 200mm width trench in the soil for laying the earth flat from earth pit electrode to earth mat/equipment.	Nos	4	
15	Dismantling and Shifting of 8-way 63A FBD from the existing location and erection at new location	Nos	1	
16	Shifting, fixing, testing and commissioning of BHEL free issued ICTPN switches			
	a) 100A CFSU along with Bottom and Reverse Entry Cable Boxes	Nos	2	
	b) 63A ICTPN Switches	Nos	3	
	c) 32A ICTPN Switches	Nos	1	
	d) 16A ICTPN Switches	Nos	4	
17	Dismantling of existing structural steel. The job includes gas cutting of existing structures through BHEL free issued Oxygen and DA gas. Torch and regulator are in the scope of contractor	Tons	0.5	
18	Dismantling of existing switches			
	a) 63A	Nos	8	
19	Dismantling, removal from trench and shifting of existing cables	Mts	200	
20	Supply and laying of Electrical Insulated Rubber Floor Mats, size: 1000x2000x2.5 mm, 11KV, Class B for placing in front of HT & LT Switch Gear Panels conforming to IS:15652/1969. Insulation Resistance: 10,000MOHMS (minimum). Breakdown Test: 50kV (minimum) as per IS: 2584/1963.	Nos	50	
21	Supply of the end termination kits: 1C X 300 sq.mm, 6.6KV (UE), Flexible copper cable along with copper lugs	Nos	12	

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