



Bid Number/बोली क्रमांक (बिड संख्या):  
GEM/2024/B/4917828  
Dated/दिनांक : 06-05-2024

### Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	16-05-2024 17:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	16-05-2024 17:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Heavy Industries And Public Enterprises
Department Name/विभाग का नाम	Department Of Heavy Industry
Organisation Name/संगठन का नाम	Bharat Heavy Electricals Limited (bhel)
Office Name/कार्यालय का नाम	10250020-pem, Noida
Total Quantity/कुल मात्रा	7
Item Category/मद केटेगरी	Portable Light Intensity Meter (Lux Meter) (Q3) , Portable Digital Frequency Meter (Q3) , Portable Automatic Earth Tester (Q3) , Portable Digital DC Resistance Meter (Q3)
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	1 Year (s)
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria,Past Performance,Additional Doc 1 (Requested in ATC),Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Past Performance/विगत प्रदर्शन	10 %
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	Yes
RA Qualification Rule	H1-Highest Priced Bid Elimination
Type of Bid/बिड का प्रकार	Two Packet Bid
Primary product category	Portable Light Intensity Meter (Lux Meter)

**Bid Details/बिड विवरण**

<b>Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय</b>	7 Days
<b>Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)</b>	No
<b>Payment Timelines</b>	Payments shall be made to the Seller within <b>90</b> days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
<b>Evaluation Method/मूल्यांकन पद्धति</b>	Item wise evaluation/

**EMD Detail/ईएमडी विवरण**

Required/आवश्यकता	No
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**ePBG Detail/ईपीबीजी विवरण**

Required/आवश्यकता	No
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**Splitting/विभाजन**

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

**MSE Purchase Preference/एमएसई खरीद वरीयता**

MSE Purchase Preference/एमएसई खरीद वरीयता	No
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**Details of the Competent Authority for MSE**

Name of Competent Authority	S K DUBEY
Designation of Competent Authority	SDGM
Office / Department / Division of Competent Authority	BHEL PEM Noida
CA Approval Number	123
Competent Authority Approval Date	06-05-2024
Brief Description of the Approval Granted by Competent Authority	Being non divisible package, MSE purchase preference not given.

Competent Authority Approval for not opting Micro and Small Enterprises Preference : [View Document](#)

## MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.

2. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

3. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

4. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 10% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

5. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- i. If number of technically qualified bidders are only 2 or 3.
- ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
- v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

## Evaluation Method ( Item Wise Evaluation Method )

Contract will be awarded schedulewise and the determination of L1 will be done separately for each schedule. The details of item-consignee combination covered under each schedule are as under:

Evaluation Schedules	Item/Category	Quantity
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Schedule 1	Portable Light Intensity Meter (lux Meter)	3
Schedule 2	Portable Digital Frequency Meter	2
Schedule 3	Portable Automatic Earth Tester	1
Schedule 4	Portable Digital Dc Resistance Meter	1

### Portable Light Intensity Meter (Lux Meter) ( 3 pieces )

**(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)**

#### Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<a href="#">Download</a>
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#### Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Vaishy	208020,Construction Manager, Bharat Heavy Electricals Limited c/o Chief Engineer (Projects), UPRVUNL PANKI TPS EXTENSION Panki , Dist. Kanpur (U.P) Pin-208020 (Uttar Prades)h	3	180

### Portable Digital Frequency Meter ( 2 pieces )

**(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)**

#### Technical Specifications/तकनीकी विशिष्टियाँ

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#### Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Vaishy	208020,Construction Manager, Bharat Heavy Electricals Limited c/o Chief Engineer (Projects), UPRVUNL PANKI TPS EXTENSION Panki , Dist. Kanpur (U.P) Pin-208020 (Uttar Prades)h	2	180

### Portable Automatic Earth Tester ( 1 pieces )

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

#### Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<a href="#">Download</a>
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### Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Vaishy	208020,Construction Manager, Bharat Heavy Electricals Limited c/o Chief Engineer (Projects), UPRVUNL PANKI TPS EXTENSION Panki , Dist. Kanpur (U.P) Pin-208020 (Uttar Prades)h	1	180

### Portable Digital DC Resistance Meter ( 1 pieces )

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

#### Technical Specifications/तकनीकी विशिष्टियाँ

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**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा**

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Vaishy	208020,Construction Manager, Bharat Heavy Electricals Limited c/o Chief Engineer (Projects), UPRVUNL PANKI TPS EXTENSION Panki , Dist. Kanpur (U.P) Pin-208020 (Uttar Prades)h	1	180

**Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें****1. Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

**2. Inspection**

**Nominated Inspection Agency:** On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:

Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC):

At vendor works

Post Receipt Inspection at consignee site before acceptance of stores:

NA

**3. Certificates**

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

**4. Certificates**

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

**5. Generic**

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

**6. Generic**

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers

can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

## **Disclaimer/अस्वीकरण**

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

**---Thank You/धन्यवाद---**

## Index of Annexures

### GeM Tender Enquiry for Electrical Lab Equipment (M &T) for 1x 660 MW Panki Project

<b>Sl. No.</b>	<b>Description</b>	<b>Annexures</b>
1.	Additional terms and conditions (ATC)	
2.	BOQ	Annexure I
3.	Land border certificate	Annexure II
4.	Certificate for local Content	Annexure III
5.	Technical Specification	-
6.	Technical PQR	-

2024

# BHEL PEM GEM ATC

## **INTRODUCTION**

1. This is a Buyer specific document named Additional Terms & Conditions (ATC). This document is applicable for the enquiry issued on Government e-Marketplace (GeM) portal. These terms and conditions must be read in conjunction with GeM- General Terms & Conditions (GTC).
2. In case of any conflict, terms and conditions stipulated in ATC shall supersede those in GTC on GeM.

