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Organization

BHARAT HEAVY ELECTRICALS LIMITED

High Pressure Boiler Plant, Tiruchirappalli- 620014

Maintenance & Services Dept. (FB)

• (0431) 257-5010

[e-mail: umadsankar@bhel.in](mailto:umadsankar@bhel.in)

Enq. No: 9452000003

29.06.2020

NOTICE INVITING TENDER

Dear Sir/ Madam,

Subject: Two Part Tender Inviting Techno-commercial and Price Bids for **“ERECTION, TESTING AND COMMISSIONING OF MV SWITCHGEAR PANEL AND MP DISTRIBUTION BOARD AND 1600KVA DRY TYPE TRANSFORMER IN WRI & FCB SUBSTATIONS.”**. Please submit your competitive offer for the above subject work as per the conditions given in the WORK/ RATE SCHEDULE and tender conditions enclosed along with the tender.

01.	Name of work	ERECTION, TESTING AND COMMISSIONING OF MV SWITCHGEAR PANEL AND MP DISTRIBUTION BOARD AND 1600KVA DRY TYPE TRANSFORMER IN WRI & FCB SUBSTATIONS.
02.	Earnest Money Deposit (EMD)	₹ 4762.00/-
03.	Duration of the contract	6 months (From the date of commencement of the work)
04.	Enquiry No. & Date	9452000003, dt. 29.06.2020
05.	Last Date for Receipt of Tender	14.00 Hrs. on 09.07.2020
06.	Date of Technical Bid Opening	14.30 Hrs. on 09.07.2020
07.	Date of Price Bid Opening	Will be intimated to those who are Qualified separately.
08.	Guarantee Period	Not applicable

1. The Tender documents can be downloaded from BHEL website (http://www.bhel.com/tender/tender_home.php) free of cost.
2. Tender document contains **17 Pages** (Technical & Commercial Bid – 14 pages, Schedule for Price Bid 01 pages).
3. The duly filled Tender should be addressed to:

**THE ENGINEER,
MAINTENANCE & SERVICES / CONTRACTS,
2&4 BUILDING, BHARAT HEAVY ELECTRICALS LIMITED,
HIGH PRESSURE BOILER PLANT,
TIRUCHIRAPPALLI, TAMILNADU - 620014.**

Special Instructions:

Tender of the following work should be submitted in a sealed cover super- scribing the NAME OF WORK, ENQUIRY NUMBER, etc., consisting of **three inner sealed covers** super-scribed such as **1) EMD cover, 2) Technical bid cover & 3) Price bid cover.**

- 1) EMD cover shall contain EMD of ₹ 4762.00/- Mode of Payment of EMD: (a) e-Collect mode (as directed in Commercial T & C) or (b) Banker's cheque/ Pay Order/ DD in favour of BHEL or (c) Fixed Deposit Receipt (FDR) issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies act (FDR should be in the name of the Contractor, a/c BHEL). EMD shall not carry any interest.



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2) EMD of ₹ 4,762/- must be paid & Tender without EMD will be summarily rejected and the Technical bid & price bid shall not be considered. (Note: There is no provision of EMD waiver for MSE suppliers and EMD amount as shown above must be paid.)

3) 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 Criteria (PQC)**. Any bid without proper documentary evidence for PQC shall not be considered for further evaluation.

4) One set of unpriced bid of Contract Work Schedule **duly filled & signed** by the tenderer for accepting the work content (Bill of Quantity- BoQ), should be submitted along with the Technical bid for technical evaluation. All the corrections / cancellations / insertions, if any, shall be duly attested by the Bidders concerned.

5) Should a tenderer find discrepancies or omissions in the tender documents, or should there be any doubt as to their meaning, he should at once address the authority inviting the tender, for clarification well before the due date, so as to submit his tender in time. No extension of time shall be given for submission of the tender on any account.

6) All entries in the tender documents should be in one ink. Erasures, and overwriting are not permitted. All cancellations, and insertions should be duly attested by the tenderers concerned.

7) Offer should be **valid** for a period of **120 (One Hundred & Twenty) days** from Techno-commercial bid opening date.

8) The Bidder shall sign each and every page of tender documents, and affix seal for having accepted the conditions.

9) Tender can be cancelled at any stage due to unavoidable circumstances.

10) **Forfeiture of EMD:** EMD paid by the Tenderer will be forfeited as per Tender Documents if:

- I. After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.
- II. The Contractor fails to deposit the required Security deposit or commence the work within 15 days of LOI/ WO/ Contract.

11) I. EMD given by all unsuccessful tenderers shall be refunded after award of work/ after offer validity period.
II. EMD shall not carry any interest.
III. EMD of successful tenderer will be retained as part of Security Deposit.

