



## BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM:: HYDERABAD::502032  
FACTORY CIVIL & PROJECTS DEPARTMENT

Phone nos: 040-23185059, 23182376 Fax: 040-23186122

email id: suryadevara@bhelhyd.co.in

Tender Notice No. HY/PROJ-EC/ELEC/OT-25/2016-17

DT. 17.12.2016

### SCHEDULE-A

### PRICE BID

#### NAME OF WORK: HT WORKS FOR 1450KW SOFT STARTER IN COMPRESSOR TESTING

##### SCOPE OF WORK:

- 1) Dismantling, shifting, erection, testing and servicing of VCBs etc.
- 2) Supply of insulated rubber mats, end terminations, and execution of termination and joints etc.
- 3) Excavation of trench, supply & spreading of sand, bricks, shabad stones etc.
- 4) Shifting, fabrication and erection of structural steel support for cable trays etc and
- 5) Supply of commissioning assistance.

S. No	Item Description	Unit	Quantity	Rate/Unit in Rs.	Total amount in Rs.
	Removal of cables, Dismantling and shifting of the following items to 52 building or to scrapyard as per the instruction of site engineer				
1	i) 6.6kV, 1450/850KW Auto transformer starter along with 6.6kV, BVP-4 MOCB. Approximate Dimensions: 4500 mm (L) X 1200mm (W) X 2500mm (H). Approx. Weight: 3 Tons	Nos	1	7,466.97	7,466.97
	ii) 6.6kV, BVP-4 MOCB. Approximate Dimensions: 600mm(L)X1400mm(W)X2500mm(H).	Nos	1	2,107.36	2,107.36
	iii) 6.6kV Auto Transformer. Approximate Dimensions: 1100mm(L)X1200mm(W)X1500mm(H). Approximate Weight: 1340 Kgs	Nos	1	3,795.00	3,795.00
2	Removal of cables, Dismantling, shifting, reerection and servicing of BVM-12, 12kV, 800A VCB, BHEL Bhopal make. Approximate Dimensions: 600mm(L)X1400mm(W)X2500mm(H). Approx. Weight: 1.5 Ton	Nos	1	5,692.50	5,692.50
3	Removal of incoming and outgoing cables from 2MW auto transformer starter, dismantling, shifting out the 2MW auto transformer starter temporarily to make way for shifting of the new soft starter and VCB panels and shifting in, reerection of the 2MW auto transformer starter and reconnection of cables in starter. Approximate Dimensions: 2000mm(L)X1200mm(W)X2500mm(H). Approximate Weight: 3 Tons	Nos	1	7,590.00	7,590.00
4	Shifting, Assembly, Erection, Testing and Commissioning of 6.6KV, VM-12, BHEL make, Indoor type VCBs. The VCBs shall erect on the trenches by providing MS material. The job includes primary injection, secondary injection and testing of relays mounted on VCB panels. Approx. Size: 820(L) x 2355(W) x 2700(H) mm and Wt: 1500kgs each.	Nos	2	7,700.00	15,400.00
5	Shifting and Erection of soft starter panel for 1450/850KW Compressor. The approximate weight is 2.0T and dimensions are 3000(L) x 1500(W) x 2500(H) mm.	Nos	1	6,166.47	6,166.47
6	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.				
	i) 3C X 300 sq.mm, 11kV(Earthed), XLPE	mts	350	25.98	9,093.00
7	Supply of 3C X 300 sqmm, 11kV(E), XLPE End terminations of Raychem/3M make	nos	12	4,158.00	49,896.00
8	Execution of the following HT Cable End terminations /Joints with Heat Shrinkable joint kits by qualified cable joiner. Job includes terminating the cable in the panels				
	i) 3C X 300 sq.mm, 11kV(Earthed), XLPE	Nos	12	1,244.50	14,934.00
9	Shifting, Fabrication and Erection of structural steel for equipment/cable tray support	Ton	2	9,066.00	18,132.00
10	Shifting & Earthing of Equipment from nearest Earth riser with 50x6mm/ 25x3mm GI flat	mts	200	22.00	4,400.00
11	Shifting & Erection of cable tray upto 600mm width of ladder / perforated type. The job includes fabrication of cable tray bends wherever required.	mts	100	43.64	4,364.00
12	Supply of Commissioning Assistance during machines & other systems commissioning.				
	i) Skilled	days	10	714.52	7,145.20
	ii) Unskilled	days	10	591.49	5,914.90

13	Shifting and laying of 1.1KV LT Control PVC Armoured/Flexible Copper cable including Dressing & Tagging				
	a) 24C x 1.5sq.mm	mts	50	21.82	1,091.00
	c) 5C x 1.5sq.mm	mts	200	11.43	2,286.00
14	Cable termination including supply of cable glands, PVC Ferrules & Copper lugs (U-type/Ring type/Pin type).				
	a) 24C x 1.5sq.mm	Nos	2	550.67	1,101.34
	c) 5C x 1.5sq.mm	Nos	14	207.80	2,909.20
15	Supply and laying of Electrical Insulated Rubber Floor Mats, size: 1000x2000x12 mm (CORRUGATED) for placing in front of HT & LT Switch Gear Panels conforming to IS:5424/1969. Insulation Resistance: 10,000MOHMS (minimum). Breakdown Test: 50kV (minimum) as per IS: 2584/1963.	Nos	5	1,280.00	6,400.00
16	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 laying the cable with marking plates. Existing HT cables may be lying in the route. Hence, Contractor has to take additional safety precautions.	mts	25	432.00	10,800.00
17	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, salt (75kg & 150kgs respectively) 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	6,538.72	26,154.88
18	Removal of existing HT cables running from BVM12 VCB to Isolator in the trench in Test bay and shifting them to scrapyards or following the instructions of site engineer.	mts	200	24.89	4,978.00
				<b>total</b>	<b>217,817.82</b>

**Total: Two lakhs seventeen thousand eight hundred and seventeen rupees and eightytwo paise only**

**Note:**

- 1) VAT, Service Tax, SBC & KKC will be paid extra as applicable on submission of valid documents.
- 2) The Contractor has to submit separate Service tax invoice along with RAB (Running Account Bill)
- 3) The quantities indicated in the schedule are tentative and may increase or decrease or delete.
- 4) Any other works not mentioned but required for completion of the project are to be carried out by the
- 5) The works are to be carried out in accordance with IE rules 1956
- 6) The contractor shall mark with paint on all panels regarding power cables size & FROM/TO destinations.
- 7) The contractor should follow all the statutory requirements, Environmental Management System (EMS), Occupation Health and Safety Management System (OHSAS) while executing the work.
- 8) 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.
- 9) All the unused/excess materials issued by BHEL shall be returned to the store / or as directed by the site engineer after use.
- 10) Contractor has to ensure neatness of the site by removing unwanted materials/scrap materials.
- 11) 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.
- 12) Penalty: 0.50 % of the gross value of work will be levied for every week's or part thereof delay by the agency subject to a maximum of 10 % gross value of the work executed after the schedule period of completion.
- 13) Payment Terms: Payment will be based on work % completion/milestone basis.
- 14) The agencies are advised to visit the site to understand the nature of work/quantum of work in its true perspective to avoid any complications.
- 15) Tenderer should have valid HT Electrical license issued by competent authority.
- 16) GST: All the terms and conditions of the contract with respect to taxes & duties are subject to the new taxation laws introduced from time to time (e.g. GST). The terms and conditions will be modified in accordance with the provisions of new laws (e.g. GST).

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

Tender Percentage	In Figures	In Words
Excess		
Less		
On par with estimates		