



An ISO: 9001
Organization

BHARAT HEAVY ELECTRICALS LIMITED

High Pressure Boiler Plant, Tiruchirappalli- 620014

Maintenance & Services Dept. (FB)

• **Phone:** (0431) 257-5010

e-mail: umadsankar@bhel.in

Enq. No: 9252000019

27.05.2020

NOTICE INVITING TENDER

Dear Sir/ Madam,

Subject: Two Part Tender Inviting Techno-commercial and Price Bids for "**Periodical Calibration of Reference Master Instruments**". 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	Periodical Calibration of Reference Master Instruments
02.	Earnest Money Deposit (EMD)	₹ 2745.00/-
03.	Duration of the contract	1 Year (From the date of commencement of the work)
04.	Enquiry No. & Date	9252000019, dt.27.05.2020
05.	Last Date for Receipt of Tender	14.00 Hrs. on 06.06.2020
06.	Date of Technical Bid Opening	14.30 Hrs. on 06.06.2020
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 **18 Pages** (Technical & Commercial Bid – 16 pages, Schedule for Price Bid 01 page, Sample format for CA certificate – 01 page).
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 **₹ 2745.00/-** 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.
- 2) Bidders registered as **MSE (UAN) / NSIC / SSI** are exempted from paying EMD subject to submission of valid Registration document along with Tender. These bidders can avail EMD Waiver benefits only if they submit in EMD cover along with the offer, attested copies of either valid **EM-II Certificate** (five years from the date of issue of acknowledgement in EM-II or else, with attested copy of a CA Certificate for the latest financial year i.e., 2018-19 or Later in Enclosed Format) or **MSE (UAN- along with CA certificate** for latest financial year i.e., 2018-19 or Later in attached format)/ valid **NSIC / SSI** certificate.



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3) **Tenders without EMD/ MSE/ NSIC/ SSI/ EM-II proof as above will be summarily rejected and the Technical bid & Price bid shall not be considered for further evaluation.**

4) 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.

5) 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.

6) 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.

7) 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.

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

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

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

11) **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.

12) 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.

13) 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.

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

15) The complete Technical bid and price bid along with requisite **EMD of ₹ 2745.00/-** shall reach the office of the undersigned on or before **06.06.2020** at 14.00 Hrs.

16) 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: Periodical Calibration of Reference Master Instruments

Ref: Enquiry no 9252000019: dt. 27.05.2020; Due dt. 06.06.2020, 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 bidders shall quote who is having calibration lab certified by NABL or international accreditation body for ISO 17025:2005 compliance.	
2	The valid NABL certificate and the scope of accreditation shall be submitted along with the offer for verification	
3	(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.	
4	Acceptance for Scope of Work as per the Enquiry.	
5	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".	
6	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	
7	If the Bidder quotes for calibration points less than the no.of points requested in the tender, the offer will be summarily rejected.	

SCOPE OF WORK

NAME OF WORK: Periodical Calibration of Reference Master Instruments

Ref: Enquiry no : 9252000019: dt. 00.00.2020; Due dt. **00.00.2020**, 14.00 Hrs

Sl.No	SCOPE OF WORK	Qty
ITEM 10	Periodical Calibration of Reference Master Instruments	
10/10	<p>Scope Of Calibration "Ac/Dc Precision Calibrator"</p> <p>1. Item Description: AC / DC Precision Calibrator Make/Model No. : Rotek/3960 A Sl. No. : 164 Unique Sl. No : PM-01</p> <p>2. Required Range of Calibration:</p> <p>2.1 DC Voltage : 100mV, 1000 mV, 10 V, 100 V, 1000 V (Each range minimum 5 equidistant reading required)</p> <p>2.2 AC Voltage : 100mV,1000 mV,10 V,100 V,1000 V @ 50 Hz (Each range minimum 5 equidistant reading required)</p> <p>2.3 DC Current : 1000 micro A,10 mA,100 mA,1000 mA (Each range minimum 5 equidistant reading required)</p> <p>2.4 AC Current : 1000 micro A,10 mA, 100 mA, 1000 mA @ 50 Hz (Each range minimum 5 equidistant reading required)</p> <p>2.5 Resistance : 10, 100, 1K, 10K, 100K, 1M & 10M Ohms (1 specific reading on each of the mentioned value)</p> <p>B) Scope Of Calibration For "High Current Adaptor"</p> <p>1. Item Description: High Current Adaptor Make/Model :Rotek/350 A Sl. No. :686 Unique Sl.No. :PM-01</p> <p>2. Required Ranges of Calibration:</p> <p>2.1 DC Current : 1A, 5A, 10 A (Each range minimum 5 equidistant readings required)</p> <p>2.2 AC Current : 1A, 5A, 10A, 20A @ 50 Hz (Each range minimum 5 equidistant readings required)</p> <p>C) Accuracy Criteria Required:</p> <p>1. For DC Volt/Current : $\pm 0.4\%$ FSV 2. For AC Volt/Current : $\pm 0.8\%$ FSV</p> <p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall meet the following values.</p> <p>1. For DC Volt/Current : $\pm 0.1\%$ FSV or better 2. For AC Volt/Current : $\pm 0.2\%$ FSV or better</p> <p>D). Required Calibration Periodicity: 2 Years</p>	1 NO