## **INSTRUCTIONS TO THE SUPPLIERS**

Suppliers are advised to note the following instructions regarding Bid/Offer submission: -

1. To regularly visit GeM portal to access the tender documents and latest updates about the tender.
2. To study all the tender documents carefully. Any submission of tender by the Supplier shall be deemed to have been done after careful study & examination of the tender documents and with full understanding of the implications thereof. Non-compliance with any of the requirements and instructions in the Tender Enquiry shall be treated as an Incomplete Bid/Offer. Suppliers would be liable for actions as per extant policies/guidelines, if they fail to abide by any of the Policies including the terms and conditions stipulated in this document.
3. Ensure submission of their Bid/Offer on or before the latest due date and time indicated in the tender after taking cognizance of all the tender documents including corrigenda (if any) published against this tender.
4. To submit their Bids/Offers on GeM portal only.
5. Not to send copy of Bid/Offer through any other mode i.e. hard copy and or through email etc. In case Bids/Offers are received through any other mode other than GeM portal from any of the Suppliers against this tender, the same shall be ignored.
6. Incomplete Bid/Offer shall be rejected by giving a suitable cut-off date.

## **ORDER OF PRECEDENCE**

In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following order of precedence:

- i. Amendments to Order/ Contract Purchase Order
- ii. Order/ Contract Purchase Order
- iii. Letter of Intent (LOI)/ Letter of Award (LOA)
- iv. Clarifications agreed between Buyer and Supplier in regards to the tender or the bidding conditions
- v. Corrigenda to NIT, with those of later date having precedence over those of earlier date
- vi. Enquiry letter and annexures except documents listed in point no (vii) to (x) below.
- vii. Technical Specifications
- viii. Additional Terms & Conditions (ATC)
- ix. Special Conditions of Contract (SCC)
- x. GeM General Terms & Conditions (GTC)

## DEFINITION OF TERMS

Throughout the Tender Documents including the Enquiry Letter, the following words shall have the meanings assigned to them herein, unless the subject matter or the context requires otherwise: -

1 **Owner** shall mean the **Customer** or **Client** for whose project the enquiry is issued by Buyer and shall include its successors and assignees as well as authorized officer(s)/ representative(s).

2 **Sub-Supplier** shall mean the person/ firm/ company/ organization to whom any part of the work has been sub-contracted by Seller/Supplier, with the written consent of Buyer, and shall include sub-Contractor's heirs, executors, administrators, representatives and assignees as agreed between Seller/Supplier and Buyer (BHEL).

*Note - The term Supplier is used for Seller/ Bidder/ Vendor/Manufacturer in this document. The term Sub-Supplier is used for Sub-Contractor/ Sub-Vendor in this document.*

3 **Site** shall mean and include the land and place on which the project station related facilities are to be constructed and any adjacent land which may be allocated or used by *Owner, Buyer or Supplier* in performance of the Order/ Contract.

4 **Erection** shall mean include all work required for complete installation, from receiving, unloading, storage, preservation, to fixing & securing the equipment in its space.

5 **Commissioning** shall mean successful/ satisfactory completion of Trial Operation and readiness of the contracted/ ordered package / plant and materials unit wise/ set wise/ individual sub-system etc. including associated stand by for commercial use. This will include all consumables and inputs required for pre-commissioning.

6 **Inspection Agency (IA)** shall mean person(s) authorized by Buyer / Owner to inspect the stores as per Order/ Contract at Supplier's / Sub-Supplier's works. Suppliers to raise inspection call on BHEL - Quality Surveillance System (<https://cqir.bhel.in>).

7 **Month** shall mean calendar month and **Week** shall mean 7 days.

8 **Services** shall include Engineering, Study, Calibration, Type Test, Supervision of Erection and/or Commissioning, Installation Check, PG Test, Demonstration, Operation & Maintenance (O&M), Annual Maintenance of Contract (AMC), etc.

9 **Performance Guarantee Test** shall mean a test to be conducted by the Supplier at Site and witnessed by Owner/ Buyer, as per procedure submitted by the Supplier and approved by Owner/ Buyer describing the objective of the test, detailed procedures to test the guaranteed parameters, obligations as per the order/ contract, results presentation procedure and verification & acceptance criterion.