12) The price bid cover shall contain price bid document in prescribed format **duly filled & signed by the tenderer** in all the pages. Care should be taken to fill the price bid without any overwriting & correction. Correction, if any, shall be duly attested by the Bidders concerned.

13) Clarification if any can be obtained from the Maintenance Engineer/ Contracts/ M&S, BHEL, Trichy.

14) The complete Technical bid and price bid along with requisite **EMD of ₹ 4762.00/-** shall reach the office of the undersigned on or before **09.07.2020** at 14.00 Hrs.

15) The Technical bid will be opened on the same day at 14.30 hrs. In case of opening day falls on holiday or happened to be declared as a holiday the due date of receipt of offers and opening of the tender shall automatically fall on the same timing of the next working day unless intimated otherwise. 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.

Encl:

- 1) NIT – Notice Inviting tender (Consists of Preamble, Technical Bid & Price bid Schedule)
- 2) CA certificate – Sample Format



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PQC & TECHNICAL BID

NAME OF WORK: ERECTION, TESTING AND COMMISSIONING OF MV SWITCHGEAR PANEL AND MP DISTRIBUTION BOARD AND 1600KVA DRY TYPE TRANSFORMER IN WRI & FCB SUBSTATIONS.

Ref: Enquiry no: 9452000003: dt. 29.06.2020; Due dt. 09.07.2020, 14.00 Hrs

PRE-QUALIFICATION CRITERIA

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

Sl. No	Description	Vendor to confirm
1	Only those vendors who are having valid EA or higher Electrical license from Tamilnadu Electrical Licensing Board for electrical work shall quote. Documentary evidence in support of the same shall be enclosed with the offer.	
2	Vendor should submit the work order from minimum one customer for the satisfactory completion of the work related to LT/MV panel & 1000kVA or higher capacity Transformer Erection works within past seven years from the date of tender opening. (Experience proof from other than BHEL shall contain work order copy along with Form 26AS / TDS certificate / bank statement for payment from the organisation. Otherwise the offer shall be rejected).	
3	Name and contact details like E-mail, Phone number, Fax no, etc. of the customer/ company where the maintenance contract is executed. Bidder to give details.	
4	(i) BHEL Vendor code (if applicable) - (ii) PAN Number (Copy to be Enclosed) – (iii) GST registration Number (Copy to be Enclosed) – (iv) Mobile number (Which is linked to GST registration Number) – (v) Email id (Which is linked to GST registration Number) – (vi) SAC Code - Offer will be entertained only if the bidder 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.	
5	Acceptance for Scope of Work as per the Enquiry.	
6	Acceptance for All Terms & Conditions as per the Enquiry; viz. Safety, LD/Penalty, Risk Purchase, Suspension of Contract, Indemnity, BHEL Fraud Prevention Policy, etc. as given in "General Terms & Conditions".	
7	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	



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SCOPE OF WORK & BILL OF QUANTITIES:

ITEM NO.	SCOPE OF WORK	QTY	UOM	RATE	VALUE
10	Erection of MV panel in WRI SS				
10/10	<p><u>Disconnection & removal of old mv Panel:</u> Disconnection of all the cable end terminations in the existing MV/LT Panel switch board of size 7300 mm length x 1200 mm width x 2200 height including double earth flat terminations. which consists of the following switch gears and cables.</p> <p>Incomer: 1250 ACB - 2 Nos.</p> <p>Bus Coupler : 1250 A ACB - 1 No.</p> <p>Outgoings:a) 1000 A ACB - 8 Nos.</p> <p>b) 400 A/200A SFU - 12 Nos.</p> <p>The MV panel has to be removed in segments from its place and transported to the designated place at 1A1 SS/disposal stores yard.</p> <p>Note: Required crane facility/lorry for movement will be arranged by BHEL.</p> <p>The connected cable details are as follows :</p> <p>1.,,Incomer from CSS-1-5Rx3.5cX300 SQMM Cable 2.,,Incomer from CSS-2-5Rx3.5cX300 SQMM Cable 3.,,O/G High Bay North MP - 2Rx3.5cx185 SQMM Cable 4. O/G,, " Lab Building MP-1 & MP-2" - 1Rx3.5cx185 SQMM Cable 5.,,O/G,,Furnace,,3Rx3.5cx185 SQMM Cable 6.,,O/G,,DG Set ,,2Rx3.5cx185 SQMM Cable 7.,,O/G,,Modular Of f ice,,2Rx3.5cx185 SQMM Cable 8.,,O/G,,APFC - 1Rx3.5cx185 SQMM Cable 9. O/G WRI New SS - 2Rx3.5cx185 SQMM Cable 10.,,O/G,,250 kVA Welding M/c,,3Rx3.5cx300 SQMM Cable 11.,,O/G,,Welding M/c,,1Rx3.5cx300 SQMM Cable 12.,,O/G,,Auditorium MP,,1Rx3.5cx185 SQMM Cable 13.,,O/G,,Laboratory South,,,,1Rx3.5cx185 SQMM Cable 14.,,O/G,,MP-1,,,,2Rx3.5cx185 SQMM Cable 15.,,O/G,,MP-2,,,,2Rx3.5cx185 SQMM Cable 16.,,O/G,,MP-3,, 2Rx3.5cx185 SQMM Cable 17.,,O/G,,MP-4,,,,2Rx3.5cx185 SQMM Cable 18.,,O/G,,MP-5,,,,1Rx3.5cx185 SQMM Cable 19.,,O/G,,MP-6,,,,1Rx3.5cx300 SQMM Cable 20.,,O/G,,Lab Building North,,1Rx3.5cx185 SQMM Cable 21.,,O/G,,Fat ique Lab,,1Rx3.5cx185 SQMM Cable</p>	1	NO	7,590.00	7,590.00

