

(Cover page for Price Bid)

Issued to: _____



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

TENDER DOCUMENTS (PRICE BID)

Name of the work : Maintenance of HT/LT overhead lines, misc. Painting works and excavation of cable trenches in township.

Tender Notice : HY/TA/E/OT-01/2011-12, Dt. 10.05.2011; Item No. 05

INDEX

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

SIGN. OF 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-01/2011-12
Date : 10.05.2011
Item No.: 05

Maintenance of HT/LT overhead lines, misc. painting works and excavation of cable trenches in Township.

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
	HT/LT OVER HEAD LINES				
1	Transporting, Erection in position aligning and fixing of Heavy Duty RCC poles of size 12"x6" at bottom and 5"x4" at top, 30' long. (poles will be supplied departmentally and have to be transported to the site of work from stores, 2.5 km distance.)as directed by engineer incharge	Each	10	966.00	9,660.00
2	Dismantling carefully of Heavy Duty RCC poles 30'/28' and transporting them to stores/ site of work 2 km distance as directed by engineer incharge	Each	10	675.00	6,750.00
3	Supply assembling and erection of stay setsAnchor rod : MS rod dia. 16mm 1.8 mtrs. Long, Anchor plate : MS plate of size 250x250x6mm & Eye bolt : MS mase made of rod dia. 16mm with Suitable Hexagonal nut.as directed by engineer incharge	Each	10	961.00	9,610.00
4	Supply & fixing of MS plain ended tubular swagad street light 8mt long pole IS 2713 -1980, 410 SP25 with single arm with junction box including 300x300x6mm thick M.S.plate to be welded to the pole for use as sturts and poles (Excavation of pit, concreting and clamping measured separately) as directed by engineer incharge	No.	3	5,127.00	15,381.00
5	Supply & fixing of MS tubular swagad street light 10mt long pole IS 2713 -1980, 410-SP-44 with ring arm 1 mtr dia (for low mast light) including red oxide and enamel paint with junction box for provision of load master and fuse cut out . (Excavation of pit, concreting and clamping measured separately) as directed by engineer incharge	No.	3	14,670.00	44,010.00
6	Supply & fixing of stay wire stranded galvanised of size 7/10 SWG as directed by engineer incharge	Mtr.	50	105.00	5,250.00
7	Supply & stringing fixing in position, binding of GI guarding for road crossing with necessary craddle guard etc., as directed by engineer incharge.	Mtr.	50	98.00	4,900.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
8	Supply and fixing of shackle type insulator of height 75mm and 85mm dia. Suitable for a working pressure of 1100V grade as directed by engineer incharge	Each	50	47.00	2,350.00
9	Supply & fixing of 11kv disc. Type insulators 256mm dia. With GI twisted strap, ball clevis, galvanised socket ended snail clamp to suit conductor upto 13mm including GI bolts, nuts washers etc., complete as directed by engineer incharge	Each	10	337.00	3,370.00
10	Supply & paying out stringing fixing in position and binding of 7/2.11mm ACSR conductor one run on to insulators for 11kv / LT street light over head line as directed by engineer incharge	Mtr.	90	23.00	2,070.00
11	Supply & paying out stringing fixing in position and binding of ACSR conductor one run on to insulators for 11kv / LT street light over head line with 7/2.59 mm ACSR conductor as directed by engineer incharge	Mtr.	175	31.00	5,425.00
12	Supply & paying out stringing fixing in position and binding of 7/3.6mm ACSR conductor one run on to insulators for 11kv / LT street light over head line as directed by engineer incharge	Mtr.	100	50.00	5,000.00
13	Supply & fixing of copper flat 25mm x 6mm / 50mmx 6mm for MD boards and earthing in substations.	Kg.	18	535.00	9,630.00
14	Supply & fixing of HT porcelain bushes for 250 KVA .Transformer should have test certificate as directed by engineer incharge	Kg.	5	204.00	1,020.00
15	Supply & fixing of LT porcelain bushes for ETE 250 KVA . Transformer should have test certificate as directed by engineer incharge	Each	5	182.00	910.00
16	Annual maintenance of high mast lights including servicing, cleaning rectification and replacement of Sub-T-Bulbs, chokes, condensers and Generators etc., (required materials will be supplied by dept.) The necessary safety equipment and safety precautions for the above operation is the responsibility of the agency as directed by engineering incharge	Each operation	2	18,000.00	36,000.00
17	Supply & fixing of timer switch type TSQ-100 make Larsen & Turbo ltd. as directed by engineer incharge	Each	4	3,652.00	14,608.00
18	Coping of RCC poles/stays/struts with cement concrete etc. (CPWD p-75 4.5.6)	Cu.M	5	1,728.00	8,640.00
19	Supply, fabrication & fixing of MS cross arms/ ring arms /horizontal V cross arms LT 4' & 2' cross arm of diff Sizes	Kg.	50	204.00	10,200.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
20	Supply, fabrication & fixing of MS clamps made of MS flat for fixing of cross arms/brassing etc	Kg.	50	95.00	4,750.00
21	Supply & crimping of copper Crimping lugs of Size				-
a)	120 sq.mm	Each	10	85.00	850.00
b)	150 sq. mm	Each	10	101.00	1,010.00
24	Restranging of loose hanging guardings wherever necessary.	Mtr.	50	8.00	400.00
22	Supply, fabrication & fixing of MS sheet steel cupboards made of sheet 1.6mm thick with single/double shutter and mechanical locking arrangements. The cupboards shall be given 2 coats of red-oxide paint and finished with necessary general purpose quick drying oil paint of suitable shade, etc. complete as directed by engineer in charge.	Kg.	55	184.00	10,120.00
	MISC. PAINTING WORKS				-
23	Applying two coats of snowcem or equivalent cement paint of approved brand to old surface including curing, cost of all materials etc. (BHEL/P13/15)as directed by engineer incharge	Sq.M	20	62.00	1,240.00
24	Cleaning and applying of two coats of Red-oxide primer paint at the existing MS cross arms, MS channels, clamps and MS flat etc. as directed by engineer incharge	Sq.M	100	61.00	6,100.00
25	Same as above but single coat. As directed by engineer incharge	Sq.M	100	40.00	4,000.00
26	Cleaning and applying of two coats of Al. base paint for final painting on the existing cross arms as in Item No.2 etc.as directed by engineer incharge	Sq.M	200	72.00	14,400.00
27	Same as above but single coat as directed by engineer incharge	Sq.M	100	46.00	4,600.00
28	Cleaning and applying of two coats of postal Red paint for final painting on the existing and doubling feeding poles etc as directed by engineer incharge	Sq.M	30	72.00	2,160.00
29	Cleaning and applying of two coats of Dark admiral grey paint for MD boards, Transformers, controlling panels/ pannel boards for pumps etc as directed by engineer incharge	Sq.M	100	72.00	7,200.00
30	Same as above but single coat as directed by engineer incharge	Sq.M	100	46.00	4,600.00
31	Painting of BHEL serial no. on Electrical poles with white paint on back side and number in black paint as directed by engineer incharge	Sq.M	100	61.00	6,100.00
	CABLE TRENCHES & MISC. ITEMS				-