## TERMS & CONDITIONS

<b>1</b>	<b>BID SECURITY/ EARNEST MONEY DEPOSIT (EMD)</b>
<b>1.1</b>	<b>a) EMD: Not Applicable</b>
<b>1.2</b>	<p><b>Modes of Deposit:</b> EMD shall be accepted only in the following forms:</p> <p>(i) <del>Electronic Fund Transfer credited in BHEL account (before tender opening)- BHEL PEM account details is given at the link  <a href="https://pem.bhel.com/Documents/VendorSection/BHELBANKER.pdf">https://pem.bhel.com/Documents/VendorSection/BHELBANKER.pdf</a></del></p> <p>(ii) <del>Banker's cheque/ Pay order/ Demand draft, in favour of BHEL (along with offer)</del></p> <p>(iii) <del>Fixed Deposit Receipt (FDR)</del></p> <p>(iv) <del>Bank Guarantee from any of the Scheduled Banks</del></p> <p>(v) <del>Insurance Surety Bonds</del></p> <p>Scanned copy of EMD shall be uploaded by Supplier in the online bid and hard copy of the same (excluding EFT at pt.1.2(i)) shall have to be submitted to the Buyer within 7 (Seven) working days of bid opening, failing which the bid shall be rejected by giving a suitable cut-off date.</p>
<b>1.3</b>	The EMD shall remain valid for a period of 45 (forty five) days beyond the final bid/offer validity period. The EMD shall also be extended in case of extension of bid/offer validity.
<b>1.4</b>	<p><b>Forfeiture and Release/Return of EMD:</b></p> <p>i) <del>A Supplier's EMD will be forfeited if the Supplier withdraws or amends its/his tender or impairs or derogates from the tender in any respect within the period of validity of the tender or if the successful Supplier fails to furnish the required performance security within the specified period mentioned in the Tender.</del></p> <p>ii) <del>EMD by the Buyer shall be withheld in case any action on the Supplier is envisaged under the provisions of extant "Guidelines on Suspension of Business Dealings with Suppliers/ Contractors" of BHEL and forfeited/ released based on the action as determined under these guidelines placed at <a href="https://www.bhel.com/supplier-registration">https://www.bhel.com/supplier-registration</a>.</del></p> <p>iii) <del>Bid securities of the unsuccessful Suppliers shall be returned to them at the earliest after expiry of the final bid validity period and latest by the 30<sup>th</sup> day after the award of the contract. However, in case of two packet or two stage bidding, Bid securities of unsuccessful Suppliers during first stage i.e. technical evaluation shall be returned within 30 days of declaration of result of first stage i.e. technical evaluation.</del></p> <p>iv) <del>Bid security shall be refunded to the successful Supplier on conclusion of the Order/ receipt of a performance security (if applicable).</del></p>
<b>1.5</b>	<del>EMD shall not carry any interest.</del>
<b>2</b>	<b>PART-II BID OPENING IS SUBJECT TO FOLLOWING CONDITIONS:</b>
	i) Qualification of Technical and/or Financial PQR as applicable.

	<p>ii) Techno-commercial compliance to the NIT (Bid).</p> <p>iii) Mandatory conformance to applicable Govt. of India rules/ guidelines/ notifications/ circulars as issued or amended time to time.</p>																					
<b>3</b>	<b>REGISTRATION IN BHEL-PEM</b>																					
	<p>It is strongly recommended that suppliers get themselves registered in BHEL-PEM as a "Regular Supplier". Regular Suppliers for the package are informed about the floated tender enquiries by BHEL-PEM. Suppliers to apply online through registration portal available at <a href="http://www.pem.bhel.com - Vendor Section - Online Supplier Registration">www.pem.bhel.com - Vendor Section - Online Supplier Registration</a>. All credentials and/or documents duly signed and stamped related to registration can be uploaded &amp; submitted online through the website.</p>																					
<b>4</b>	<b>TECHNICAL PQR</b>																					
	<p><b>a) <del>Technical PQR: Not Applicable</del></b></p> <p><b>b) Technical PQR: Applicable</b></p> <p>i) Supplier has to provide the details as per TECHNICAL PQR in its Offer. Supplier to note that bids of only those Supplier(s) shall be evaluated who meet the Pre-Qualifying requirements.</p> <p>ii) This item/package /system falls under the list of items defined in para 3 of ministry of finance guideline dated 20.09.16 (Procurement of items related to Public safety, Health, Critical Security operations &amp; Equipment's etc.) &amp; hence criteria of prior experience/Turnover shall be same for all the Suppliers including Start-up/MSME.</p>																					
<b>5</b>	<b>FINANCIAL PQR</b>																					
	<b>a) Financial PQR: Not Applicable</b>																					
<b>5A</b>	Above terms of BHEL PQR(s) shall prevail in conflict (if any).																					
<b>6</b>	<b>INTEGRITY PACT (IP)</b>																					
<b>6.1</b>	<b>a) IP: Not Applicable</b>																					
<b>7</b>	<b>PQR DOCUMENTS VERIFICATION</b>																					
	<p>Suppliers to ensure that Third party / Customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document / certificate issuing authority in the format given below. Suppliers to furnish latest verification details for checking veracity of document(s) by the Buyer. In case the same is found not available, Buyer has right to reject such document(s) from evaluation: -</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Sl. No.</th> <th>Project Name</th> <th>Customer Name, Contact Address, Phone No. &amp; Email ID</th> <th>Contract/ Order No.</th> <th>Value of Contract/ Order</th> <th>Brief of Work</th> <th>Completion Date</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sl. No.	Project Name	Customer Name, Contact Address, Phone No. & Email ID	Contract/ Order No.	Value of Contract/ Order	Brief of Work	Completion Date														
Sl. No.	Project Name	Customer Name, Contact Address, Phone No. & Email ID	Contract/ Order No.	Value of Contract/ Order	Brief of Work	Completion Date																
<b>8</b>	<b>CONFLICT OF INTEREST</b>																					