Sign & Seal of Contractor

20/10	<p>Scope of Calibration of 8 1/2 DIGIT MULTIMETER.</p> <p>1. Instrument Description : 8 1/2 DIGIT MULTIMETER Make : DATRON Model No. : 1271 Sl.No. : 27158 Unique Sl.No. : PM-03</p> <p>2. Required calibration ranges: 2.1 AC Voltage: 100 mV, 1V, 10V, 100V, 1000 V @ 50 Hz 2.2 DC Voltage: 100 mV, 1V, 10V, 100V, 1000 V. 2.3 AC Current: 1mA, 10mA, 100mA, 1 Amps @ 50 Hz 2.4 DC Current: 1mA, 10mA, 100mA, 1 Amps. (Each range minimum 5 equidistant readings required.) 2.5 Linearity Check: 10 V Range @ 1khz 2.6 Resistance: 10, 100, 1k, 10k, 1M, 10M, 100M Ohms. (1 specific reading on each of the mentioned value)</p> <p>3. Accuracy Criteria Required: 3.1. For DC Volt/Current : $\pm 0.4\%$ FSV 3.2. For AC Volt/Current : $\pm 0.8\%$ FSV</p> <p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e) The Accuracy of the reference standards shall meet the following values.</p> <p>1. For DC Volt/Current : $\pm 0.1\%$ FSV or better 2. For AC Volt/Current : $\pm 0.2\%$ FSV or better</p> <p>4. Required Calibration Periodicity: 2 Years</p>	1 NO
30/10	<p>A) Scope Of Calibration Of Multi Product Calibrator.</p> <p>1) Item Description : MULTI PRODUCT CALIBRATOR Make : TRANSMILLE Model No : 3050A Sl. No : K1175H13 Unique Sl. No : PM – 15</p> <p>2) Ranges of Calibration required: (Electrical parameters - SOURCE mode)</p> <p>a) DC Voltage : 200mV, 2 V, 20 V, 200 V, 1000 V (Each range minimum five readings required)</p> <p>b) AC Voltage : 200mV, 2 V, 20 V, 200 V, 1000 V @ 50 Hz (Each range minimum five readings required)</p> <p>c) DC Current : 200 micro amps, 2mA, 20 mA, 200 mA, 2A, 20A (Each range minimum five readings required)</p> <p>d) AC Current : 200 micro amps, 2mA, 20 mA, 200 mA, 2A, 20A @ 50 Hz (Each range minimum five readings required)</p> <p>e) Resistance : 10, 100, 1K, 10K, 100K, 1M, 10M, 100M & 400M Ohms. (1 specific reading on each of the mentioned value)</p> <p>B) Scope Of Calibration Of Thermocouple Adaptor.</p> <p>1) Item Description : THERMOCOUPLE SIMULATOR Make : TRANSMILLE</p>	1 NO