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
32	Earth work excavation for cable trenches of size 0.6m width & 0.9m deep in all soils except rocky, cutting of floor & roads & refill. (2.10.1.1)	Mtr.	440	71.00	31,240.00
33	Supply & spreading of sand cushion 5cm thick alround the cable & laying rough shahabad stone of size 300x300x30mm over the cables.	Mtr.	350	89.00	31,150.00
34	Earth work excavation for laying of additional cable, replacing of damaged cables and diverting the existing cable trenches in different routes as directed by engineer in charge.	Cu.M	350	65.00	22,750.00
35	Providing of earthing arrangement comprising of 100 mm inner dia, 3 mm thick GI pipe buried upto a minimum depth of 3.0 mtrs including filling the earth pit with homogenous layers of coke/charcoal, salt & sand etc. as required conforming to IS:3043 . Suitable length of 8 SWG bare copper conductor to be bolted at bottom of the pipe and run around the pipe upto the surface connection point (Copper conductor included as separate item). 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	2	3,177.00	6,354.00
36	Supply and laying of local sand including cost of conveyance to site and spreading for sub stations.	Metric Ton	5	458.00	2,290.00
37	Providing and fixing GI pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal work)				-
a)	50mm dia. GI pipe (medium) (CPWD p-210 20.2.1.6)	Mtr.	44	343.00	15,092.00
b)	100mm dia GI pipe (medium) (dept. supply) (BHEL misc. external water supply work)	Mtr.	25	32.00	800.00
38	Erection of MS tubular poles (Approximate 80 kg. Weight) including transport approximate distance 2km	Each	3	903.00	2,709.00
39	Supply and laying of Hume pipes (RCC) of the following sizes for cables entry at the buildings and road crossings. The two ends to be closed suitably with impervious clay after laying the cables as directed by engineer in charge.				-
a)	150 mm dia Hume pipe	Mtr.	25	300.00	7,500.00
b)	225 mm dia Hume pipe	Mtr.	25	400.00	10,000.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
40	Supply, fixing, jointing and testing of 11kv "cable jointing kit" pole mounted suitable for 3x120 sq mm XLPE / PILC Aluminium conductor cable for outdoor end termination inclusive of all materials like cable jointing compound, hardener, epoxy insulators, lugs, bi-metallic washers etc., complete of reputable make as directed by engineer in charge.	Each	2	6,500.00	13,000.00
41	Laying of PVC insulated PVC sheathed steel armoured Al conductor cable & connecting to switch and pole (both sides) (cable supplied dept.)				-
a)	1.5sq.mm/2.5sq.mm to 16 sq.mm (cable supplied dept.)	Mtr.	90	13.00	1,170.00
b)	25 sq.mm to 70 sq.mm cable (cable supplied dept.)	Mtr.	100	19.00	1,900.00
42	Laying of AL conductor PVC insulated PVC sheathed, steel armoured cables following sizes and connecting both sides.				-
a)	3 / 3 ¹ / ₂ core 120 to 225 sq.mm HT/LT cables	Mtr.	90	26.00	2,340.00
b)	3 ¹ / ₂ core 50 to 95 sq.mm	Mtr.	150	19.00	2,850.00
c)	3 ¹ / ₂ core 25 to 35 sq.mm	Mtr.	150	15.00	2,250.00
d)	2 / 3 / 4 core 2.5 to 16 sq.mm	Mtr.	200	13.00	2,600.00
43	Supply and fixing of heavy duty flange type brass cable glands with brass washers complete for the following sizes of cables :				-
a)	2/3/4 core 2.5 - 6.0 sq.mm	No.	6	41.00	246.00
b)	2/3/4 core 10 sq. mm	No.	6	72.00	432.00
c)	4 core 16 sq. mm / 3.5 core 25 sq. mm	No.	6	87.00	522.00
d)	3.5 core 35 sq.mm / 3.0 core 50 sq.mm	No.	6	91.00	546.00
e)	3.5 core 50 sq.mm	No.	6	101.00	606.00
f)	3.5 core 70 sq.mm	No.	6	126.00	756.00
g)	3.5 core 95 sq.mm	No.	6	155.00	930.00
44	Felling trees of girth including cutting of trees and branches, removing the roots and stacking of serviceable material at BHEL nursery stockguard including tractor loading and un loading, transporation at BHEL Nursery etc., completed and disposal of unserviceable material.as directed by engineer in-charge.				-
a)	Beyond 30 cms girth upto and including 60 cms girth.	Each	90	81.70	7,353.00
b)	Beyond 60 cms girth upto and including 120 cms girth.	Each	45	359.80	16,191.00

