

Issued to: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**BHARAT HEAVY ELECTRICALS LIMITED**  
**RAMACHANDRAPURAM :: HYDERABAD-32**  
**TOWNSHIP ADMINISTRATION**

**TENDER DOCUMENTS (PRICE BID)**

**Name of the work : Erection of transformers in sub-stations ( 3 nos.) in township.**

**Tender Notice HY/TA/E/OT-03/2011-12 Dt. 23.08.2011; Item No. 01**

**INDEX**

**1. Schedule 'A' : Schedule of rates and approximate quantities**

**TENDERER**

**ISSUING OFFICER**

**Address:**

**Phone No. \_\_\_\_\_**

**BHARAT HEAVY ELECTRICALS LIMITED**  
**RAMACHANDRAPURAM :: HYDERABAD - 32**  
**(TOWNSHIP ADMINISTRATION)**  
**ELECTRICAL DEPARTMENT**  
**SCHEDULE - 'A'**

**Tender No.: HY/TA/E/OT-03/2011-12**  
**Date : 23.08.2011**  
**Item No.: 01**

**Erection of transformers in sub-stations ( 3 nos.) in township.**

<b>Sl. No.</b>	<b>Nature of work</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
	<b>Construction of plinth for transformer :-</b>				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 Sqm on plan) including disposal of excavated earth, within a lead of 50 m and lift up to 1.5 m disposed earth to be levelled and neatly dressed for all kind of soils all as directed by Engineer-in-charge.	Cu.M	<b>18.0</b>	101.85	1,833.30
2	Plain Cement Concrete 1:4:8 mix using 40 mm guage down graded hard granite metal including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	Cu.M	<b>3.0</b>	2,449.00	7,347.00
3	Coursed Rubble Stone masonry in CM 1:6 (1 cement : 6 coarse sand), 2nd sort with hard granite stone in foundation and basement including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	Cu.M	<b>24.0</b>	1,913.10	45,914.40
4	Flush pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) for all thickness of walls including curing, cost of all materials etc. complete all as directed by Engineer-in-charge.	Sq.M	<b>27.0</b>	62.50	1,687.50
5	Re-filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidation each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m etc. complete all as directed by Engineer-in-charge.	Cu.M	<b>6.0</b>	45.70	274.20
	<b>Sub - station equipments erection :-</b>				
6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means for pole / stay pits of size 0.6m x 0.9m x 1.5m including disposal of excavated earth, within a lead of 50 m and lift up to 1.5 m disposed earth to be levelled and neatly dressed for all kind of soils all as directed by Engineer-in-charge.	Cu.M	<b>4.0</b>	101.85	407.40

