



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM:: HYDERABAD::32
FACTORY CIVIL & PROJECTS DEPARTMENT
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Schedule-A**Tender Notice No.**

PROJ-EC/ELEC/OT-14/2013-14 Dtd. 21.03.2014
 Item No.1

Price Bid

Name of the work : HT WORKS FOR PIPE & PLATE YARD

Sl.No	Work Description	Unit	Qty	Rate / Unit in Rs	Total Amount in Rs
1	Dismantling/Removing of 11KV, IB4 oil switch in T30 sub-station, 07-block and transport to 52 building or as per the instructions of site engineer. Approx.Size:2x1x2mt and Wt.1.0T	No	1	3,215.00	3,215.00
2	Dismantling/Removing of Amara Raja / other make 30V DC battery with Charger and transport to 52 building or as per the instructions of site engineer.	No	1	1,150.00	1,150.00
3	Relocation of LT panel inside T30 substation. The scope includes removal of cables, shifting of panel and re-connection of cables etc.	No	1	3,360.00	3,360.00
4	Shifting, Assembly, Erection and Commissioning of 11KV, 1600 A, VM-12 , BHEL make, Indoor type VCBs. The VCBs shall erect on the trenches by providing MS material in T30 sub-station, 07-block. The job includes primary injection, secondary injection and testing of relays mounted on VCB panels. Approx. Size: 820(L) x 2355(W) x 2600(H) mm and Wt: 1000kgs each.	Nos	3	7,500.00	22,500.00
5	Shifting, Erection, Testing & Commissioning of free issued Compact Sub-station of 1000KVA capacity. a) Shifting of 1000KVA Compact Sub-station consisting of HT breakers, Dry type Transformer & LT Breakers from stores to erection site. Approx. Size: 3230 (L) x 2330 (W) x 2415 (H) mm & Wt: 6800kgs. b) Removal of Packing material of CSS and check up for the intactness of all items / components. c) Erection of CSS on the foundation. d) Tightening of all busbars from panel to panel, inside fasteners, clean up with cleaning agent and apply grease where ever it is required. e) All control wiring (AC & DC) has to be done for individual panel and panel to panel etc. f) Fixing up of all loose items such as PTs, CTs, Relays, Measuring Instruments (meters) and indication accessories etc. g) Checking up of CSS top with sprit level and align properly. h) Double earthing with free issued GI flat of 50 x 6mm size for all panels. i) Testing of primary injection, secondary injection and healthness of relays mounted, IR value etc. Test results are to be submitted in proper format. j) Checking of Mechanical & Electrical operation of HT & LT breakers etc.	No	1	38,470.00	38,470.00

6	Shifting, Erection, Testing & Commissioning of free issued APFC panel of 300KVAR capacity.	No	1	4,680.00	4,680.00
7	Shifting, Erection, Testing and Commissioning of 30V DC, 100AH Lead Acid (VRLA) battery bank and charger for VCB & LT ACB panel operation. The job includes assembly of battery cells.	Nos	1	3,360.00	3,360.00
8	Shifting, Assembly, Erection, Testing and Commissioning of Power Control Centre (PCC) panel consisting of different SFUs combination of 2nos. 800A I/C and 3nos 200A, 4nos 100A, 3nos 63A O/G. Approx. Size: 2000 x 600 x 2400mm & Wt 2.0 T.	Nos	3	4,025.00	12,075.00
9	Shifting, Fabrication and Erection of structural steel for equipment/cable tray support etc.including 2 coats of red oxide painting. Supply of red oxide paint is in the scope of contractor.	Ton	3	9,066.00	27,198.00
10	Shifting, Erection and Commissioning of 200A CFSU in cast iron enclosure for 15T EOT crane.	Nos	2	840.00	1,680.00
11	Shifting, Erection and Commissioning of 3 phase Fuse Distribution Board (FDB) as per site engineers instruction.				
	i) 63A, 8 way	Nos	1	2,413.00	2,413.00
	ii) 32A, 12 way	Nos	2	2,413.00	4,826.00
12	Shifting & Erection of cable tray upto 600mm width of ladder / perforated type. The job includes fabrication of cable tray bends wherever required.	Mts	500	49.00	24,500.00
13	Shifting & Earthing of Equipment from nearest Earth riser with 50x6mm/ 25x3mm GI flat. Work includes supply and apply of Aluminium paint at each welding points.	Mts	500	22.00	11,000.00
14	Supply and Erection of Earth pits for power distribution transformer neutral earthing with 1200x1200x12mm GI plate, 50mm dia 2500mm long GI pipe with holes of 1/4" dia at 4" apart at random & 75x10, 2250mm long GI flat material as per drawing. The work including 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 copper cable from earth pit electrode to transformer neutral.	Nos	2	14,175.00	28,350.00
15	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 including 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	6	7,350.00	44,100.00
16	Excavation of cable trench(500x1000mm)				
	i) In soil, excavation of 1000mm deep and 500mm width trench, supply & spreading of sand, supply & laying of bricks & shabad stone as per IS:1255 1983 and back filling after cable laid with marking plates.	Mts	300	327.00	98,100.00
	ii) Cutting of Road, RCC & Hard rock	Mts	50	400.00	20,000.00
	iii) Supply & laying of 9" dia 2 M long RCC hume pipes at Road and Railway track crossings.	Nos	10	668.00	6,680.00
17	Shifting, Laying & Dressing of 3C x 95 sq.mm armoured PVC XLPE 11KV aluminium cable in hume pipe trench.	Mts	2000	20.00	40,000.00