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10/20	<p><u>Erection & commissioning of new mv panel:</u> Unpacking, Transporting, erection, testing and commissioning of new LT Cubicle type switch gear panel in segments which consists of the following incomer, Bus coupler and out going ACB'S 1). Incomer: 3200 A ACB - 2 NO 2). Bus coupler: 3200 A ACB - 1 NO 3). Outgoings: 1000 A ACB's - 16 NO The panel board size would be 7800 mm length X 1350 mm width X 2225 mm height and the approx. weight of 4000 Kgs. The panel has to be erected on the floor with required found at ion bolts. Concrete breaking, coping around the panel board and earthing of panel shall be done by the contractor. The switch gear panel healthiness and coupling the panels as per the supplier drawing has to be carried out as per the instruction SS in charge. All bus bars connect ion tightness and other wirings like CT connect ions, ACB Trip / closing circuit , voltmeter, ammeters, energy meter connect ions and indicate ion lamps has to be checked / corrected as per panel supplier drawings for its proper functions. Interconnect ions between CSS and ACB for trip circuit shall be carried out by laying of PVC AA 3/4 core control cable of size 2.5/4 Sq.mm. The following incoming and out going cables terminations has to be carried along with supply suitable single compression copper cable glands. 1.I/C,,Incomer from CSS-1-5Rx3.5cX300 SQMM Cable 2.I/C,,Incomer from CSS-2 -,,5Rx3.5cX300 SQMM Cable 3.,,O/G,,High Bay North MP - 2Rx3.5cx185 SQMM Cable 4.,,O/G,,Lab Building MP-1 - 1R x 3.5C X 185 SQ MM 5. O/G MP-2- 1Rx3.5cx185 SQMM Cable 6.,,O/G,,Furnace,,3Rx3.5cx185 SQMM Cable 7. O/G,,Modular Of f ice-2Rx3.5cx185 SQMM Cable 8.,,O/G,,Modular Of f ice - 2Rx3.5cx185 SQMM Cable 9.,,O/G,,DG Set -,,2Rx3.5cx185 SQMM Cable 10.,,O/G,,APFC - 2R 3.5 C 185 SQ MM. 11. WRI New SS" ,," 2Rx3.5cx185 SQMM Cable. 12.,,O/G,,250 kVA Welding M/c,,3Rx3.5cx300 SQMM Cable 13.,,O/G,,Welding M/c,,1Rx3.5cx300 SQMM Cable 14.,,O/G,,Auditorium MP,,1Rx3.5cx185 SQMM Cable 15.,,O/G,,Laboratory South,,1Rx3.5cx185 SQMM Cable 16.,,O/G,,MP-1,, - 2Rx3.5cx185 SQMM Cable</p>	1	NO	25,300.00	25,300.00
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	17.,,O/G,,MP-2,, - 2Rx3.5cx185 SQMM Cable 18.,,O/G,,MP-3,, - 2Rx3.5cx185 SQMM Cable 19.,,O/G,,MP-4,, - 2Rx3.5cx185 SQMM Cable 20.,,O/G,,MP-5,, - 1Rx3.5cx185 SQMM Cable 21.,,O/G,,MP-6,,,1Rx3.5cx300 SQMM Cable 22.,,O/G,,Lab Building North-1Rx3.5cx185 SQMM Cable 23. ,,O/G,,Fat ique Lab - 1Rx3.5cx185 SQMM Cable as per the instructions as per the ss incharge. Note: 1)The Panel board will be issued by BHEL. 2)Required crane facility/lorry for movement will be arranged by BHEL. 3) Necessary supporting channels in cable trench shall be provided as per the instructions of SS incharge. 4)Paint touch ups, other positioning and alignments etc for erection are to be carried out by contractor. 5)Additional laying of earth flat to match the new panel shall be layed and joined with the existing earth flat , work has to be carried out by contractor. 6) Cable gland earthing to be done as per the substation incharge with supply of suitable copper clamp and 16swg bare copper wire. 7) Provision of suitable cable gland holes/opening shall be in contractor scope.				
10/30	<u>Removing and relaying of control Cable:</u> Removing & reconnecting of multicore (2/4/6/12/24) 2.5 Sq. mm. Copper/Alu conductor armored cable by disconnecting of lugs, glands and clamping arrangement from Ac/ Dc Supply source, HT, LT, panel interlocking and tripping circuits. Note: All materials required including glands/lugs etc for carrying out the work are under contractor's scope.	150.00	M	40.00	6000.00
10/40	<u>Making LT 300 sqmm cable end Termination:</u> Making end terminations of the following sizes PVC insulated Armored cable with supply of cable glands, lugs & earthing etc., for 3/3.5 core 300 sq.mm PVCAA cable. Note: All materials required for carrying out the work are under contractor's scope	16.00	NO	858.00	13,728.00
10/50	<u>Making LT 185 sqmm cable end termination:</u> Making end terminations of the following sizes PVC insulated Armored cable with supply of cable glands, lugs & earthing etc for 3/3.5 core 185 Sq.mm PVCAA cable	32.00	NO	786.00	25,152.00

