

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575010 / 2575123 / e-mail : umadsankar@bheltry.co.in



ISO 9001

ENQ No: 9451700011

Dt. 03.07.2017

NOTICE INVITING TENDER

SUB: Electrification of new dust free AC cabin, control cabin and AHU room at Unit-II.- REG.

Ref: Enquiry no: 9451700011 / Dated: 03/07/2017; Due Dt: 07/08/2017

Tender of the following work should be submitted in a sealed cover consisting of three inner sealed covers such as 1) EMD cover, 2) Technical bid cover & 3) Price bid cover, all superscribing the name of work, enquiry number etc.

- 1) EMD cover shall contain requisite **EMD of ₹ 10,463/-** remitted in cash (as permissible under Income Tax Act)/Electronic Fund Transfer credited in BHEL account before tender opening or Banker's cheque/Pay order/Demand Draft in favour of M/S BHEL Trichy. Tender without EMD will be summarily rejected and the Technical bid & price bid shall not be considered.
- 2) Technical bid cover shall contain duly filled in Technical bid document signed by the tenderer in all the pages with documentary evidences for pre-qualification such as experience, value of work executed in the similar nature of work etc. Any bid without proper documentary evidence for pre-qualification shall not be considered for further evaluation.
- 3) One set of unpriced bid of Contract Work Schedule duly signed by the tenderer for accepting the work content (BOM) should be submitted along with the Technical bid for technical evaluation.
- 4) The price bid cover shall contain price bid document duly filled in and signed by the tenderer in all the pages. The tenderer has to quote only the percentage rates ie., Below (- %) / At par (0%) / Above (+ %) of the rates provided in Price bid.

The complete Technical bid and price bid along with requisite **EMD of ₹ 10,463/-** shall reach the office of the undersigned on or **07/08/2017 at 10.00 Hrs.**

MSE suppliers can avail EMD Waiver benefits only if they submit along with the offer, attested copies of either EM II Certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II Certificate along with attested copy of a CA Certificate (Format Enclosed). Tenders without EMD/MSME proof as detailed above will be summarily rejected.

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The Technical bid will be opened on the same day at **10.30 hrs.** In case of opening day falls on holiday or happened to be declared as a holiday the receipt and opening of the tender shall automatically fall on the same timing of the next working day. Date and time of opening of the Price Bid shall be intimated only to the bidders those who have qualified after evaluation of the Technical bid. You / Your authorized representative may participate in the tender opening.

Clarification if any can be obtained from the undersigned.

Kindly acknowledge the receipt of the entire set of tender document.

Thanking you,

Yours faithfully,

For Bharat Heavy Electricals Limited,
Engineer/Contracts
Maintenance & Services

Encl:

- 1) NIT – Notice Inviting tender (Consists of Preamble, Technical Bid & price bid)

Tender should be addressed to: **THE ENGINEER,
MAINTENANCE & SERVICES / CONTRACTS,
2&4 BUILDING, BHARAT HEAVY ELECTRICALS LIMITED, HIGH
PRESSURE BOILER PLANT,
TIRUCHIRAPPALLI - 620014,
TAMILNADU**

Sign & Seal of Contractor

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NOTICE INVITING TENDER

01.	Name of work	Electrification of new dust free AC cabin, control cabin and AHU room at Unit-II.
02.	Earnest Money Deposit	₹ 10,463/-
03.	Duration of the contract	12 Months from date of commencement of the work.
04.	Last Date for Receipt of Tender	10.00 Hrs on 07/08/2017
05.	Date of Technical Bid Opening	10.30 Hrs on 07/08/2017
05.	Date of Price Bid Opening	Will be intimated to those who are Qualified separately.
07.	Guarantee Period	Not applicable

The Tender documents can be down loaded from BHEL website (www.bhel.com) / govt. website (www.tenders.gov.in) at free of cost.

