



BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD-32
TOWNSHIP ADMINISTRATION

TENDER DOCUMENTS (PRICE BID)

**Annual works contract for (A) Reading energy meters & attending meter complaints,
(B) Arrangement of PA system & decorative serial lights in township and
(C) Electrical installation & modification works in Non-Residential Buildings,
General Hospital, bore-wells etc. in Township.**

Tender Notice : HY/TA/E/OT-02/2020-21, Dt. 19.12.2020 (N0ATX00423)

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

NAME & ADDRESS OF TENDERER:

PHONE NO. : _____

E-mail : _____

BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM :: HYDERABAD - 32
TOWNSHIP ADMINISTRATION / ELECTRICAL DEPARTMENT

Tender No.: HY/TA/E/OT-02/2020-21
Date : 19.12.2020
(N0ATX00423)

SCHEDULE - 'A'

Annual works contract for (A) Reading energy meters & attending meter complaints, (B) Arrangement of PA system & decorative serial lights in township and (C) Electrical installation & modification works in Non-Residential Buildings, General Hospital, bore-wells etc. in Township.

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		PART - A				
1	995469	Collection of readings from energy meters (approx. 5200 nos.) in township by using Spot Billing Machine (issued by BHEL) and/or writing in registers & meter cards as directed by Engineer-in-charge including repeated attempts for door lock cases and also cross verification of abnormal readings. Note-1: Total operation to be completed within 5th day of every month by maintaining equally spaced interval of 1 month \pm 2 days for each meter. Any faults/ tampering/ non-functioning of meter observed to be brought to the notice of Dept. Note-2: Required stationeries such as SBM paper rolls, registers, meter cards, pens, markers etc. and conveyance charges shall be in the scope of contractor.	Month	12	17,380.02	2,08,560.24
2	995469	Attending & resolving complaints for abnormal units/ billing and faults like meter tampering, wrong connection, earthing etc. and if required, recording historical data from meter, testing of meter by providing another meter in series etc.; all complete as directed by Engineer-in-charge.	Each Complaint	160	60.17	9,627.20
3		Replacement of faulty energy meter with new energy meter, including required tools & tackles, cost of carriage etc. all complete as directed by Engineer-in-charge. (energy meter & seal will be supplied by BHEL). The approx. replacement quantity on a per annum basis is indicated below.				-
a)	995469	1-phase energy meter	Each	110	89.45	9,839.50
b)	995469	3-phase energy meter (direct type)	Each	22	112.22	2,468.84
c)	995469	3-phase energy meter (CT type)	Each	8	179.71	1,437.68
4	995469	Fixing of seals on energy meters; all complete as directed by Engineer-in-charge. (seal will be supplied by BHEL)	Each	190	2.85	541.50
		PART - B				-
5		Providing & arranging public address system with suitable & good quality equipments with required accessories such as cables, connectors, stands etc. and operation of system by engaging sufficient manpower for various official/ public functions; all complete as directed by Engr.-in-charge. (Rates are on per day basis)				-
a)	995469	Two Zone PA Amplifier & Digital Player (min. 400 Watts)	Day	50	1,138.45	56,922.50
b)	995469	Cord Microphone of suitable type with and without stand	Day	100	170.76	17,076.00
c)	995469	Cordless Microphone of suitable type with and without stand	Day	50	199.23	9,961.50
d)	995469	Gooseneck microphone with base	Day	7	227.69	1,593.83
e)	995469	Collar Microphone	Day	7	170.77	1,195.39
f)	995469	Two-way speaker system (min. 400 Watts)	Day	50	455.38	22,769.00
g)	995469	PA Horn with driver unit	Day	7	256.15	1,793.05
6	995469	Providing and fixing of good quality and sufficient quantity of LED type decorative serial lights for a period up to three nights on each occasion; all complete as per instructions of Engineer-in-charge. (1 unit = string of 10000 nos. LED)	Unit	16	2,959.96	47,359.36