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	Note: All materials required for carrying out the work are under contractor's scope.				
10/60	<p><u>Removing and relaying of LT cables:</u> Removing and relaying of LT XLPE/PVC AA 3/3.5 core 300/185 Sqmm cables to match or altering for identified ACB/SFU compartments for end termination works. To keep excess length of cables for future requirements.</p> <p>Special Note:</p> <p>1) All interconnecting 2000 /1000 Amps bus bars phase /Neutral in MV / LT panel 2) Control wiring between section of MV / LT panel 3) All ACB / SFU / Energy meters, Protection relays, CTs to be removed and handed over to Sub Station incharge</p>	250.00	M	69.00	17,250.00
20	Erection of 1600kVA Dry Type Transformer				
20/10	<p><u>Removal of oil cooled transformer:</u> Removing of existing oil cooled 1600 KVA, 11 KV / 415V Transformer and OLTC along with removal of neutral, body earth flats, control cable etc. (approx. Wt of 5 tones) from the FCB substation in HPBP complex.</p> <p>Transformer Room/shed and transporting the same to the storage yard near 110 KV substation. (The Crane facility for lifting and transporting the transformer to the storage yard will be arranged by BHEL.)</p>	2.00	NO	3,036.00	6,072.00
20/20	<p><u>Erection of Dry type transformer:</u> Transporting, Erection, Testing and Commissioning of 11KV/415 Volts 1600 KVA Dry type transformer at FCB substation transformer Room /shed. Work including Fixing of the transformer firmly on the existing plinth. The disconnected old transformer neutral and body earth flats, control cables shall be reconnected.</p> <p>Required civil works according to the instruction of substation in-charge is at contractor scope.</p> <p>Approximate weight of the transformer is 5 Ton.</p> <p>Existing earth flat connection shall be reconnected.</p> <p>(Transformers will be issued by BHEL from storage yard.</p> <p>The crane facility for handling the transformer for transporting to Substation room and for erection of transformer will be arranged by BHEL.)</p>	2.00	NO	18,216.00	36,432.00
20/30	<p><u>Removing of HT end termination:</u> Removing of HT XLPE cable end termination of single run 3 core 95 Sq.mm XLPE cable provided in the primary side of the 1600 KVA, 11 KV / 415 V</p>	2.00	NO	1,518.00	3,036.00

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	Transformer and HT switchgear at respective substation.				
20/40	<p><u>Making of HT end Terminations:</u> Making end termination for the 3 core 95 Sq, mm. XLPE H.T cable on the primary side of the transformer with supply of suitable copper crimping lugs, H.T compound, H.T. tape, alloy bolts, nuts, washers, spring-washers and other required insulating material etc.,(End termination Kit will be issued by BHEL at site.)</p>	2.00	NO	3,036.00	6,072.00
20/50	<p><u>Removing of LT BUS Duct terminations:</u> Removing of 4 Runs of 125x6mm aluminum bus bar per phase and 2 runs of 125x6mm aluminum for neutral on secondary side of the transformer with cable adaptor boxes, the neutral and body earth flats etc. for the required length as directed by sub stat ion incharge.</p>	2.00	NO	2,631.00	5,262.00
20/60	<p><u>End Termination of BUS Duct at TR secon:</u> Making end termination 4 runs of 125x6mm aluminum busbar per phase and 2 runs of 125x6mm alluminum busbar for neutral using flexible copper, copper lugs and cable glands as per sub stat ion incharge instructions. Copper cable crimping lugs, bolts, nuts, washer and single compression cable glands are contractor scope.</p> <p><u>Note:</u></p> <p>1)Necessary modification of Busbar and bus duct along with supply of suitable support insulators shall be carried out by the contractor as per the instruct ion of SS incharge.</p> <p>2)Suitable 3000 Amps copper flexible bus end terminations with necessary cadmium bolts, nuts flat washers and spring washers are under contractor scope to match the existing LT busduct busbars and new transformer secondary terminals(Busbar size and fixing holes shall be matched with new transformer secondary terminals)</p>	8.00	NO	3,036.00	24,288.00
20/70	<p><u>Control Cable Laying:</u> Laying of 4/6/12 core 2.5 sq.mm or 1.5 sq.mm control cable in the cellar/trench with required clamping and connecting to Tripping / Indicating circuits/ Lamp of the transformer with H.T breaker suitably.</p> <p>Required gland,lugs for connect ing transformers temperature indicating controller and HT Vacum circuit breaker are contractor scope. The terminations are to be carried out as per the instruct ion of the substat ion incharge.(The cable will be issued by BHEL at stores.)</p>	180.00	M	61.00	10,980.00