Tender document contains **21 Pages (Technical Bid -20 Pages, Schedule for price bid – 01 page).**

ISSUING OFFICER

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TECHNICAL BID

NAME OF THE WORK: Electrification of new dust free AC cabin, control cabin and AHU room at Unit-II

Ref: Enquiry no: 9451700011/ Dated: 03/07/2017; Due Dt: 07/08/2017

PRE-QUALIFICATION CRITERIA

The following eligibility criteria shall be complied to fulfill the Technical bid:-

Sl. No	Description	Vendor to confirm
1	Only those BIDDER/SERVICE PROVIDER, who has minimum five years of experience in executing erection of electrical installations (such as distribution boards, MP boards, isolators, switch sockets etc..) and cables / fabrication activities / installation of false-ceiling mounted fittings and associated cables in any engineering industry (from the date of opening of tender) are eligible to participate in the tender. Vendor shall indicate the number of years of experience in the above field.	
2	The following documentary proofs shall be furnished with respect to the above point (Point No.1) (i)Xerox copies of the POs executed in the previous five years (as on tender date). (ii)One number of work completion certificate for work orders executed in the previous five years (as on tender date). Otherwise offer is liable for rejection. Bidder to confirm.	
3	Name and contact details like E-mail, Phone number, Fax no, etc. of the customer / company where the contract is executed. Bidder to confirm	
4	BHEL may verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected. Bidder to confirm.	
5	(i) BHEL Vendor code (if applicable) - (ii) PAN Number (Copy to be Enclosed) - (iii) GSTN registration Number (Copy to be Enclosed) - (iv) Mobile number (Which is linked to GSTN registration Number) - (v) Email id (Which is linked to GSTN registration Number) - (vi) HSN Code - Offer will be entertained only if the vendor submit the details as above & has a valid GST registration no. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer. Otherwise the offer shall be rejected.	
6	Acceptance for Scope of Work as per the Enquiry	
7	Acceptance for All Terms & Conditions as per the Enquiry	
8	The bidder along with its associate/collaborators/sub-contractors/sub-vendors/ consultants/service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.	

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SCOPE OF WORK & BILL OF QUANTITIES :

ITEM NO.	SCOPE OF WORK	UO M	QTY	RATE IN Rs.	VALUE IN Rs.
10/10	Assembling and fixing of recessed/surface mounting type 21 nos LED light fittings & 90 nos induction light fittings on false ceilings in dust-free cabins as follows: Cabin 1: 45.5(L) x 24(B) x 3.5(H) m - 60 nos induction light fittings & 18 nos LED light fittings. Cabin 2: 18.3(L) x 24(B) x 7.2(H) m - 30 nos induction light fittings and 3 nos LED light fittings. with supply of necessary fasteners and other mounting accessories and make necessary termination to the wiring point along with earthing. All light fittings will be provided with safety chains. The safety chains shall be hooked onto existing clamps on the ceiling in Cabin 1 and separate hooks on the steel trusses of roof in Cabin 2. The contractor shall ensure that the fittings are flush with the false ceiling. The contractor shall access the top of the ceiling by means of a ladder. Note: LED & induction recessed/surface mounting type luminaires, clamps on the ceiling will be provided by BHEL free of cost at site. Other materials like hooks on the roof (minimum height: 300mm, maximum height: 2m), fasteners, mounting accessories such as clamps, ladder etc., are in contractor's scope.	NO	111	300	33300
10/20	Laying of Medium voltage 3.5 core 25 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Note: Only the Medium voltage 3.5 core 25 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	150	25	3750
10/30	Making end termination of Medium voltage 3.5 core 25 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1).Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	8	140	1120