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		PART - C				-
		POINT WIRING				-
7	995469	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	75	538.69	40,401.75
8	995469	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	7	543.81	3,806.67
9	995469	Supply and fixing 5A PVC batten holder / angle holder / 3-pin ceiling rose (ISI marked) including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	110	29.79	3,276.90
	-	PLUG POINTS			-	-
10	995469	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	40	598.30	23,932.00
11	995469	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet (common socket) on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	22	57.02	1,254.44
12	995469	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	18	195.01	3,510.18
13	995469	Supply and installation of 20A SP MCB and 20A metal clad socket outlet in single phase MCB box on surface or in recess, with chained cover for the socket outlet and complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 4.0 sq.mm run of mains)	Each	7	595.90	4,171.30
14	995469	Supply of 25mm dia 1.5 mm thick medium class PVC conduit pipe along with accessories in surface / recess including cutting the wall and making good the same with required massonary work etc. as required; complete all as directed by Engineer-in-charge.	Mtr.	18	56.44	1,015.92
	-	MAINS WIRING			-	-
15	-	Supply & wiring for circuit / submain wiring alongwith earth wire with the following sizes of FR PVC insulated multistranded copper conductor, single core cable in surface / recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Rmt	440	113.63	49,997.20
b)	995469	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Rmt	150	140.15	21,022.50

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
c)	995469	4 x 4.0 sq.mm + 2 x 4.0 sq.mm earth wire	Rmt	40	230.86	9,234.40
d)	995469	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Rmt	40	177.74	7,109.60
e)	995469	4 x 6.0 sq.mm + 2 x 6.0 sq.mm earth wire	Rmt	16	307.80	4,924.80
	-	ACEESSORIES			-	-
16	-	Supply & fixing following piano type switch / socket on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	15	25.95	389.25
b)	995469	250V, 6A 5-pin socket outlet	Each	15	31.07	466.05
c)	995469	250V, 16A Switch	Each	11	53.55	589.05
d)	995469	250V, 16A 6-pin socket outlet	Each	11	63.38	697.18
17	-	Supply & fixing following modular switch / socket on the existing modular plate & switch box including connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 6A Switch	Each	4	65.08	260.32
b)	995469	250V, 6A 3-pin socket outlet	Each	4	82.79	331.16
c)	995469	250V, 16A Switch	Each	4	94.15	376.60
d)	995469	250V, 16A 6-pin socket outlet	Each	4	126.63	506.52
18	-	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	1 or 2 Module	Each	4	54.82	219.28
b)	995469	3 Module	Each	4	65.08	260.32
c)	995469	4 Module	Each	4	70.64	282.56
d)	995469	6 Module	Each	4	85.17	340.68
e)	995469	8 Module	Each	4	104.41	417.64
19	-	Supply and fixing following accessories with internal connections etc. as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	230V, 6A, 3-pin plug top	Each	4	36.87	147.48
b)	995469	230V, 16A, 3-pin plug top	Each	7	51.45	360.15
c)	995469	Buzzer bell	Each	1	60.03	60.03
d)	995469	Ding dong bell	Each	1	101.19	101.19
e)	995469	Electronic Musical bell	Each	1	225.52	225.52
	-	HYLAM SHEET, METAL BOXES & T.W. BOARDS			-	-
20	995469	Supply, cutting and fixing of hylam sheet of 3mm thickness, preferably white on existing metal boxes as required; complete all as directed by Engineer-in-charge.	S.ft.	4	88.32	353.28
21	-	Supplying and fixing metal box of following sizes (nominal size) on surface / in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	8" x 10" (i.e. 200mm x 250mm x 60mm deep)	Each	4	182.40	729.60
b)	995469	10" x 12" (i.e. 250mm x 300mm x 100mm deep)	Each	4	267.97	1,071.88
22	-	Supply & fixing of teak wood boards of following sizes:			-	-
a)	995469	Teak wood round block	Each	7	12.86	90.02
b)	995469	10" x 12" teak wood board	Each	4	40.30	161.20
c)	995469	12" x 15" teak wood board	Each	1	61.74	61.74
	-	MAINSWITCHES, FUSES & FUSE D.B.			-	-
23	-	Supply & fixing of porcelain rewirable fuse unit of reputed make; complete all as directed by Engineer-in-charge.			-	-
a)	995469	32A, 415V fuse unit	Each	8	120.91	967.28
b)	995469	63A, 415V fuse unit	Each	11	188.65	2,075.15
24	-	Supply, fixing and connecting of following Main Switch; complete as directed by Engineer-in-charge.			-	-
a)	995469	415V, 32A Double Pole Iron Clad Main Switch	Each	1	770.04	770.04
b)	995469	415V, 32A Triple Pole Iron Clad Main Switch	Each	1	803.48	803.48
c)	995469	415V, 63A Triple Pole Iron Clad Main Switch	Each	1	1,752.74	1,752.74
25	995469	Supply, fixing and connecting of 250V, 16A, 1-phase 8-way porcelain fuses distribution board having metallic sheet steel enclosure; complete as directed by Engineer-in-charge.	Each	1	504.21	504.21