20/80	<u>Supply & Fixing of Adaptor box:</u> Supply and fixing of suitable cable adoptor box (for transformer secondary side) of approx. dimension 600 mm height X 1000 mm width X 1000 mm depth approximately. After fixing of box and termination, the boxes should painted one coat of red oxide and two coat of grey paint . Suitable bus duct height along with busbar to be modified to match with new dry type transformer. Note: 1) Existing Bus duct dimension 600 mm width 350 mm depth 2) Transformer secondary side dimension 1000 mm width 1000 mm depth. 3) Necessary busbar support insulators to provided at minimum two places in the height of the duct . 4) Duct side matching flange of 5mm thick flat to be fabricated and fixed/weleded. Transformer side to be jointed with suitable bolts. 5) Duct should have Transformer and duct side matching flanges with necessary bolting. 6) Duct should be fabricated with 2mm CRCA sheet with suitable angle support . 7) After finishing duct fabricat ion and fixing 2 coat of redoxide and 1 coat of color paint to be painted. 8) Existing earth flat running along with LT duct to be extended upto transformer body. The earth flat should be provided with suitable clamps and fastners. Clamps and fastners are contractor scope.	2.00	NO	4,048.00	8,096.00
	<u>General conditions:</u> 01).Necessary MS material such as angle, channel, flat , welding electrode will be supplied by BHEL. 02).The contractor should supply necessary civil tools and materials for floor opening, grouting and floor concreting. 03).Cable tags should be provided for all power and control cables. 04).Lettering/ painting work in all breakers, mentioning the cable size, bus bar arrangement identification of the breaker etc should be done by the contractor as per the instruction of substation in charge. 05).Electric power for welding and other erection purpose will be given by BHEL free of cost. 06).Welding machine, gas cutting set and regulator should be brought by the contractor.				

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	07).Any clarification & modification of the work should be directly discussed with Area In charge. 08).Minor paint touching shall be done on the transformer for damages caused during transportation of transformer is under contractors scope. Paints will be supplied by BHEL. 09).Any modification/correct ion are to be done by the contractor with the approval of SS-Incharge. 10).Re using old adaptor boxes should be painted as per instruction of SS In-charge. 11).Contractor should engage only Electrical "C" License holder for all Electrical work. 12). Erected transformers should be handed over in good working condition after testing and commissioning. 13).After erection of the transformers make the substation area to be good and clean.				
30	Installation of MP Board in WRI SS				
30/10	<u>Shifting and installation of MP Board</u> Shifting and installation of Main power board (Cubical/Industrial type) to the WRI SS / Area room. This includes, the dismantling of adapter box in the MP board to take the panel inside WRI SS / Area room. Installation of New MP board from its position and Erection of new MP board with required grouting and supports above the formed trench. This includes, the refixing of removed adapter box for connecting the cables. Note: Required crane and lorry facility will be arranged by BHEL.	1.00	NO	8,096.00	8,096.00
30/20	<u>Laying of cables for incomer:</u> 4 runs of 3.5Core 185 Sqmm cable from WRI SS MV panel room to MP board incomer in the formed trench approx. length of cable: 100 Meters (25 M per run) <u>Laying of cables for outgoings:</u> 6 runs of 3.5Core 185 Sqmm cable laid upto entry of WRI SS MV panel room to be laid to MP board outgoing SFU in the formed trench with necessary cable clampings for terminations approx. length of cable: 180 Meters (30M per run)	280.00	M	50.00	14,000.00
30/30	Making of straight through joint Making of straight through joint for 3.5 core 185 Sqmm Aluminum armored cable. Note: Cable joint kit will be supplied by BHEL.	2.00	NO	1,430.00	2,860.00