	<p>A Supplier shall not have conflict of interest with other Suppliers. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. <b>The Supplier found to have a conflict of interest shall be disqualified.</b> A Supplier may be considered to have a conflict of interest with one or more parties in this bidding process, if:</p> <ul style="list-style-type: none"> <li>a) they have controlling partner (s) in common; <b>or</b></li> <li>b) they receive <b>or</b> have received any direct or indirect subsidy/ financial stake from any of them; <b>or</b></li> <li>c) they have the same legal representative/agent for purposes of this bid; <b>or</b></li> <li>d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Supplier, <b>or</b></li> <li>e) Supplier participates in more than one bid in this bidding process. Participation by a Supplier in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from. one bidding manufacturer in more than one bid; <b>or</b></li> <li>f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following: <ul style="list-style-type: none"> <li>f.i. The principal manufacturer directly or through one Indian agent on his behalf; and</li> <li>f.ii. Indian/foreign agent on behalf of only one principal,</li> </ul> <p style="text-align: center;"><b>or</b></p> </li> <li>g) A Supplier or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid,</li> <p style="text-align: center;"><b>or</b></p> <li>h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Suppliers must proactively declare such sister/ common business/ management units in same/ similar line of business.</li> </ul>
<b>9</b>	<b>LIMIT FOR SUPERVISION OF E&amp;C CHARGES</b>
	NA
<b>10</b>	<b>DETAILED PRICE BREAK-UP</b>
	<p>Suppliers to mention freight/GST percentage for all the items as part of un-priced bid to be submitted along with their Techno-Commercial offer. Detailed Price Break-up shall be submitted by Supplier within Three (03) working days of Reverse Auction.</p> <p>If Price Break-up is not furnished within 03 working days, Buyer shall proceed ahead with its Price Break-up, which shall be binding on the Supplier.</p>
<b>11</b>	<b>PRICES</b>
	Prices shall be FIRM for the entire scope of work in line with the tender documents and subsequent clarifications / confirmations till completion of Order / Contract.
<b>12</b>	<b>DELIVERY SCHEDULE &amp; CONTRACT VALIDITY</b>

<p>12.1</p>	<p><b>1. Delivery Schedule</b></p> <p><b>a) Main Supply including quantity variation:</b> Delivery completion for Main supply shall be ... “135” ... days from the PO date.</p> <p><b>b) Services (if applicable) - Demonstration Test etc.:</b> Supplier to depute its service engineer for respective site activity within 15 days from BHEL's intimation.</p> <p><b>2.</b>Supplier to start manufacturing/supply only after getting the applicable engineering Drgs. /docs approved from Buyer/ Owner. Drawings /documents submission/re-submission schedule shall be below which shall be used for progress monitoring purpose and required course correction, if any.</p> <p style="padding-left: 40px;">1st submission of drawings / documents – 11 days  BHEL comments – 08 days  Re-submission of drawings / documents – 8 days  BHEL &amp; Customer comments / approval – 18 days</p> <p><b>3.</b>The delivery date specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule. The delivery conditions specified are for contractual purposes. However, to meet project requirement, the Buyer may ask for early deliveries without any compensation thereof.</p> <p><b>4.</b> Delivery period mentioned in GeM portal is tentative. Above mentioned delivery schedule shall prevail.</p>
<p>12.2</p>	<p><b>1. Validity of Contract (PO rates, terms and conditions):</b> Supplier has to make supply of goods/services as per the delivery time mentioned above. However, due to unavoidable circumstances where there is delay in providing inputs/ clearances from the Buyer (inputs, engineering approvals, deputing inspector for inspection, issuance of MDCC and/or any hold put by the Buyer for whatever reasons during execution of contract etc.) delivery time extension is admissible as per point no.3 below. In such situation it shall be obligatory on part of the Supplier to execute the contract at PO rates, terms and conditions provided inputs/ clearances have been accorded within validity of contract. Validity period for various activities shall be as defined below: -</p> <p><b>1.1 Validity of the contract for main supply including quantity variation:</b></p> <p>Contract shall be valid for .....180.... days from the PO date. However, delay at Supplier’s end (if any) shall be added to the validity period and contract validity shall get extended by the delay period at Supplier’s end.</p> <p>For example: Original Delivery period for main supply: A (in days)  Delay at Supplier’s end: B (in days beyond “A” days)  Contract validity: C+B (in days)  Supplier to note that B is the Supplier delay days beyond original contractual delivery period for main supply /extended delivery period owing to time taken by BHEL.</p> <p><b>1.2 Validity of the contract for Supply of <del>Mandatory Spares</del> Services (other than PG test) applicable in the contract:</b>  Validity of contract for supply of mandatory spares/ services applicable in the contract shall be one year over and above contractual validity period for main supply including quantity variation as specified at point no. 1.1 above.</p>