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10/40	Indoor roof light wiring with 2 runs 2.5 sq.mm /1.5 sq.mm stranded PVC flexible copper conductor wire unsheathed cable in the medium quality, 1.5 mm thick, and 20 mm dia. PVC conduit pipe with continuous running of 16 SWG copper wire as earthing on the steel structural members of the roof/on top of false ceiling with suitable clamping. The PVC pipes along with cables shall be routed above the false ceiling by suitably tying the pipes on the false ceiling support tie rods with wire ties. Required length of 1.5 mm thick, 20mm dia. PVC conduit pipes, 2.5 sq.mm flexible copper wires and 16 SWG copper wires for earthing will be supplied by BHEL by free of cost at site. The contractor shall have access to the top of the ceiling by means of ladders. NOTE:1) One running meter of wiring consists of 1 M PVC conduit, 1 M earth wire and 2 runs 2.5/1.5 sq.mm stranded copper conductor of 1 M each with suitable clamps. 2) The 20 mm dia. PVC pipes, 2.5/1.5 sq.mm stranded copper conductor unsheathed cable and earth wire will be issued by BHEL free of cost at site. 3) The PVC Conduits, Tees, Junction boxes & bends, conduit clamping and fasteners, wire ties, ladder are in the scope of contractor. 4) The wiring of the same has to be done without cranes, since crane facility at present not available in this building. Contractor should consider this point while quoting their offer.	M	1500	54	81000
10/50	Assembly, fixing and testing of 8 ways 16 A MCB Lighting distribution Boards with 100 A, 4 pole MCB as incomer. Each phase to be controlled with 63 A DP MCB. The MCB DB (DL) should be provided with necessary angle iron frame work on the wall/ column. Necessary cable adopter boxes for both incoming & outgoing, support channels with required fasteners are to be supplied by the contractor. The interconnection between the MCB and the MCB DB with interconnecting cable/links and proper earthing are to be done by the contractor. Note: 1) Only 8 ways 16 A TPN MCB Lighting distribution Boards (DL) with 100 A, 4 pole MCB will be supplied by BHEL free of cost at site. 2) All the other materials required including adopter boxes, support channels fasteners, angle iron frame work, multi strand copper cable etc., for carrying out the work will be in the scope of the contractor	NO	3	1800	5400

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10/60	Laying of Medium voltage 3.5 core 185 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Note: Only the Medium voltage 3.5 core 185 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	100	15	1500
10/70	Making end termination of Medium voltage 3.5 core 185 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1) Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor	NO	2	200	400
10/80	Fixing of clamps/angles/supports on the outer sides of the dust-free AC cabin wall at regular intervals to support cable trays of dimensions 800mm (W) x 300mm (H). Assembling of steel cable trays with the available bolts/fasteners and laying or positioning the trays on the above supports. Once all the cables are laid on the cable trays, the trays shall be closed properly with the steel covers. The cables shall be routed to respective isolator/DBs inside the cabin by making suitable holes on the walls. The gaps in the holes shall be closed with suitable sealants once the cables are routed and terminated at the respective isolators/ DBs. All angles/supports, cement, sand, associated tools etc., required for fixing the clamps on the sidewalls shall be under the scope of the contractor. The cable trays of dimensions (800mm(W)x300mm(H)) along with the steel covers and fastening bolts shall be provided by BHEL.	M	115	1230	141450
20/10	Assembly, fixing and testing of 8 ways 63 A MCB distribution Boards with 250 A, 4 pole MCCB as incomer. Each MCB DB to be fixed on the wall/column with suitable angle iron framework. Necessary cable adopter boxes for both incoming & outgoing, support channels with required fasteners are to be supplied by the contractor. Necessary interconnection between the MCCB and the MCB DB with interconnecting cable/links and proper earthing are to be done by the contractor. Note: 1) Only 8 ways 63 A MCB DB with 250 A, 4 poles MCCB will be supplied by BHEL free of cost at site. 2) All the other materials required including adopter boxes, support channels fasteners, angle iron framework, multi strand copper cable etc., for carrying out the work will be in the scope of the contractor.	NO	4	1800	7200

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20/20	Laying of Medium voltage 3.5 core 25 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 3.5 core 25 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	700	25	17500
20/30	Laying of Medium voltage 3.5 core 50 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 3.5 core 50 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	400	30	12000
20/40	Laying of Medium voltage 3.5 core 185 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging.. Only the Medium voltage 3.5 core 185 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	1200	15	18000
20/50	Making end termination of Medium voltage 3.5 core 25 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1). Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	46	140	6440
20/60	Making end termination of Medium voltage 3.5 core 50 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1).Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2).Crimping tools and other materials required for carrying out the work	NO	16	140	2240
20/70	Making end termination of Medium voltage 3.5 core 185 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1).Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	18	200	3600