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-	ISOLATORS, MCBs & MCB D.B.			-	-
26	995469	Supplying and fixing of single pole 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	30	121.49	3,644.70
27	-	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-
a)	995469	40 amps	Each	2	210.40	420.80
b)	995469	63 amps	Each	2	259.98	519.96
28	-	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.			-	-
a)	995469	40 amps	Each	3	475.51	1,426.53
b)	995469	63 amps	Each	2	483.20	966.40
c)	995469	100 amps	Each	1	607.98	607.98
29	-	Supply and fixing following way, single pole & neutral, sheet steel, MCB distribution board on surface / recess complete with tinned copper bus bar, neutral busbar, earth bar, din channel, interconnections, powder painted including earthing etc as required ; complete all as directed by Engineer-in-charge.			-	-
a)	995469	240V, 2 + 4 way, single door including 63A double pole isolator and 5-32A MCBs complete.	Each	1	1,149.06	1,149.06
b)	995469	240V, 2 + 6 way, single door including 63A double pole isolator and 5-32A MCBs complete.	Each	1	1,425.17	1,425.17
30	-	Supply and fixing following way, horizontal type three pole & neutral, sheet steel, MCB distribution board on surface / recess complete with tinned copper bus bar, neutral busbar, earth bar, din channel, interconnections, powder painted including earthing etc as required; complete all as directed by Engineer-in-charge.			-	-
a)	995469	415V, 4 way (4 + 12), double door including 63A four pole isolator and 5-32A MCBs complete.	Each	1	3,351.99	3,351.99
b)	995469	415V, 6 way (4 + 18), single door including 80/100A four pole isolator and 5-32A MCBs complete.	Each	1	4,013.98	4,013.98
31	995469	Providing earthing conforming to IS:3043 with 40 mm dia G.I. earth pipe and all accessories including excavation of pit, filling with homogenous layers of coke/charcoal & salt and providing masonry enclosure with hinged cover plate having locking arrangement and watering pipe etc.; including cost and conveyance of all materials; complete as directed by Engineer-in-charge.	Set	2	2,931.24	5,862.48
32	995469	Providing and fixing of 4.00 mm dia copper wire on surface / in recess as required; complete all as directed by Engineer-in-charge.	Mtr.	15	75.39	1,130.85
	-	M.S. ITEMS			-	-
33	995468	Supply & fixing of angular iron frame in wall with 1/1.6 mm MS sheet on top with hinges & all four sides with screws. Necessary red-oxide / grey painting as directed by engineer in charge.	Kg.	20	96.29	1,925.80
34	995468	Supply, fabrication & fixing of MS sheet 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.	25	158.19	3,954.75