	<p>Model No : EA001A Sl. No : 110918E13 Unique Sl. No : PM - 15</p> <p>2) Range of calibration required: (Thermocouples - SOURCE mode)</p> <p>K Type (0 to 1300 deg C) J Type (0 to 1200 deg C) R Type (0 to 1500 deg C) N Type (0 to 1200 deg C)</p> <p>(Thermocouples - SENSE mode)</p> <p>K Type (0 to 1300 deg C) J Type (0 to 1200 deg C) R Type (0 to 1500 deg C) N Type (0 to 1200 deg C)</p> <p>Note : For all type of thermocouples, six readings shall be taken in both source/sense mode starting from min to max range as mentioned</p> <p>C) Accuracy Criteria Required:</p> <ol style="list-style-type: none"> 1. For DC Volt/Current : $\pm 0.4\%$ FSV 2. For AC Volt/Current : $\pm 0.8\%$ FSV 3. For Temperature measurements : $\pm 0.1\%$ <p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall meet the following values.</p> <ol style="list-style-type: none"> 1. For DC Volt/Current : $\pm 0.1\%$ FSV or better 2. For AC Volt/Current : $\pm 0.2\%$ FSV or better 3. For Temperature measurements : $\pm 0.025\%$ FSV or better <p>D). Required Calibration Periodicity: 2 Years</p>	
40/10	<p>Scope Of Calibration Of Multifunction Process Calibrator.</p> <p>1. Item Description: Multifunction Process Calibrator</p> <p>Make : Martel Electronics Model No : M3001 Sl. No : 2599049 Unique Sl.No : PM-18</p> <p>2. Required calibration ranges:</p> <p>2.1 Electrical Parameter: "SOURCE" mode:</p> <p>DC Voltage : 0 to 0.1V, 0 to 1V, 0 to 10V, 0 to 100V DC Current : 0 to 100 mA Resistance : 5 - 400 Ohms, 5 - 4000 Ohms</p> <p>(For each range minimum 5 readings required starting from min to max of the each range specified.)</p> <p>2.1 Electrical Parameter: "SENSE" mode:</p> <p>DC Voltage : 0 to 10V, 0 to 100V DC Current : 0 to 50 mA Resistance : 0 - 400 Ohms, 0 - 4000 Ohms</p>	1 NO

	<p>(For each range minimum 5 readings required starting from min to max of the each range specified.)</p> <p>2.3 Temperature: Thermocouple & RTD (Source and Measure mode)</p> <p>K Type (0 to 1300 deg C)</p> <p>J Type (0 to 1200 deg C)</p> <p>R Type (0 to 1500 deg C)</p> <p>N Type (0 to 1200 deg C)</p> <p>Pt100 = -200° to 800°C</p> <p>(For each range minimum 5 readings required starting from min to max of the each range specified.)</p> <p>3) Accuracy Criteria Required:</p> <ol style="list-style-type: none"> 3.1. For DC Volt/Current : $\pm 0.4\%$ FSV 3.2. For AC Volt/Current : $\pm 0.8\%$ FSV 3.3. For Temperature measurements : $\pm 0.1\%$ <p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall meet the following values.</p> <ol style="list-style-type: none"> 1. For DC Volt/Current : $\pm 0.1\%$ FSV or better 2. For AC Volt/Current : $\pm 0.2\%$ FSV or better 3. For Temperature measurements : $\pm 0.025\%$ FSV or better 4). Required Calibration Periodicity: 2 Years 	
50/10	<p>Scope of work : Calibration of MASTER RTD SENSOR</p> <p>1. Item Description: Master RTD Sensor</p> <p>Unique Sl.No : PM-22</p> <p>Type : PT 100 Ohms</p> <p>2. Range of the RTD : -50 deg.C to +250 deg.C</p> <p>3. Required Calibration points : -50,0,50,100,150,250 deg.C.</p> <p>4. Required accuracy : $\pm 0.5\%$</p> <p>Note : The accuracy of the reference master instruments shall be : $\pm 0.125\%$ or better</p> <p>5. Required Calibration Periodicity: 2 Years.</p>	1 NO
60/10	<p>Scope Of Calibration Of Thermo Hygrometer:-</p> <p>1. Item Description: Thermo hygrometer</p> <p>Make : Jumo</p> <p>Sl.no : 181209000248A1</p> <p>Unique Sl.no : PG-THM-01</p> <p>2. Required Range of Calibration:</p> <p>2.1 Temperature Range :0 to 50°C</p> <p>2.2 Resolution in Temperature Range: 0.1°C</p> <p>2.3 Accuracy in Temperature Range:$\pm 0.5°C$</p> <p>2.4 Humidity Range : 0-100% RH</p> <p>2.5 Resolution in Humidity Range: 0.1% RH</p> <p>2.6 Accuracy in Humidity Range: $\pm 2\%$ RH</p>	1 NO