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20/80	Fixing of 3 Phase 415 Volts, 63 A TP/TPN Isolator/Switch Fuse Units with supply of suitable angle iron frame work, fasteners etc., on the trench/floor/column/wall. Note: TP/TPN Isolator/Switch Fuse Units only will be supplied by BHEL at Stores. Angle iron frame work, fasteners, paint etc. are under contractor's scope. The Angle iron frame work should be painted with one coat of red oxide paint and two coats of smoke grey colour paint.	NO	18	1000	18000
20/90	Fixing of 3 Phase 415 Volts, 100 A TP/TPN Isolator/Switch Fuse Units with supply of suitable angle iron frame work, fasteners etc., on the trench/floor/column/wall. Note: TP/TPN Isolator/Switch Fuse Units only will be supplied by BHEL at Stores. Angle iron frame work, fasteners, paint etc., are under contractor's scope. The Angle iron frame work should be painted with one coat of red oxide paint and two coats of smoke grey colour paint.	NO	5	1000	5000
20/100	Laying of 25 mm x 3 mm GI Earth flat on the floor/formed trench/excavated trench/wall by fixing/welding and to be connected at both ends between Main existing earth connection/Earth pit and Electrical Equipments/MP(or) ML boards and other accessories. Note: Only 25 mm x 3 mm GI flat and welding electrodes will be issued by BHEL at store/Electrical Section. All other items like screws and clamps etc., should be supplied by the contractor.	M	200	25	5000
20/110	Laying of No.14/16 SWG copper (or)7/20 GI wire in the trench/wall/column/truss and connect the both ends with earth points/body of the Electrical equipments /Accessories.(along with the single/ 2/3/3.5/4 core PVC AA/XLPE/Copper cables/PVC wiring/ Separately.) Note: 14/16 SWG copper (or)7/20 GI wire only will be supplied by BHEL at stores.	M	1300	5	6500
20/120	Assembling and fixing of 2 X 28 W T5 luminaries with 2 nos of 28 W TL-5lamps mounting in modular matrix on the ceilings/surface mounting on the ceiling in modular matrix offices with supply of necessary wooden round blocks, ball and socket arrangements and M.S down rods of length 1.5 mtr. (14 mm ID X 19 mm OD X 2.5 mm thickness with both end of suitable thread with chuck nut.) and make necessary termination to power supply with earthing. The wooden round block should be grouted with 2 nos. of 4inch length x 1/4 inch dia.GI screw/bolt on the roof. Note: 1)The 2 x 28 W T5 luminaries with TL-5 lamps will be supplied by BHEL free of cost at site. 2) Other materials like wooden round blocks, ball and socket arrangement and M.S down rods and screws etc. are contractors' scope.	NO	8	90	720

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20/130	Assembly, fixing and commissioning of 12 Way/SPN/MCB Double Door DB, Flush and Surface mounted on the outer surface of wall. Incomer: 32 A/DP MCB/10 kA - 1 no Outgoing: 16 A/SP MCB/10 kA - 10 nos. Note: 1) Supply of top & bottom cable adaptor box on the wall by using suitable MS angle iron framework, earthing etc., and necessary fasteners are under contractor scope. 2) 12 Way SPN MCB Double Door DB will be supplied by BHEL free of cost site.	NO	5	1800	9000
20/140	Fixing of 4 way 100A Fuse distribution board with 200A TPN isolator as incomer on the column/Wall/Floor with supply of suitable angle iron frame work, fasteners etc., making inter connections and, earthing. Note: Fuse/MCB distribution board and TPN isolator only will be supplied by BHEL at Stores. All other materials including angle iron frame work fasteners etc., are under contractor's scope.	NO	2	1100	2200
20/150	Laying of Medium voltage 4 core 6 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 4 core 6 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	550	25	13750
20/160	Laying of Medium voltage 4 core 10 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 4 core 10 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	200	25	5000
20/170	Making end termination of Medium voltage 4 core 6 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1) Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	26	100	2600