Sl. No.	Nature of work	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
c)	Beyond 120 cms girth upto and including 240 cms girth.	Each	20	1,658.85	33,177.00
d)	Above 240 cms.	Each	10	3,330.20	33,302.00
45	Cutting of tree branches along the overhead electrical lines, removing other kind of branches from the cut branch and stocking as directed by engineer in charge within a lead of 3 kms (separate payment will be made for transporting the tree branches from site to BHEL nursery stockyard.				-
a)	100 to 200 cms	Each	90	34.20	3,078.00
b)	above 200 cms	Each	90	56.60	5,094.00
46	Engaging a tractor with hydraulic lift trailer for transporting of the tree trunks / branches / roots from township at various places to nursery including loading, unloading with required no. of persons i.e. minimum 5 persons to be deployed along with the tractor etc., complete as directed by the Engineer-in-charge (the tractor shall have a valid fitness certificate) all as directed by the Engineer-in-charge.	Day	10	1,400.00	14,000.00
47	Engaging a tractor (along with driver) with trolley / water tanker for transporting of cables and electrical material from factory main store to Township Electrical store including loading & unloading and Watering of all substations and earth pits with one unskilled person to be deployed along with the tractor etc. complete as directed by Engineer-in-charge. (The tractor shall have a valid fitness certificate) (water supplied by Department)	Day	12	815.00	9,780.00
48	Supply of Glassiel chemical for eradication of grass at all electrical substations in township; all complete as directed by Engineer-in-charge.	Litre	20	385.00	7,700.00
49	Engaging a JCB for levelling of ground, clearing of thick bushes, removal of roots after cutting of trees, etc. as required; all complete as directed by Engineer-in-charge. The hiring cost shall be inclusive of all, such as operator, helper, fuel, transportation etc.	Hour	25	750.00	18,750.00
50	Engaging a Crane for loading & unloading of transformers on to the plinth of substations across the township, lifting of RCC poles for erection at site and other miscellaneous lifting & loading-unloading jobs etc. as required; all complete as directed by Engineer-in-charge. The hiring cost shall be inclusive of all, such as operator, helper, fuel, transportation etc.	Hour	25	1,000.00	25,000.00
			TOTAL		595,772.00

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 penalty of 0.5% 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 rates quoted for the items of work shall be inclusive of taxes (excluding sales tax & service tax) and duties levied by Central / State Govt. Organisations as well as local authorities.
3	Sales tax & Service tax will be extra if applicable for this contract. Taxes if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the taxes by the contractor.
4	If the contractor has not quoted the %age clearly , it is considered as incomplete tender and tender cannot be accepted.
5	All BHEL general conditions of contract and special conditions enclosed to this document are applicable to this work.
6	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.
7	The department reserves the right to cancel the work without assigning any reasons therefor.
8	The billing is done as per the units specified and completion to the satisfaction of Engineer-in-charge.
9	The quantities shown above are approximate and liable for variation.
10	Conditional offers are not acceptable.
11	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.