	<p><del><b>1.3 Validity of contract for Performance Guarantee (PG) test:</b> Validity of contract for PG test shall be till completion of the PG Test.</del></p> <p>2. Main supply including quantity variation, <del>mandatory spares/</del> services applicable in the contract released/ cleared for manufacturing within contractual validity period, to be supplied by Supplier at PO rates, terms and conditions.</p> <p>3. Execution of the contract quantities released beyond contract validity period shall be decided on mutual consent basis at PO rates, terms and conditions.</p>
<b>13</b>	<b>TERMS OF DELIVERY AND INSURANCE</b>
	<p>13.1 Terms of delivery shall be F.O.R. dispatch station. All dispatches shall be through Road Carriers on Freight Pre-Paid basis. E-way Bill will be arranged by Supplier as per GST law.</p> <p>13.2 Unloading of items at delivery point shall be in the scope of Buyer.</p> <p>13.3 Transit Insurance shall be in the Supplier's account.</p>
<b>14</b>	<b>DOCUMENTS FOR DISPATCH</b>
	<p>Supplier to submit copy of following documents by e-mail immediately on dispatch:</p> <ul style="list-style-type: none"> <li>i) Tax Invoice/ e-Invoice (as applicable),</li> <li>ii) LR,</li> <li>iii) Packing List,</li> <li>iv) Insurance Intimation,</li> <li>v) E-way bill (as applicable),</li> <li>vi) Copy of BHEL MDCC</li> </ul>
<b>15</b>	<b>PAYMENT TERMS</b>
	<p><b>15.1 Payment of Main Supply <del>including Mandatory Spares (if any):</del></b> 100% Payment shall be released against Consignee Receipt-cum-Acceptance Certificate (CRAC)/MRC (Material Receipt Certificate) on submission of bills.</p> <p><b>15.2 Payment of Service(s) Charges:</b> 100% payment shall be released after successful completion of the activity on pro rata basis against CRAC/ certification by Buyer's Site or Engineering (as applicable) on submission of bills.</p> <p><b>15.3 Documents for Payment:</b></p> <p><b>a) <u>For Supply including Mandatory Spares (if any):</u></b></p> <ul style="list-style-type: none"> <li>i) Original Tax Invoice/e-Invoice (as applicable),</li> <li>ii) Packing List,</li> <li>iii) LR/Receipted LR,</li> <li>iv) CRAC/MRC (issued by project site engineer of Buyer/Owner),</li> <li>v) Guarantee Certificate,</li> <li>vi) E-way bill (as applicable),</li> </ul>

- vii) Copy of valid Insurance document and Intimation,
- viii) Proof for submission of Performance Security (if applicable),
- ix) Copy of BHEL MDCC,
- x) PVC Calculation & copy of all applicable indices (if PVC is applicable)

**b) For Services:**

- i) Original Tax Invoice/e-Invoice (as applicable) &
- ii) CRAC/certification by Buyer's Site or Engineering (as applicable)

**15.4** Payments to Supplier's shall be released only after:

- a) Supplier has declared such invoice in GSTR-1as per the relevant GST Act.
- b) The tax component charged by the Supplier in the invoice matches with the details uploaded by the Supplier in GSTR-1and GST liability is discharged through GSTR 3B.

In case, any GST credit is delayed/denied to the Buyer due to non/delayed receipt of goods and/or tax invoice or expiry to timeline prescribed in the relevant GST Act for availing such ITC, or any other reasons not attributable to the Buyer, tax amount shall be recovered from the Supplier along with interest levied/ leviable on the Buyer.

**15.5** RXIL is an initiative instituted by Govt. of India for MSMEs. PEM strongly advise all the MSME suppliers to get themselves registered on RXIL(TreDs) for faster payments.

**15.6 Time line for Payment:** Payment shall be made within timeline as mentioned below from the date of issue of consignee receipt-cum-acceptance certificate (CRAC)/MRC/Completion of Services certified by Buyer's Site/Engineering.

- a) Within 45 days for Supplier qualified and registered as Micro or small enterprises as per MSMED Act
- b) Within 60 days for Supplier qualified and registered as Medium enterprises as per MSMED Act
- c) Within 90 days for suppliers other than (a) & (b) above

The supplier shall ensure submission of complete documents along with the bill. In case of incomplete documents, the bill shall be rejected, and next due date shall start from the date of closure of discrepancy by the Supplier.

**Provision of payment outside GeM shall be utilized.**

**15.7** Notwithstanding anything to the contrary contained in any other document comprising the contract, no interest shall be payable by the Buyer to the Supplier on any money or balances including but not limited to the security amount, Performance Security amount, bank guarantee amount, EMD, retention money, any bills or any amount withheld which may become due owing to difference or misunderstanding or any dispute between the Buyer and the Supplier, or any delay on the part of Buyer in making periodical or final payment or any other aspects incidental thereto.