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20/180	Making end termination of Medium voltage 4 core 10 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1) Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	10	100	1000
20/190	Fixing of 20 Amps. Metal clad industrial type switched socket/on the top of sheet metal box/industrial metal enclosure on the column/wall with necessary iron framework with internal wiring and earth connection. Necessary support channels/angles with required fasteners for carrying out the work will be in the scope of the contractor. Note: 1) Only 20 Amps metal clad industrial switched socket along with metal enclosure will be supplied by BHEL free of cost at site. 2) All the other materials required including support channels fasteners etc., for carrying out the work will be in the scope of the contractor	NO	13	360	4680
20/200	Laying of 50 mm x 6 mm GI Earth flat on the floor/formed trench/ excavated trench/wall by fixing/ welding and to be connected at the both ends between Main existing earth connection/Earth pit and Electrical Equipments/ MP (or) ML boards and other accessories. Only 50 mm x 6 mm GI flat and welding electrodes will be issued by BHEL at store/Electrical Section. All other items like screws and clamps etc., should be supplied by the contractor. Clamp should be painted with one coat of red oxide paint.	M	300	50	15000
20/210	Assembling, fixing and commissioning of 1200/1400 mm sweep ceiling fan with 1.5m down rod on the existing hook on the ceiling. Note: Ceiling fan with down rod only will be supplied by BHEL at Stores. All other materials including 1.5m down rod are under contractor's scope.	NO	30	100	3000

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20/220	Wiring with 2 runs of 1.5/2.5 Sq.mm PVC insulated, unsheathed, multi strand, single core copper conductor cable in 19/20 mm dia. PVC, medium quality rigid conduit pipe with continuous running of 14/16 SWG bare copper wire for earthing for light, fan and socket points and connecting both ends to the switches, equipments respectively.(1 Meter of wiring consists of PVC pipe, 2 runs of wire, earth wire & required saddle clamps ,PVC junction box, elbows, bends, Tees, raw plugs, screws etc.) Note: PVC straight length pipe and PVC insulated, unsheathed, multi-strand, single core copper conductor cable, 14/16 SWG bare copper wire only will be supplied by BHEL at Stores. All other materials are under contractor's scope.	M	500	10	5000
20/230	Supply and fixing the Modular 6 A/16 A 3 pin combined switch and sockets as follows. 3 pin combined switch and sockets module in flush/surface with the wall/cubicle after making necessary pockets on the wall and fixing metal flush box for required nos. of module plates and making necessary interconnections for AC cabin power supply. Make: Legrand, Siemens, L&T, GE, and ABB only acceptable. (Metal Flush boxes, suitable module cover plates, module switches & sockets are to be supplied by the contractor.)	NO	30	600	18000
20/240	Supply and fixing of 5 spike copper lightning Arrestor with complete set of 4 feet copper tube, one no bowl, one no copper base plate on the top of the building of height approx.10 M.	NO	1	3600	3600
20/250	Providing earth electrodes as per IS standards as follows: Excavation of earth, supply and installation of earth electrode generally conforming to IS: 3043-1987. The electrode should be of 50 mm dia. G.I. pipe, class C having wall thickness of 5 mm and length 2500 mm. with supply and filling of alternate layers of Bentonite, river sand and charcoal around the electrode, construction of masonry chamber and cover etc., with supply of masonry materials. Earth resistance value (to be measured using earth megger), earth electrode No. and date of inspection are to be painted inside the chamber wall and on the top of the cover.	NO	1	3000	3000

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	SPECIAL INSTRUCTIONS for making earth pits :- a) Before commencement of work, contractor should discuss with Electrical in charge and finalise the location plan for the installation of earth pits. b) After excavation of earth & before closing the same it should be shown to Electrical in charge. c) Contractor should fill bentonite, river sand, and charcoal around electrode with presence of Electrical in charge. d) Unique earth pit number should be allotted for every earth pit and same is to be painted with black colour paint on the inside wall of masonry chamber and cover. e) After erection of earth pit, the ohmic value to be measured in the presence of Electrical in charge and final report to be submitted. The value of the earth pit should be less than 2 ohms.				
30/10	Laying of Medium voltage 3.5 core 50 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 3.5 core 50 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	250	30	7500
30/20	Laying of Medium voltage 3.5 core 185 sq.mm PVC AA cable in the formed trench by removing trench covers and after laying the cables, closing the trench with removed trench covers and making it good / on the wall with proper routing and clamping at regular intervals / in the cable trays with proper clamping and tagging. Only the Medium voltage 3.5 core 185 sq.mm PVC AA cable will be supplied by BHEL free of cost at site.	M	900	15	13500
30/30	Making end termination of Medium voltage 3.5 core 50 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1) Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	20	140	2800
30/40	Making end termination of Medium voltage 3.5 core 185 sq.mm PVC AA cable with suitable brass cable glands, copper lugs, gland earthing, cable clamping etc. Note: 1) Supply of brass cable glands, copper lugs, gland earthing, cable clamping and PVC insulation tape etc., are contractor's scope. 2) Crimping tools and other materials required for carrying out the work will be in the scope of the contractor.	NO	12	200	2400