18	Supply and Execution of uniterm heat shrinkable HT end termination joint kits of Raychem make suitable for 3C x 95 sq.mm, 11KV(UE), XLPE PVC Al armoured cable.	Nos	7	13,205.00	92,435.00
19	Execution of heat shrinkable HT end termination joint kits suitable for 3C x 95 sq.mm, 11KV(UE), XLPE PVC Al armoured cable.	Nos	1	840.00	840.00
20	Supply and Execution of uniterm heat shrinkable HT straight through joint kits of Raychem make suitable for the following cables.				
a	3C x 95 sq.mm, 11KV, UE, XLPE PVC Al armoured cable.	Nos	4	28,200.00	112,800.00
21	Supply and Application of sealent cans of Pufseal (1K-S), Stanvac Chemicals make. The pufseal is to be applied near cable entry areas to avoid unwanted pest and rodents.	Nos	5	800.00	4,000.00
22	Shifting and laying of LT power PVC armoured aluminium cable including Dressing				
	a) 31/2C X 300sq.mm Al	Mts	50	24.00	1,200.00
	b) 31/2C X 240sq.mm Al	Mts	2000	24.00	48,000.00
	c) 31/2C X 120sq.mm Al	Mts	500	16.00	8,000.00
	d) 31/2C X 50sq.mm Al/Cu	Mts	300	14.00	4,200.00
	e) 4C X 16 /10/6/4sq.mm Al/Cu	Mts	1500	11.00	16,500.00
23	Power cable termination including supply of cable glands & lugs(Copper/Aluminium).				
	a) 31/2C X 300sq.mm Al	Nos	2	1,633.00	3,266.00
	b) 31/2C X 240sq.mm Al	Nos	20	1,550.00	31,000.00
	c) 31/2C X 120sq.mm Al	Nos	8	766.00	6,128.00
	d) 31/2C X 50sq.mm Al/Cu	Nos	4	376.00	1,504.00
	e) 4C X 16 /10/6/4sq.mm Al/Cu	Nos	76	227.00	17,252.00
TOTAL					744,782.00

NOTE:

- 1) The above rates are inclusive of VAT.
- 2) Service Tax is extra, as applicable and the contractor shall indicate Service Tax separately as extra in price bid.
- 3)The Contractor has to submit separate Service tax invoice alongwith RAB (Running Account Bill)
- 4)The quantities indicated in the schedule are tentative and may increase or decrease or delete.
- 5)Any other works not mentioned but required for completion of the project are to be carried out by the contractor with mutually agreed rates and vetted by finance.
- 6)The contractor shall mark with paint on all panels regarding power cables size & FROM/TO destinations.
- 7)Contractor shall shift the materials from different locations inside the factory to the project site and return back the left over materials after completion of the work to the project stores or as per the instructions of the site engineer.
- 8)**Safety** : Contractor has to ensure usage of safety shoes, safety helmets, safety belts, safety net & anchoring rope, hand gloves etc. during erection and commissioning for all his personnel.
- 9)Contractor should ensure the availability of calibration certificates for all the equipments likely to be used.
- 10)Contractor has to follow the work permit system strictly wherever applicable.
- 11)Contractor has to ensure neatness of the site by removing unwanted materials/scrap materials.
- 12)The contractor should follow all the statutory requirements, Environmental Management System (EMS), Occupational Health and Safety Management System (OHSAS) while executing the work.
- 13)The works are to be carried out in accordance with IE rules 1956.
- 14) The contractor has to arrange inspection by CEA and obtain the permission for charging the sub-station. BHEL will provide all relevant drawings and pay the processing fee indicated by CEA and other necessary arrangements will be born by the contractor.

Note: The bidders are required to quote the tender value on percentage(%) basisat excess or less or on par with estimate value in figures and words.

Tender %	In Figures	In Words
Excess		
Less		
Estimated Value		