<b>16</b>	<b>PERFORMANCE SECURITY</b>
<b>16.1</b>	<b>a) Performance Security: Not Applicable</b>

**b) Performance Security: Applicable**

Supplier may opt any of the following for submission of Performance Security:–

~~16.1.1: Initially 10% of the contract value (Total Order value excluding PVC). 5% of the contract value (excluding PVC) will be released after completion of Main Supply based on certification by PG. However, balance 5% of the contract value (excluding PVC) will be released on completion of all contractual obligations, including guarantee/warranty obligations based on certification by PG.~~

~~Or~~

~~16.1.2: 5% of the contract value (total Order value excluding PVC). Additional 5% of the contract value (excluding PVC) will be deducted & retained from first bill & subsequent bill(s) of the same contract (in case the value of first bill is less than 5% of the contract value). The retention amount will be released after completion of Main Supply based on certification by PG. However, balance 5% of the contract value (excluding PVC) will be released on completion of all contractual obligations, including guarantee/warranty obligations based on certification by PG.~~

~~This percentage supersedes the GeM enquiry SD/Performance Security percentage.~~

~~Single bank guarantee of 10% value from will be given by those bidders who will secure Purchase orders having total cumulative value more than 20 L. In case, contract value is less than 20 L, BG shall be not applicable.~~

**16.2**

~~**Modes of Deposit:** Supplier has to furnish Performance Security in the following forms:~~

- ~~(i) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL.~~
- ~~(ii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.~~
- ~~(iii) Fixed Deposit Receipt 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).~~
- ~~(iv) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).~~
- ~~(v) Insurance Surety Bond.~~

~~BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.~~

**16.3**

~~Performance Security is to be furnished within 14 days from the date of PO/LOA and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations. Initial validity of Performance Security shall be as per GeM Bid. However, Performance Security validity is to be extended based on the actual delivery of package.~~

16.4	<p><del>Performance Security value can be proportionately reduced after completion of Guarantee Period Unit wise/ Stage wise/Set wise/Scope wise (Main Supply/Mandatory spares/Services excluding PG test) subject to the units/sets/stages/Scope (Main Supply/Mandatory spares) being explicitly specified in delivery terms in the contract. However, Performance Security for the last unit/set/stage will be released only after completion of all contractual liability or guarantee period, whichever is later.</del></p>
16.5	<p><b><u>Forfeiture and Release/Return of Performance Security:</u></b></p> <p><del>i) The Performance Security will be forfeited and credited to BHEL's account in the event of a breach of contract by the Supplier.</del></p> <p><del>ii) Performance Security shall be refunded to the Supplier without interest, after he duly performs and completes the contract in all respects but not later than 60 (Sixty) days of completion of all such obligations including guarantee/warranty under the contract.</del></p> <p><del>iii) If Performance Guarantee (PG)/ Demonstration Test and handing over of the system/ package (if applicable), as per Order/ Contract is not conducted up to 36 months from supply completion for reasons not attributable to the Supplier then Performance Security for total contract shall be released on submission of undertaking by the Supplier that Performance Guarantee (PG)/ Demonstration Test and handing over of the system/ package shall be conducted as and when required by Buyer.</del></p>
16.6	<p><del>The Performance Security shall not carry any interest.</del></p>
17	<p><b>LIQUIDATED DAMAGES (LD):</b></p>
	<p>Timely dispatch/delivery and completion of other schedules as stipulated in Order/Contract shall be the essence of Order/Contract. If the Supplier fails to complete the dispatch/delivery and other schedules within the time period stipulated in Order/Contract, or within any extension of time granted by the Buyer, it shall be lawful for Buyer to recover damages for breach of Order/Contract and hereunder.</p> <p><b>17.1</b> Buyer reserves the right to recover from the Supplier, as agreed liquidated damages and not by way of penalty, a sum equivalent to half (½) percent of the total main supply contract value excluding GST per week or part thereof, subject to a maximum of ten (10) percent of the total of main supply contract price excluding GST, if the Supplier fails to deliver any part of the ordered goods/stores within the period stipulated in the Order/ Contract.</p> <p><b>17.2</b> LD on service portion where delivery for services are defined separately in the Order/Contract. LD shall be applicable @ ½ percent, of the total service contract value excluding GST per week or part thereof. However, total LD (main supply and services) shall be limiting to 10% of cumulative total contract value (main supply +services) excluding GST.</p> <p><del><b>17.3</b> LD on mandatory spares portion where delivery for mandatory spares is defined separately in the Order/Contract. LD shall be applicable @ ½ percent, of the total of mandatory spares contract value excluding GST per week or part thereof, limiting to 10% of total contract value of mandatory spares excluding GST.</del></p> <p><b>17.4</b> In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s).</p>