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30/40	<p><u>Removing and relaying of LT cables</u> Removing and relaying of LT XLPE/PVC AA 3.5 core 185 Sqmm cables to match or altering for identified SFU in MP board for end termination works approx. cable length of 25 M-4runs. To keep excess length of cables for future requirements.</p>	100.00	M	69.00	6,900.00
30/50	<p><u>Cable end terminations in new MP board</u> Making of end termination as per the break-up given below: New MP Board Loads,,,,,, 1.I/C Incomer from MV panel 1000A 4Rx3.5cx185 SQMM Cable-ACB 2. O/G Lab Building North 1Rx3.5cx185 SQMM-SFU-400 A 3. O/G Lab Building South 1Rx3.5cx185 SQMM-SFU-400 A 4. O/G MP 3,,2Rx3.5cx185 SQMM Cable SFU - 400 A 5. O/G MP 2,,2Rx3.5cx185 SQMM Cable SFU - 400 A 6. O/G Auditorium 1Rx3.5cx185 SQMM Cable - SFU -200 A 7. O/G MP 5 1Rx3.5cx185 SQMM Cable SFU - 200 A 8. O/G 40 KVA DG SEM 1Rx3.5cx185 SQMM Cable SFU - 100 A 9. O/G 41 KVA DG TEM 1Rx3.5cx185 SQMM Cable SFU - 100 A Note: Necessary cable lugs and gland shall be in the scope of contractor. General conditions: 1.Necessary MS material such as angle, channel, flat , welding elect rode etc will be supplied by BHEL. 2.The contractor should supply necessary civil tools and materials for floor opening, grouting and floor concreting for erect ion and commissioning of panel. 3.Letter painting work in all switches mentioning the cable size and feeder name. Paints will be supplied by BHEL. 4.Electric power for welding and other erect ion purpose will be provided by BHEL. 5.Welding machine, gas cutting set and regulator should be brought by the contractor. 6.Contractor should engage only Electrical "B" License holder for all Electrical work.</p>	14.00	NO	786.00	11,004.00

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GENERAL TERMS AND CONDITIONS FOR M&S CONTRACTS

1) SAFETY:

- a) Safety precautions have to be ensured by the Contractor Depending on the work. Necessary work permit system and personal protective equipment's (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.
- b) PPES for appropriate trade job has to be ensured by the contractor at the job site at all times.
- c) The work nature may demand working at heights and/or at depth areas. Hence all staff members must be of sound Physical and Mental Health who can complete the job without harming himself and others.
- d) In case any employee found incompetent to carry out the work as stated above/ misbehaving others/ consumed alcohol, he shall be sent out of the factory and the contractor has to arrange alternate manpower immediately. Else the day shall be marked absent.

2) Before quoting the bidders may inspect the site of work and its environments and be well acquainted with the actual working and other relevant conditions, position of materials and labour. Tenderers are also requested to go through General -Terms & conditions, Special -Terms & conditions of Contract, Scope of work, Technical Terms & Conditions, drawings and specifications and all other documents which form part of the agreement to be entered into.

3) 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 DEPUTY MANAGER
MAINTENANCE & SERVICES / CONTRACTS, 2&4 BUILDING,
BHARAT HEAVY ELECTRICALS LIMITED, HPBP, TIRUCHIRAPALLI
TAMIL NADU, INDIA - 620 014.**

h) All entries in Tender documents shall be clearly written in one ink or typed. Tenders should be **FREE FROM CORRECTION AND ERASURES**, Corrections if any, must be 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.

4) OPENING OF TENDERS:

- a) 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).
- b) 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.
- c) Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

5. GST:

- a) Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration No (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration, a declaration

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with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare that he is a composition dealer supported by the screen shot taken from GST portal. The dealer has to submit necessary documents if there is any change in status under GST.

b) Supplier shall mention their GSTIN in all their invoices (incl. credit Notes, Debit Notes) 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), Billed to party (with GSTIN) & Shipped to party details, item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, Place of Supply etc.

c) All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).

d) Invoices will be processed only upon completion of statutory requirement and further subject to following:

(i) Vendor declaring such invoice in Form GST ANX-1

(ii) Receipt of Goods or Services and Tax invoice by BHEL

e) As the continuous uploading of tax invoices in GSTN portal (in GST ANX-1) is available for all (i.e. both Small & Large) tax payers under proposed new GST Return System, all invoices raised on BHEL may be uploaded immediately in GST portal on despatch of material /rendering of services. The supplier shall ensure availability of Invoice in GST portal before submission of invoice to BHEL. Invoices will be admitted by BHEL only if the invoices are available in GSTN portal (in BHEL's GST ANX-2).

f) In case of discrepancy in the data uploaded by the supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims, within the calendar month informed by BHEL.