	<p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall meet the following values.</p> <ol style="list-style-type: none"> 1. For Temperature : $\pm 0.125^{\circ}\text{C}$ or better 2. For Humidity : $\pm 0.5\%$ or better 3. Required Calibration Periodicity: 2 Years 	
70/10	<p>Scope of Calibration of Thermo hygrometer:-</p> <ol style="list-style-type: none"> 1. Item Description: Thermo hygrometer Make : Jumo Sl.no : 18120900025345 Unique Sl.no : ET-THM-02 2. Required Range of Calibration: 2.1 Temperature Range :0 to 50°C 2.2 Resolution in Temperature Range: 0.1°C 2.3 Accuracy in Temperature Range:$\pm 0.5^{\circ}\text{C}$ 2.4 Humidity Range : 0-100% RH 2.5 Resolution in Humidity Range: 0.1% RH 2.6 Accuracy in Humidity Range: $\pm 2\%$ RH <p>Note: The Accuracy of the reference standards should be 4 times better than Accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall meet the following values.</p> <ol style="list-style-type: none"> 1. For Temperature : $\pm 0.125^{\circ}\text{C}$ or better 2. For Humidity : $\pm 0.5\%$ or better 3. Required Calibration Periodicity: 2 Years 	1 NO
80/10	<p>Scope of Calibration of Digital Pressure Gauge:-</p> <ol style="list-style-type: none"> 1. Instrument Description: Make : AEP Transducer Model : LabDMM Sl.no : 921184 Unique sl.no : SM-50 Range : 0 to 1500 kg/cm² Resolution : 0.2 kg/cm² Medium : OIL 2. Calibration points : The calibration shall be carried out at minimum 9 equidistant calibration points in the entire range including zero and full scale value. 3. Required accuracy : $\pm 0.1\%$ FSV Note : The accuracy of the reference master instruments shall be : $\pm 0.025\%$ or better 4. Required periodicity: 1 Year 	1 NO
90/10	<p>Scope of Calibration of Digital Pressure Gauge</p> <ol style="list-style-type: none"> 1. Instrument Description: Make : AEP Transducer Model : Lab DMM Sl.no : 924117 	1 NO

	<p>Unique sl.no : SM-52 Range : 0 to 1500 kg/cm² Resolution : 0.2 kg/cm² Medium : OIL</p> <p>2. Calibration points: The calibration shall be carried out at minimum 9 equidistant calibration points in the entire range including zero and full scale value.</p> <p>3. Required accuracy : $\pm 0.1\%$ FSV Note : The accuracy of the reference master instruments shall be : $\pm 0.025\%$ or better</p> <p>4. Required periodicity: 1 Year</p>	
100/10	<p>Scope of Calibration of Digital Pressure Gauge</p> <p>1. Instrument Description:</p> <p>Make : WIKA Model : CPG 1500 Sl.no : 1A00VYGI739 Unique sl.no : SM-54 Range : 0 to 2500 kg/cm² Resolution : 0.1 kg/cm² Medium : OIL</p> <p>2. Calibration points : The calibration shall be carried out at minimum 9 equidistant calibration points in the entire range including zero and full scale value.</p> <p>3. Required accuracy : $\pm 0.1\%$ FSV Note : The accuracy of the reference master instruments shall be : $\pm 0.025\%$ or better</p> <p>4. Required periodicity: 1 Year</p>	1 NO
110/10	<p>Scope of Calibration: Dual Range Hydraulic Dead Weight Tester.</p> <p>1. Instrument Description:</p> <p>Make : Budenberg / England Model : 380H Inst.sl.no : 19027 Unique sl.no : PM-05 Medium : OIL Range : Dual range(Low & High) Low range : 6 - 60 kg/cm² High range : 60 - 1200 kg/cm²</p> <p>2. Dead Weights</p> <p>a) 1/20 kg/cm² : 2 nos b) 2/40 kg/cm² : 2 nos c) 5/100 kg/cm² : 1 no d) 9/180 kg/cm² : 1 no e) 10/200 kg/cm² : 4 nos f) 0.2/4.0 kg/cm² : 2 nos</p> <p>Incremental weights</p>	1 NO

	<p>g)0.1/2.0 kg/cm² : 1 no h)0.05/1.0 kg/cm²: 1 no i)0.02/0.4 kg/cm²: 2 nos j)0.01/0.2 kg/cm²: 1 no.</p> <p>3. Calibration points required:</p> <p>1) Low Range: 7.01,16,20,40,60 kg/cm² 2) High Range: 60.2, 141, 200, 300, 400, 600, 700, 800, 1000, 1200kg/cm²</p> <p>4. Required accuracy: $\pm 0.1\%$ FSV</p> <p>Note: The Accuracy of the reference standards should be 4 times better than the accuracy of Unit Under Calibration. i.e.) The Accuracy of the reference standards shall be $\pm 0.025\%$ FSV or better.</p> <p>5. Required Periodicity: 2 Years</p> <p>Note: Required calibration points must cover all the above mentioned weight. Also the weights nos. must be incorporated in the calibration certificate.</p>	
120/10	<p>Scope of Calibration of Digital Pressure Calibrator.</p> <p>1. Instrument Description :</p> <p>Make : DH-Budenberg / England Model : H540 Inst.sl.no : H540/160 Unique sl.no : PM-13 Range : 0 - 1200 kg/cm² Resolution : 0.01 kg/cm² Medium : OIL</p> <p>2. Required Calibration points : 0, 10, 50, 100, 200, 400, 600, 800, 1000, 1200 kg/cm²</p> <p>3. Required accuracy : $\pm 0.1\%$ FSV</p> <p>4. Required accuracy of reference master instrument shall be: $\pm 0.025\%$ of FSV or better.</p> <p>5. Required periodicity : 2 Years</p> <p>General Terms & Conditions:</p> <p>-----</p> <p>1. The calibration of Instruments at vendor works to be completed within 4weeks times from the date of receipt of instrument at vendor works.</p> <p>2. The Instruments will be packed & dispatched to the vendor works by BHEL, Trichy. The vendor has to receive the instruments. After completion of scope of works, vendor has to repack and redispach the instruments to M&S/Calibration center/BHEL, Trichy.</p> <p>3. The to & fro transport charges and transit insurance for the instruments are under BHEL's scope.</p>	1 NO