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-	SERVICE CONNECTIONS & MAINS			-	-
35	-	Supply & fixing of PVC insulated (WPTC) sheathed weather proof AL. Conductor cable of payal/gold model make 1100V grade together run with 7/18 SWG GI bearer wire outside building and concealed /surface in rigid PVC conduit inside the building including necessary clips insulation tape etc., for service tapping as directed by engineer in charge.			-	-
a)	995469	one run of 2-core, 10.0 Sq.mm (twin core WPTC)	Mtr.	230	46.79	10,761.70
b)	995469	two run of 2-core, 10.0 Sq.mm (twin core WPTC)	Mtr.	50	79.71	3,985.50
36	995469	Supply & fixing of Steel support wire 7/20 SWG with tape and new link clips to the existing weather proof wire only in case of breaking of GI wire.	Mtr.	81	9.53	771.93
	-	METERS			-	-
37	995469	Supply, fixing and connecting of 3 phase 5Amp/100Amp – 415V C.T meter	Each	1	2,563.94	2,563.94
38	995469	Supply, fixing and connecting of 3 phase 5Amp/100Amp-415V C.T.coil	Each	1	122.62	122.62
	-	LIGHTING			-	-
39	995469	Supply & fixing of CFL lamp PL-L 36W only bulbs Philips make	Each	10	162.07	1,620.70
40	995469	Supply and fixing of decorative CFL luminaire for wall mounting FL 800/320 with 20 W bulb philips make.	Each	2	573.67	1,147.34
	-	SPECIAL ITEMS FOR NON-RSDL BLDGS. & GEN. HOSPITAL			-	-
41	995469	supply & fixing of tubular type heating element suitable for 35 Ltrs / 50 Ltrs storage water heaters, 3 hole /triangular disc type / non-threaded type as per samples given as directed by engineer in charge .	Each	10	377.30	3,773.00
42	995469	Supply & fixing of thermostat 30° to 90°C adjustable and suitable for storage water heaters.	Each	8	197.23	1,577.84
43	995469	Supply & fixing of 12way - 30Amps., 600 V Bakelite with brass terminal connectors as directed by engineer incharge	Each	2	130.68	261.36
	-	SPECIAL ITEMS FOR BOREWELLS			-	-
4New	995469	Supply and fixing of 3TF32 contactor (Siemens) having 16A rated current at 415V supply, with 1NO+1NC and 230V or 415V AC, 50 Hz coil as directed by Engineer-in-charge.	Each	2	1,230.00	2,460.00
5New	995469	Supply and fixing of 3TF34 contactor (Siemens) having 32A rated current at 415V supply, with 1NO+1NC and 230V or 415V AC, 50 Hz coil as directed by Engineer-in-charge.	Each	2	3,725.00	7,450.00
6New	995469	Supply and fixing of spare coil (230V or 415V, 50Hz) suitable for 3TF32 / 3TF34 contactor as directed by Engineer-in-charge.	Each	3	205.00	615.00
47	995469	Supply & fixing of timer switch type TSQ-100 make Larsen & Turbo Ltd. as directed by engineer incharge	Each	1	3,131.61	3,131.61
48	995469	Supply and fixing push buttons of Red /Green colour for starter panel.	Each	4	96.90	387.60
49	995469	Supply & fixing of 100A DIN type HRC Fuses of SIEMENS / C&T / GE / INDO-ASIAN / C&S / HAVELLS / STANDARD make.	Each	9	167.03	1,503.27
	-	MISC. PAINTING WORKS			-	-
50	995473	Cleaning and applying of two coats of Red-oxide primer paint including cost & conveyance of all materials etc. as directed by Engineer-in-charge.	Sq.M	7	52.31	366.17
51	995473	Cleaning and applying of two coats of Al. base paint for final painting including cost & conveyance of all materials etc. as directed by Engineer-in-charge.	Sq.M	7	61.74	432.18
	-	CABLES LAYING			-	-
52	-	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation (0.6 x 0.9m), sand cushioning, protective covering and refilling the trench etc as required; complete all as directed by Engineer-in-charge. (cable will be supplied by BHEL)			-	-
a)	995469	Upto 35 sq. mm	Mtr.	155	145.48	22,549.40
b)	995469	Above 35 sq. mm and upto 95 sq. mm	Mtr.	40	150.84	6,033.60

Sl. No.	SAC Code	Nature of work	Unit	Qty.	Rate	Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
53	995479	Providing and laying in position cement concrete of 1:4:8 grade (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) excluding the cost of centering and shuttering etc. complete all as directed by Engineer-in-charge.	Cu.M	1	2,885.35	2,885.35
			GRAND TOTAL			6,84,975.41

Note:- The tenderers are required to quote their tender value on %age basis at Excess / Less / on par with estimated value.

Tender %	In Words	In Figures
Excess		
Less		
Estimate rate only		

Conditions :

1	Taxes & Duties: The rate quoted by the contractor shall be exclusive of GST. All the terms & 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 & conditions will be modified in accordance with the provisions of new laws (e.g., GST).
2	Contract Period & Maintenance Period: Period of contract : One (1) year from the date of commencement Maintenance period : Six (6) months from the date of completion
3	Penalty: Penalty amount determined as per penalty clause (as mentioned in pg. 5 of NIT) of the contract along with GST if applicable thereon shall be recovered

Notes :

1	All necessary tools, tackles & equipment etc. required for effective execution of the work are to be invariably provided by contractor only. Carriage of necessary tools, tackles & equipment etc. to site is a part of the work.
2	Contractor shall maintain proper record of complaints / works attended with proof of completion.
3	Compiled data of complaints / works as directed by Engineer-in-charge must be produced before submission of bill for payment.