g) In cases where invoice details have been uploaded by the vendor but failed to remit the GST amount to GST Department (Form PMT-08 or Form GST RET-01 to be submitted) within stipulated time, then GST paid on the invoices pertaining to the month for which GST return not filed by the vendor will be recovered from the vendor along with the applicable interest (currently 24% p.a) and all subsequent bills of the vendor will not be processed till filing of the GST return by the vendor

h) In case GST credit is denied to BHEL due to non-receipt or delayed receipt of goods and/ or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount claimed in the invoice shall be disallowed to the vendor.

i) Where any GST liability arising on BHEL under Reverse Charge (RCM), the vendor has to submit the invoices to BHEL well within the timeline prescribed in GST Law, to enable BHEL to discharge the GST liability. If there is a delay in submission of invoice by the vendor resulting in delayed payment of GST by BHEL along with Interest, then such Interest payable or paid shall be recovered from the vendor.

j) Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contracts. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Tax Invoice will be issued by BHEL indicating the respective supply invoice number.

k) GST TDS will be deducted as per Section 51 of CGST Act 2017 and in line with Notification 50/2018 – Central Tax dated 13.09.2018. GST TDS certificate which will be generated in GST portal subsequent to vendor accepting the TDS deduction in the GST portal, will be issued to the vendor.

6. LD/ PENALTY 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 from the bill/ recovered from the SD for each week of delay or part thereof subject to a max. of 10% of the total contract value.

7. Successful bidders have to submit filled forms forwarded by BHEL HR, i.e. Form-III & Form-VII (shall be given with WO copy) & submit to ALC, Pondicherry for License before commencement of work.

8. RISK PURCHASE:

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In the event of any successful Tenderer's failure to fulfil any of the Tender / Contract obligations as per Contract / Agreement BHEL may entrust the job to alternate source and get it completed to meet BHEL requirement and additional expenditure, if any, including consequential cost, will be fully recovered from the Tenderer Contractor who failed to complete the job in line with Contract.

The decision of BHEL with regard to the actual losses / consequential expenditures incurred by BHEL shall be final and binding on the Tenderer / Contractor.

9. SUSPENSION OF CONTRACT:

In the event of non-completion of contract/ un-satisfactory performance reported by the area Executive, resulting in cascading of events leading to impact in a negative way on financial/ safety/ procedures of various sections/ departments, the contract shall be terminated immediately with intimation and action shall be taken against the contractor as per the extant 'Guidelines for Suspension of business dealings with Suppliers/ Contractors'.

10. INDEMNITY:

The Contractor shall have to indemnify BHEL against all claims for injury or damage to any person or property caused by his negligence or negligence of his employees whilst in BHEL premises / sites.

11. BHEL FRAUD PREVENTION POLICY:

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> & shall immediately bring to notice of BHEL management about any fraud/ suspected fraud as soon as it comes to their notice.

12. PF,ESI:

The workmen of contractor should be covered under PF, ESI

13. DAMAGE & LOSS TO PRIVATE PROPERTY & INJURY TO WORKMEN

The Contractor shall at his own expense reinstate and make good to the satisfaction of the respective area HOD and pay compensation for any injury, loss or damage occurred to any property or rights whatever including property and rights of BHEL (or agents) servants or employee of BHEL, the injury loss or damage arising out of or in any way in connection with the execution or purported execution of the contract and further the contractor shall indemnify BHEL against all claims enforceable against BHEL (or any agent, servant or employee of BHEL) or which would be so enforceable against BHEL, in respect of any such injury (including injury resulting in death) loss or damage to any person whomsoever or property including all claims which may arise under the Employees Compensation Act or otherwise.

"BHEL shall recover the amount of compensation paid to victim(s) by BHEL towards loss of life / permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below.

a) Victim: Any person who suffers permanent disablement or dies in an accident as defined below.
b) Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/operation and works incidental thereto at BHEL factories/offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/during working at BHEL Units/Officers/townships and premises/Project sites

c) Compensation in respect of each of the victims:

(i) In the event of death or permanent disability resulting from Loss of both limbs: Rs 10,00,000/- (Rs Ten lakh)

(ii) In the event of others permanent disability: Rs.7,00,000/- (Rs. Seven Lakh)

d) Permanent Disablement: A disablement that is classified as a permanent total disablement under the proviso to section 2 (I) of the Employee's Compensation Act,1923"

14. ARBITRATION & CONCILIATION: -

(a) Except as provided elsewhere in this Agreement, in case amicable settlement is not reached between the parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Agreement ; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Agreement ; or , in any manner touching upon the Agreement, then, either Party may , by a notice in writing to

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BHARAT HEAVY ELECTRICALS LIMITED

High Pressure Boiler Plant, Tiruchirappalli- 620014

Maintenance & Services Dept. (FB)

• **Phone:** (0431) 257-5010

e-mail: umadsankar@bhel.in

other Party refer such dispute or difference to sole arbitration of an arbitrator appointed by Head of the BHEL Units/Region/Division issuing the Agreement.