	<p><b>17.5</b> LR/RR date for indigenous supplies shall be treated as the date of dispatch for levying LD. However, if date of receipt at site for indigenous supply is beyond the maximum validity of E-way bill as per extant govt. GST law then such excess period shall also be considered for LD purpose irrespective of the dispatch date.</p> <p><b>17.6</b> If Order/ Contract involves two or more Units/ Sets/ Stages, then Liquidated Damages shall be levied on order/ contract value excluding GST of the delayed Unit/ Set/ Stage, provided delivery stipulated in the Order/ Contract is Unit/ Set/ Stage wise and total LD amount shall be limited to 10% of total Order/ amended Order value excluding GST of delayed Unit/ Set/ Stage.</p> <p><b>17.7</b> The sum specified above is not a penalty but a genuine pre-estimate of the loss/ damage which will be incurred by the Buyer directly or indirectly on account of delay in delivery of material/equipment/services on the part of the Supplier and the said amount will be deductible without proof of actual loss or damage caused by such delay.</p>
<b>18</b>	<b>GUARANTEE TERMS</b>
	<p><b>18.1</b> Guarantee Period (Unit-wise, Stage-wise, Set-wise, System-wise - as applicable) for Supply package shall be Eighteen (18) months from the date of last dispatch.</p> <p><b>18.2</b> All Shortages/damages in sound cases shall be replenished free of cost by the Supplier, as early as possible however, not exceeding more than 45 days from the time of reporting the shortage/damage.</p> <p><b>18.3</b> For shortages/damages during transit, Supplier shall supply replacements free of cost as early as possible, within 45 days from the time of reporting the defect/ loss/ rejection etc. by the Buyer/ Owner/ Site.</p> <p><b>18.4</b> For shortages/damages during handling at site, Supplier shall supply replacements, as early as possible, at the old contractual rates upon intimation to Supplier within 45 days from the time of reporting the defect/ loss/ rejection etc.</p> <p><b>18.5</b> All replacements and repairs during the guarantee period shall be delivered and completed promptly and satisfactorily within a period of 45 days from the time of reporting the defect/ loss/ rejection etc. Damaged items/parts can be taken back by Supplier on his own cost with the permission of Owner.</p> <p><b>18.6</b> All the replaced and replenished plant/ equipment/ stores shall also be guaranteed as per PO terms.</p>
<b>19</b>	<b>INSPECTION</b>
	<p><b>19.1</b> Buyer and/or Buyer's nominated Inspection Agency shall have at all reasonable times access to Supplier's premises or works and shall have the power at all reasonable times to inspect drawings of any portion of the work or examine the materials and workmanship of the plant/ equipment/ stores during their manufacture, and if part of the plant/ equipment/ stores is manufactured at other premises, the Supplier shall arrange for inspection, examination and testing by the Inspection Agency as if the plant/ equipment/ stores is manufactured on the</p>

	<p>Supplier's premises. Procedure for approval of works shall be as per the procedure given on <a href="https://cqir.bhel.in/Cqir/jsp/Masters/Help_File_for_suppliers.pdf">https://cqir.bhel.in/Cqir/jsp/Masters/Help_File_for_suppliers.pdf</a></p> <p>Inspection calls should be raised by the Supplier on BHEL - Quality Surveillance System (<a href="https://cqir.bhel.in">https://cqir.bhel.in</a>).</p> <p>Such inspection, examination and testing by itself shall not relieve the Supplier from any obligation under the Order/ Contract.</p> <p><b>19.2</b> Supplier shall give Inspection Agency reasonable notice of 15 days of any material being ready for testing and the Inspection Agency shall (unless the inspection of tests is voluntarily waived) attend at the Supplier's premises within seven (7) days of the date on which the material is notified as being ready. Tests are to be performed as per Buyer approved QAP (if applicable).</p> <p><b>19.3</b> In case of delay in witnessing of inspection beyond stipulated time (i.e. 7 days from the proposed date of inspection as notified by the Supplier through e-mail/call raised on BHEL - Quality Surveillance System (<a href="https://cqir.bhel.in">https://cqir.bhel.in</a>) by the Buyer arising due to reasons not attributable to Supplier, Buyer will extend the delivery period for such delay in witnessing inspection. If the Buyer is not able to witness inspection up to 15 days then in addition to delay beyond stipulated period, 7 days' additional time shall also be given to the Supplier to facilitate for arranging fresh inspection.</p> <p><b>19.4</b> Where the Order/ Contract provides for tests/ inspections at the premises or works of the Supplier or any Sub-Contractor, the Supplier, except specified otherwise, shall provide free of charge such assistance, labour, materials, electricity, fuel, water, stores, apparatus, measuring instruments and test equipment including any other facilities as may be reasonably required to carry out such tests efficiently.</p>
<b>20</b>	<b>MATERIAL DISPATCH CLEARANCE CERTIFICATE (MDCC)</b>
	<p><b>20.1</b> When the tests have been satisfactorily completed at Supplier's works, the Inspection Agency shall issue an inspection report that effect within seven (07) days after completion of the tests, but if the tests were not witnessed by the Inspection Agency or his representative, the material acceptance report would be issued within seven (07) days after receipt of the test certificates by the Buyer.</p> <p><b>20.2</b> Buyer will issue MDCC to the Supplier within 7 days based on inspection report/ test certificates/Certificate of Conformance as applicable. In case of delay in issuance of MDCC beyond 7 days stipulated time (i.e. from the date of receipt of Inspection Report/Test certificates), by the Buyer due to reasons not attributable to the Supplier, Buyer shall extend the delivery period for such delay in issuing MDCC. If the Buyer is not able to issue MDCC up to 15 days then in addition to delay beyond stipulated period, 7 days' additional time shall also be given to the Supplier to facilitate for arranging logistics arrangements.</p> <p><b>20.3</b> Supplier shall not dispatch any material before issue of MDCC by the Buyer.</p>
<b>21</b>	<b>PACKING LIST</b>