Terms referring to calibration of Instruments:

1. The accuracy of reference masters used for calibration shall have minimum four times better accuracy than the BHEL's instrument (UUC).
2. All the reference master instruments used for calibration should have valid calibration certificate traceable to national/international standards.
3. The Calibration certificate should incorporate all the below mentioned details:
 - 3.1 The name, Sl.no and the unique identification no. of the BHEL's instrument.
 - 3.2 Date of Calibration and Due date for Next Calibration.
 - 3.3 Name and address of the customer has to be mentioned in the certificate as "M/s. BHEL, M&S Department, Trichy-14" and the customer reference (i.e. BHEL Work Order no & date) to be mentioned in the certificate.
 - 3.4 The details of the reference masters used for calibration like Sl.No, Range, Standard Value for measurement, Accuracy, etc.
 - 3.5 Details of Traceability of the reference master instruments.
 - 3.6 For each calibration point, the deviation and % error to be mentioned as applicable for UUC.
 - 3.7 The calibration certificate shall include "as found and as left data". If both "as found and as left data" are same then it shall be exclusively mentioned in the certificate.
 - 3.8 NABL Logo mentioning the certificate number shall be affixed on the certificate.

Note: In case if the required periodicity of cannot be printed in calibration certificate as recommended by BHEL, then it shall be left as blank.

GENERAL TERMS AND CONDITIONS FOR M&S ELECTRICAL 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 ENGINEER
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 with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare

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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.

7. 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.

8. 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.

9. RISK PURCHASE:

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 (with 5% over heads) incurred by BHEL shall be final and binding on the Tenderer / Contractor.

10. 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'.

11. 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.

13. 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.

14. PF, ESI:

The workmen of contractor should be covered under PF, ESI

15. 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"

16. 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 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.

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(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.

17. 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

18. 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.

19. 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 ELECTRICAL 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 Attendance register should be maintained.
- 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=574693>
 - 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: **Periodical Calibration of Reference Master Instruments**

Ref: Enquiry no: 9252000019: DT. 27.05.2020; Due dt. 06.06.2020, 14.00 Hrs

Sl. No	SCOPE OF WORK	Qty	UoM	RATE/ unit	VALUE
10/10	Calibration of AC/DC Precision Calibrator	1	NO		-NA-
20/10	Calibration of 8 1/2 DIGIT Multi meter	1	NO		-NA-
30/10	Calibration Of Multi Product Calibrator	1	NO		-NA-
40/10	Calibration Of Multifunction Process Calibrator	1	NO		-NA-
50/10	Calibration Of Master RTD Sensor	1	NO		-NA-
60/10	Calibration of Thermo hygrometer	1	NO		-NA-
70/10	Calibration of Thermo hygrometer	1	NO		-NA-
80/10	Calibration of Digital Pressure Gauge	1	NO		-NA-
90/10	Calibration of Digital Pressure Gauge	1	NO		-NA-
100/10	Calibration of Digital Pressure Gauge	1	NO		-NA-
110/10	Calibration: Dual Range Hydraulic Dead Weight Tester	1	NO		-NA-
120/10	Calibration of Digital Pressure Calibrator	1	NO		-NA-

- ❖ UOM (unit of measurement): NO
- ❖ 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 Attendance register should be maintained
- ❖ GST not to be included in the quoted rate & to be mentioned as a percentage separately. Other taxes, if any, are inclusive.
- ❖ **Individual L1 for every item will be considered for ordering.**

**Detailed scope of work and other terms and conditions are specified in the tender.

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Certificate by Chartered Accountant on Letter Head

This is to certify that M/s. _____ (here in after 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:

Name:

(Signature)

Membership number:

Seal of Chartered Accountant