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
7	Transportation, erection, aligning in position and fixing of 28 feet long Heavy Duty RCC poles having size of 10" x 6" at bottom and 6" x 5" at top, all complete as directed by Engineer-in-charge. <b>( RCC poles will be supplied by BHEL )</b>	Each	<b>4.0</b>	715.00	2,860.00
8	Plain Cement Concrete 1:2:4 mix using 20 mm guage down graded hard granite metal (for fixing of poles) including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	CuM.	<b>1.0</b>	3,257.45	3,257.45
9	Erection and mounting of 11000/440V power trans- former on the plinth. This includes connecting the conductors / cables to the HT & LT side of the transformer with suitable sizes of lugs. Cable if connected, to be supported with proper supporting arrangement; all complete as directed by Engineer-in-charge.	Each	<b>3.0</b>	13,000.00	39,000.00
10	Structural steel work with MS channels of 100 x 50 x 5 mm including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as directed by Engineer-in-charge. <b>( Structural steel will be supplied by BHEL )</b>	Kg.	<b>750.0</b>	11.15	8,362.50
11	Supply, fabrication and fixing of clamps / brackets / frames made of MS flat / angle / channel of suitable sizes with required nuts, bolts & washers complete, including cutting, bending, drilling & welding etc. and painting; all as directed by Engineer-in-charge.	Kg.	<b>120.0</b>	95.00	11,400.00
12	Supply, assembly and erection of stay set complete in all respect with 16 mm Ø 1.8 mtr. long anchor rod, 250 x 250 x 6 mm anchor plate, eye bolt made up of 16 mm Ø MS rod & necessary nuts-bolts etc.; all complete as directed by Engineer-in-charge.	No.	<b>4.0</b>	3,500.00	14,000.00
13	Supply & fixing 256 mm dia <b>disc type insulators</b> suitable for 11kV complete in all respect with galvanised socket ended snail clamp to suit ACSR conductor upto 13 mm Ø, including GI bolts, nuts, washers etc.; all complete as directed by Engineer-in-charge.	Each	<b>18.0</b>	368.00	6,624.00
14	Fixing of 150 mm height vitreous brown porcelain <b>pin type insulators</b> suitable for 11kV, complete in all respects including GI spindle, nuts, washers etc.; complete all as directed by Engineer-in-charge. <b>( Insulators will be supplied by BHEL )</b>	No.	<b>9.0</b>	48.00	432.00
15	Supply, fixing in position and binding of 6.0 mm Ø copper conductor of suitable length for connection of transformer on HT side / on to the insulators for over head 11KV Bus-bar; all complete as directed by Engineer-in-charge.	Kg.	<b>9.0</b>	490.00	4,410.00
16	Supplying and fixing of 11 kV, 400 Amps. AB switches with tilting type, complete in all respect with all standard accessories etc. complete with cost and conveyance of all materials; all as directed by Engineer-in-charge.	Nos.	<b>6.0</b>	9,800.00	58,800.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
17	Supplying and fixing of 11 kV, 400 Amps. HG fuse sets with necessary nuts & bolts; all complete as directed by Engineer-in-charge.	Nos.	9.0	7,000.00	63,000.00
18	Supply & installation of <b>pipe earthing</b> arrangement comprising of 100 mm inner dia, 3 mm thick GI pipe buried upto a minimum depth of 3.0 mtrs including excavation of pit, filling the earth pit with homogenous layers of coke/charcoal, salt & sand etc. as required conforming to IS Standards. The earth pit to be provided with brick masonry chamber with hinged cover and watering arrangement; complete in all respects, as directed by Engineer-in-charge.	Set	10.0	6,000.00	60,000.00
19	Supply and fixing of 8 SWG copper bare wire / copper flat for earthing and bus-bar; all complete as directed by Engineer-in-charge.	Kg.	20.0	607.00	12,140.00
20	Supply, laying & fixing of 25 mm x 6 mm Copper strips for earth connection to transformer with all necessary nuts, bolts, washers etc.; all complete as directed by Engineer-in-charge.	Kg.	35.0	607.00	21,245.00
21	Supply, fabrication and erection of 14 SWG (2.0 mm) CRCA (Cold Rolled Closed Annealed) sheet steel enclosure for <b>power control cubicle panel / boxes</b> with mechanical locking arrangements etc., including cutting, bending, drilling, welding & reveting etc., complete and painting with powder coating including cost and conveyance of all materials and labour charges; complete all as directed by Engineer-in-charge.	Sft.	165.0	288.00	47,520.00
22	Supply & spreading of 53 mm to 22.4 mm size stone aggregate at site; colmplete all as directed by Engineer-in-charge.	CuM.	4.5	810.55	3,647.48
	<b>Cable trench &amp; laying of cable :-</b>				