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MAINTENANCE & SERVICES

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ISO 9001

ENQ No: 9451700011

Dt.03.07.2017

30/50	Fixing of 3 Phase 415 Volts, 100 A TP/TPN Isolator/Switch Fuse Units with supply of suitable angle iron frame work, fasteners etc., on the trench/ floor/ column/wall. Note: TP/TPN Isolator/Switch Fuse Units only will be supplied by BHEL at Stores. Angle iron frame work, fasteners, paint etc., are under contractor's scope. The Angle iron frame work should be painted with one coat of red oxide paint and two coats of smoke grey colour paint.	NO	10	1000	10000
30/60	Supply and fixing of adopter boxes (made up of 1.6 mm thick sheet steel) to facilitate end termination of cable and suitable for different makes, 63A TP/TPN isolator/switch fuse units. Note: All materials (MS sheet, fasteners, paint etc.,) are under contractor's scope. The adaptor should be painted with one coat of red oxide paint and two coats of smoke grey colour enamel paint.	NO	18	600	10800
30/70	Supply and fixing of adopter boxes (made up of 1.6 mm thick sheet steel) to facilitate end termination of cable and suitable for different makes, 100 A TP/TPN isolator/switch fuse units. Note: All materials (MS sheet, fastener's, paint etc.,) are under contractor's scope. The adaptor should be painted with one coat of red oxide paint and two coats of smoke grey colour enamel paint.	NO	15	600	9000
30/80	Fixing of 4 way 100A Fuse distribution board with 200A TPN isolator as incomer on the column/Wall/Floor with supply of suitable angle iron frame work, fasteners etc., making inter connections and, earthing. Note: Fuse/MCB distribution board and TPN isolator only will be supplied by BHEL at Stores. All other materials including angle iron frame work, fasteners etc., are under contractor's scope.	NO	3	1100	3300

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30/90	Erection and commissioning of the following Medium voltage, floor mounting type industrial switch board (MP Board) comprising of fuse switches, bus bar chamber confirming to the following specification. The Switch board should be erected on the cable trench of newly constructed bays in extended shop-floor area of Bldg 119 with necessary support channel, earthing etc. Two runs of 50x6mm GI earth flat shall be routed from body of the MP board to main existing earth connection. Medium Voltage Industrial type switches Board of the following configuration: Incomer: 800 A TPN switch fuse unit with HRC fuses, sheet steel enclosure: 1no. Busbar Rating: 800 Amps, 3 phases, 4 wires, 50 HZ aluminium busbars. Outgoing Fuse switch units with fuses: 1).400 A TPN switch fuse units sheet steel enclosure with HRC fuses: 6 nos. Note: 1).Only Medium voltage, floor mounting type industrial switchboard(MP Boards)with cable adopter boxes will be supplied by BHEL free of cost at site. 2).All the other materials like channels, bolt, nuts & washers required for carrying out the work will be in the scope of the contractor.	NO	1	3600	3600
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30/100	Disconnection of existing power connections from an MP board consisting of the following switches: Incomer fuse switch unit: 800A (1 no) Outgoing fuse switch units: 200A (6nos), 100A (4 nos) and shifting the board to an identified location. Disconnection of the following cable terminations: 8 nos of 185sq.mm, 1 nos 50 sq.mm and 2 nos 25 sq.mm PVCAA cables at MP ide. Removing of MP board by disconnecting all earthing connections, mounting bolts, tack welds etc., lifting it out of the available location and movement of the MP board to the identified location. The existing MP board is presently installed on granite flooring and the base of the frame has to be dislocated from below the flooring. Note: All the tools required for dismantling such as gas cutting sets, bolt removers and other accessories are under contractor's scope. The entire scope of movement and re-fixing from present to the new location is under the scope of the contractor. GENERAL NOTE: 01) Where ever welding work required, the same to be carried out by the Contractor. 02) Only welding electrode will be issued by the Area Supervisor/ Executive at Electrical section. 03) Necessary height of the ladder and all types of required tools must be brought by the Contractor. 04) While fixing of the Electrical equipments all types of masonry work where ever required is to be done by the contractor. 05) All types of debris and other wastage materials are to be disposed properly as per the instructions. 06) Personal protective Safety Equipments to be supplied to their workers by the Contractor. 07) Safety precautions to be strictly adopted by the workers of the Contractor. 08) If cables are available in Stores, the contractor shall suitably arrange for movement of materials to site. 09) Crimping tools and other accessories required for carrying out the above works will be in the scope of the contractor. 10) The contractor should consult with the area in-charge before starting the work. 11) Necessary Material "IN" gate pass to be kept safe and it to be produced when billing. 12) GST Extra to be remitted for work orders according to the instruction. 13) The quantity mentioned for this work is only tentative. It may vary +/- by 20 %.	NO	1	4300	4300
			TOTAL :	5,23,150	