(b) The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties.

(c) Subject as aforesaid, the provision of Arbitration & Conciliation Act 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause. The seat of arbitration shall be Trichy, Tamil Nadu.

(d) The cost of arbitration shall be borne as per the award of the Arbitrator.

(e) Subject to arbitration in terms of clause 28 above, the Courts at Trichy Tamil Nadu shall have exclusive jurisdiction over any matter arising out of or in connection with this Agreement.

(f) Notwithstanding the existence or any dispute or difference and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligation under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

In case of contract with Public Sector Enterprises (PSE) or a Government Department, the following shall be applicable

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

15. PAYMENT THROUGH BANK:-

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 challans to Welfare Section every month

16. TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR:

Without prejudice to any of the rights or remedies under this contract, if the Contractor dies, or if the firm is dissolved or the company is liquidated, BHEL shall have the option of terminating the contract without compensation to the Contractor.

17. IMPORTANT NOTE:-

BHEL reserves the right to short close this work 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 on pro rata basis for the service rendered out up to the period.

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COMMERCIAL TERMS AND CONDITIONS FOR M&S MECHANICAL CONTRACTS

- 1) 100% payment will be made after completion of work on pro-rata basis on submission of invoice in triplicate duly certified by Area In-charge.
- 2) Attendance register should be maintained.
- 3) Payment of **EMD** should be done in the methods given in Spl. Instructions, sl.no.1, page-1 of the NIT.
- 4) Mode of Payment of **Security Deposit**:
 - a) **Bank Guarantee** from Scheduled Banks/ Public Financial Institutions as per Companies Act. Bank Guarantee format should have approval of BHEL or
 - b) **Local Cheques** of Scheduled Banks (subject to realization)/ **Pay Order/ DD/ Electronic Fund Transfer** in favour of BHEL or
 - c) **Fixed Deposit Receipt (FDR)** issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies act (FDR should be in the name of the Contractor, a/c BHEL) or
 - d) **Securities available from Indian Post Offices**, i.e. National Savings Certificates, Kisan Vikas Patras, etc. (held in the name of Contractor furnishing the security & duly endorsed/ pledged, as applicable, in favour of BHEL). While making such payment, Enquiry number should be mentioned in Remark column.
- 5) **Procedure to remit money to BHEL Trichy's Account (e-Collect Mode):**

Login to : <https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=5XX693>

 - a) Accept the terms & conditions, click "**PROCEED**".
 - b) Select State "TAMILNADU" and Institution type "INDUSTRY". Select "**BHEL TRICHY**" under "INDUSTRY".
 - c) In the next page, select APPROPRIATE category, fill details correctly & click "**SUBMIT**".
 - d) If all details entered are correctly populated, click "**CONFIRM**" to proceed.
 - e) Make payment as per your convenience. (Options available are payment of fees through **SBI Net Banking, State Bank ATM cum Debit Cards / Other Bank Debit / Credit Cards and through SBI Branches**).
 - f) **SAVE & Keep the copy of receipt for future reference.**
- 6) EMD & SD amount shall not carry any interest.
- 7) 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.
- 8) **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. GST will be charged on the EMD/SD amount forfeited from the bidder at the applicable rates. GST tax Invoice will be issued to the vendor on receipt/recovery of GST amount from the vendor
- 9) An additional payment as per circular ref. BHEL: HR: W: EW, dt.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/-
- 10) Bonus @ 8.33 % to workmen to be paid.
- 11) **Rate should be quoted as per price bid format.**
- 12) The rate that is offered should be comprehensive and no separate charges will be made towards expenses like travel, boarding & lodging.
- 13) GST not to be included in quoted rate & to mention separately as percentage. Other taxes, if any, are inclusive.
- 14) Tax deduction will be made from every bill at the prevailing rate as per the Government rule and regulation from time to time.
- 15) In the course of evaluation if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders. Incase more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss /draw of lots in the presence of the respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

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SCHEDULE FOR PRICE BID

NAME OF WORK: ERECTION, TESTING AND COMMISSIONING OF MV SWITCHGEAR PANEL AND MP DISTRIBUTION BOARD AND 1600KVA DRY TYPE TRANSFORMER IN WRI & FCB SUBSTATIONS.

Ref: Enquiry no: 9452000003: dt. 29.06.2020; Due dt. 09.07.2020, 14.00 Hrs.

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)
10	Rs. 2,38,118.00/- (Rupees Two Lakhs Thirty Eight Thousand One Hundred and Eighteen only)		

- Taxes if any should be quoted extra.

- 1). Tax deduction will be made from every bill at the prevailing rate as per the Government rule and regulation from time to time.
- 2). Detailed scope of work and other terms and conditions are specified in the Technical Bid of the Tender.
- 3). **Cumulative L-1 will be considered for ordering.**

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