23	Earth work in excavation of cable trenches by mechanical means (Hydraulic excavator) / manual means for cable trenches of size 0.6m width & 0.9m depth, including disposal of excavated earth, within a lead of 50 m and lift up to 1.5 m disposed earth to be levelled and neatly dressed for all kind of soils all as directed by Engineer-in-charge.	Rmt.	40.0	115.05	4,602.00
24	Supply & spreading of sand cushion 5cm thick alround the cable & laying rough shahabad stone	Rmt.	40.0	97.00	3,880.00
25	Laying of 3 / 3½ - core, 50 - 95 sq.mm. PVC insulated, PVC sheathed steel wire armoured Aluminium conductor cables in the cable trenches; all complete as directed by Engineer -in-charge. <b>( cable will be supplied by department )</b>	Rmt.	70.0	23.00	1,610.00
26	Termination of HT cable with supply and fixing of 11KV, outdoor type, heat shrinkable cable termination kit suitable for 3 x 120 sq.mm XLPE / PILC Aluminium conductor cable; inclusive of all required materials like cable jointing compound, hardener, epoxy insulators, lugs, bi-metallic washers etc. of reputable and standard make; all complete as directed by Engineer-in-charge.	Each	4.0	9,800.00	39,200.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
27	Supply and fixing of crimping type <b>aluminium lugs</b> conforming to I.S specifications for cable of 50 - 95 sq.mm. including nuts & bolts with connections; all complete as directed by Engineer-in-charge.	No.	<b>30.0</b>	10.00	300.00
28	Supply and fixing of crimping type <b>copper lugs</b> conforming to I.S specifications for cable of 35 sq.mm. including nuts & bolts with connections; all complete as directed by Engineer-in-charge.	No.	<b>30.0</b>	21.00	630.00
	<b>Providing of chain link mess :-</b>				
29	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 Sqm on plan) including disposal of excavated earth, within a lead of 50 m and lift up to 1.5 m disposed earth to be levelled and neatly dressed for all kind of soils all as directed by Engineer-in-charge.	CuM.	<b>5.0</b>	101.85	509.25
30	Plain Cement Concrete 1:5:10 mix using 40 mm guage down graded hard granite metal (for foundation of CRS masonry) including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	CuM.	<b>0.8</b>	2,079.60	1,663.68
31	Plain Cement Concrete 1:4:8 mix using 20 mm guage down graded hard granite metal (for grouting of angle iron) including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	CuM.	<b>1.0</b>	2,449.00	2,449.00
32	Coursed Rubble Stone masonry in Cement Mortar 1:6 (1 cement : 6 coarse sand), 2nd sort with hard granite stone in foundation and basement including curing, cost of all materials etc., complete all as directed by Engineer-in-charge.	CuM.	<b>5.0</b>	1,913.10	9,565.50
33	Structural steel work with angle iron of 65 x 65 x 6 mm including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as directed by Engineer-in-charge. <b>( Structural steel will be supplied by BHEL )</b>	Kg.	<b>320.0</b>	11.15	3,568.00
34	Supply and fixing of G.I. Chain Link Mesh of 25 x 25 mm mesh and 3 mm dia wire including cost of binding wire and all materials etc., complete all as directed by Engineer-in-charge.	Sq.M	<b>60.0</b>	135.00	8,100.00
35	Steel work welded in built up sections / framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required in gratings, frames, guard bar, ladder, railings, brackets, <b>Gates</b> , and similar works, complete all as directed by Engineer-in-charge.	Kg.	<b>300.0</b>	51.20	15,360.00
	<b>TOTAL ... ..</b>			<b>( Rupees five lakhs five thousand five hundred ninety nine and paise sixty six only )</b>	<b>505,599.66</b>

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)

**Note:- The tenderers are required to quote their tender value on %age basis at excess or less or on par with estimated value.**

Tender %	Figures	words
Excess		
Less		
Estimate rate only		

**Conditions :**

1	A <b>penalty of 0.5%</b> of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work.
2	The tender % age quoted by the contractor shall be inclusive of all taxes and duties other than service tax as applicable from time to time.
3	<b>Service tax will be extra if applicable for this contract.</b> Service Tax if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax by the contractor.
4	In case there is any difference in the quoted % age between figures and words, the resultant higher tender value will be taken for evaluation of tender priority and while awarding, lower tender value will be taken and this should be binding on the contractor.
5	The department reserves the right to cancel the work without assigning any reasons therefor.
6	Conditional offers are not acceptable.
7	All the bills of the contractors will be cleared subject to the production of clearance certificate by the contractors in respect of compliance of all statutory requirement, issued by IR section of BHEL-HR department.