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GENERAL TERMS AND CONDITIONS FOR M&S CONTRACTS

- 1) The workmen of contractor should be covered under PF/ESI, etc., as per labour laws.
- 2) Safety precautions have to be ensured by the Contractor Depending on the work nature. Necessary work permit system and personal protective equipments (PPE) such as electrical resistance rubber gloves, helmet, spectacle goggles, safety shoes, safety belt etc. as applicable to Mechanical works should be adhered while carrying out the work.
- 3) PPES for appropriate trade job has to be ensured by the contractor at the job site at all times.
- 4) The contractors may visit the area to assess the quantum of work before quoting.
- 5) The contractor should mention the point to point confirmation.
- 6) Contractor should commit for Terms and Conditions of the enquiry otherwise the offer shall be liable for rejection.
- 7) **TWO PART BID SYSTEM:** Contractor should send their offer for two part bid system as below
- 8) Contractor may visit to get acquaintance with quantum of day to day work by visiting BHEL Trichy premises before quoting.
- 9) The contractor should quote the exact time required to complete the work in their offer.

TENDERING CONDITIONS:

- a) The Bidders shall submit the offer in TWO PART BID SYSTEM (Part -I & II) along with EMD as indicated below which shall be sealed in ONE OUTER ENVELOPE.
- b) Envelope I- This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. Envelope I should contain sealed EMD cover indicating the enquiry detail.
- c) Envelope II - This sealed envelope should contain price details. This envelope should be clearly marked as - "Part -II Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.
- d) Envelope III - This sealed envelope should contain requisite **EMD**. This envelope should be clearly marked as - "EMD COVER", indicating Enquiry No., Due Date and Address & Reference of the Bidder.
- e) All the three envelopes shall be put in one cover, duly sealed, super scribing as offer for Enquiry No., and due date of opening, Name of the work and the address and reference of the Bidder.
- f) The offer should reach this office on or before the due date by 14.00 Hrs. (IST). Late offers will not be considered.
- g) Tender should not be addressed to any Individual's name but only by designation to:

THE ENGINEER
MAINTENANCE & SERVICES / CONTRACTS,
2&4 BUILDING,
BHARAT HEAVY ELECTRICALS LIMITED,
HIGH PRESSURE BOILER PLANT,
TIRUCHIRAPALLI - 620 014.
TAMIL NADU, INDIA.

- h) Tenders should be free from CORRECTION AND ERASURES, Corrections if any, must be

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attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

- i) Offers should be in ENGLISH and accompanied by detailed Point to point confirmation of the scope of work.

OPENING OF TENDERS:

- The Part I - Technical & un-priced commercial bid and EMD Cover alone would be opened on the Tender opening date(as mentioned in the enquiry) by 14.30Hrs(IST)
- The Part II - Price bid of technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the Price bid opening date.
- Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

GST:

- Response to Tenders for Contractor will be entertained only if the vendor has a valid GST registration no which should be clearly mentioned in the offer. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.
- Contractor shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.
- All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).

LD CLAUSE:

If the contractor fails to complete the work as per terms & conditions of the order within the delivery schedule, 0.5% of the order value will be deducted for each week of delay or part thereof subject to a maximum of 10% of the total contract value.

IMPORTANT NOTE: BHEL reserves the right to short close this contract with one month advance notice due to administrative reasons. BHEL's decision in this regard is final. Under such circumstances payment will be made for actual number of work carried out up to the period.

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COMMERCIAL TERMS AND CONDITIONS FOR M&S CONTRACTS

- 1) 100% Payment will be made after completion of work on pro rata basis on submission of invoice in triplicate duly certified by Engineer In Charge.
- 2) Attendance register should be maintained.
- 3) EMD is to be submitted and is to be remitted in cash (as permissible under Income Tax Act)/Electronic Fund Transfer credited in BHEL account before tender opening or Banker's cheque/Pay order/Demand Draft in favour of M/S BHEL Trichy along with offer. **Offers without EMD shall be liable for rejection.**
- 4) Security Deposit shall be furnished by the successful vendor to the total contract value before starting the work. The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit. SD is forfeited in case of any failure in execution of the contract or due to any shortcomings observed in the documentation furnished earlier for getting qualified or in case the Contractor is banned.
- 5) An additional payment as per circular ref. BHE/HR/W/EW/08.04.2014 is to be paid to the contract workmen as below, over and above the minimum wages prescribed by the government of Tamil Nadu:

Unskilled	-	Rs.3200/-
Semiskilled	-	Rs.3700/-
Skilled	-	Rs.4100/-
- 6) Bonus @ 8.33 % to workmen to be paid.
- 7) **Rate should be quoted as per price bid.**
- 8) Taxes if any will be mentioned separately in the offer.
- 9) The rate that is offered should be comprehensive and no separate charges will be made towards expenses like travel, boarding and lodging.
- 10) The contractor should quote the validity of the offer.
- 11) If two or more vendors offer the same rate, negotiation will be conducted separately.
- 12) The contractor should remit the salary/wages for their workmen only through Bank. Monthly clearance will be given in respect of all contractors, if only the salary/ wages to the workmen has been remitted through the bank account of the contract workmen. The relevant Bank statement/proof for Bank payment should be produced along with PF and ESI challan's to Welfare Section every month.

Sign & Seal of Contractor

Certificate by Chartered Accountant on Letter Head

This is to certify that M/s. _____ (hereinafter referred to as 'company') having its registered office at _____ is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part II)) _____ dt. _____, Category: (Micro/Small). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the latest audited financial year _____ as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No. S.O.1722(E) dated October 5, 2006):

₹ _____ Lacs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act 2006):

₹ _____ Lacs

(Strike off whichever is not applicable)

The above investment of ₹ _____ Lacs is within permissible limit of ₹ _____ Lacs for _____ Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/Small) (Strike off which is not applicable) and the date of graduation of such enterprise from its original category is (dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name:

Membership number:

Seal of Chartered Accountant

BHARAT HEAVY ELECTRICALS LIMITED

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MAINTENANCE & SERVICES DEPARTMENT

☎: (0431) 2575010 / 2575123 / e-mail : umadsankar@bheltry.co.in

ENQ No: 9451700011

Dt.03.07.2017

SCHEDULE FOR PRICE BID

SUB: Electrification of new dust free AC cabin, control cabin and AHU room at Unit-II.

Ref: Enquiry no: 9451700011 / Dated: 03/07/2017; Due Dt: 07/08/2017

Sl. No. (1)	Approx. Value of work (2)	Below (- %) / At par (0%) / Above (+ %) of the rates appended in Bill of quantities	
		In Figures (3)	In Words (4)
1	Rs.5,23,150/- (Five lakh Twenty three thousand Three hundred rupees only)		

- Taxes if any should be quoted extra.

- 1). Payment terms: 100% Payment will be made after completion of work on pro rata basis on submission of invoice in triplicate duly certified by Engineer In Charge.
- 2). Tax deduction will be made from every bill at the prevailing rate as per the Government rule and regulation from time to time.
- 3). Detailed scope of work and other terms and conditions are specified in the Technical Bid of the Tender.
- 4). Cumulative L-1 will be considered for ordering.

Sign & Seal of Contractor