	<p>Packing shall be in conformity with specifications and shall be such as to ensure prevention of damages, corrosion, deterioration, shortages, pilferage and loss in transit or storage.</p> <p>Suppliers to submit Packing List along with advance set of documents for claiming payment which must indicate:</p> <ul style="list-style-type: none"> <li>i. No. of boxes</li> <li>ii. Packing size.</li> <li>iii. Gross weight and net weight of each package.</li> <li>iv. Contents of the package with cross reference to BoM item code no. or item serial no.</li> <li>v. Quantity of each item separately.</li> </ul> <p>The Packing list must cover all the BoM items and supplier to give the following undertaking in the Packing List: “The Packing List provided herewith is as per the BoM approved under Contract No.- .....dated- .....”</p>
22	<p><b>DELIVERY EXTENSION: EXTENSION OF CONTRACTUAL DELIVERY TIME</b></p>
	<p>Delivery time mentioned in the NIT includes Engineering completion time (time for drawing/document submission/resubmission by the Supplier and review/approval of the same by the Buyer/Owner), manufacturing, inspection, Packing and dispatch time. Due diligence is to be observed by the Supplier to ensure timely completion of engineering and supply.</p> <p>During the execution of the contract, time loss occurred owing to the reason attributable to the Buyer besides force majeure shall be considered for delivery time extension to the Supplier as given below:</p> <ul style="list-style-type: none"> <li>i) Any Delay in providing comments/ approval on Primary drawing/documents beyond the stipulated time as specified in NIT.</li> <li>ii) Time Loss in approval of the drawing/document as a result of increase in the iteration not attributable to the Supplier (i.e. resubmission owing to end customer comments) as certified by Buyer. Time extension equivalent to the resubmission time noted in the tech. spec and consequential increase in the approval time in lieu of increase in iteration shall be applicable. However, for incomplete re- submission time loss shall be in the Supplier’s account.</li> <li>iii) Delay in providing engineering input by Buyer.</li> <li>iv) Delay in deputing inspector for inspection and delay in release of MDCC in line with clause no. 20 above.</li> <li>v) Any hold put by Buyer for whatever reasons during execution of contract (within contract validity period), time extension equivalent to hold period shall be admissible. However, in the event hold period continues for more than 30 days then, an additional 15 days for the purposes of mobilization and demobilization of resources shall also be admissible.</li> </ul> <p>Supplier to note that Extension in delivery period if any with or without imposition of LD shall be considered after detailed delay analysis based on provisions given above. Supplier to provide dates of drg./doc. submission &amp; re-submission (if any) within 7 days of Cat-I approval. However, no delay analysis will be applicable if supply is completed within delivery schedule as specified in Order/ Contract.</p>
23	<p><b>BREACH OF CONTRACT, REMEDIES AND TERMINATION</b></p>

	<p>In case of Breach of Contract, BHEL shall recover 10% of the contract value from the Supplier using following instruments:</p> <p>(i) encashment of security instruments like EMD, Performance Security with PEM against the said contract.</p> <p>(ii) balance amount (if value of security instruments is less than 10% of the contract value) from other financial remedies i.e. available bills of the Supplier, retention amount etc. with PEM.</p> <p>(iii) balance amount from security instruments like EMD, Performance Security and other financial remedies i.e. available bills of the Supplier, retention amount etc. with other units of BHEL.</p> <p>(iv) Any other mode as deemed fit by the Buyer at its sole discretion.</p> <p>(v) if recovery is not possible then legal remedies shall be pursued.</p> <p>However, Supplier shall continue performance of the Order/ Contract, under all circumstances, to the extent not cancelled.</p>
<b>24</b>	<b>SUSPENSION OF BUSINESS DEALINGS</b>
	The "Guidelines on Suspension of Business Dealings with Suppliers/ Contractors" is placed at <a href="https://www.bhel.com/supplier-registration">https://www.bhel.com/supplier-registration</a> and, same shall prevail over Incident Management Policy of GeM.
<b>25</b>	<b>SUPPLIER PERFORMANCE MONITORING AND RATING SYSTEM</b>
	Supplier's performance will be evaluated as per Supplier Performance Monitoring and Rating System of BHEL. Please refer BHEL website <a href="http://www.bhel.com">www.bhel.com</a> for details.
<b>26</b>	<b>CONFIDENTIALITY</b>
	Supplier shall, at all times, undertake to maintain complete confidentiality of all data, information, software, drawings & documents, etc. belonging to the Buyer and also of systems, procedures, reports, input documents, manuals, results and any other company documents discussed and/ or finalized during the course of execution of Order/ Contract. i.e. Supplier shall in no way share or use such intellectual property of Buyer to promote his own business with others. Buyer reserves the right to claim damages from the Supplier, or take appropriate penal action as deemed fit against the Supplier, for any infringement of the provisions contained herein.
<b>27</b>	<b>INTELLECTUAL PROPERTY &amp; LICENSES</b>
	<p>If any patent, design, trademark, trade secret or any other intellectual property rights apply to the delivery or accompanying documentation/drawings, Buyer or its customer shall be entitled to the legal use thereof free of charge by means of a non-exclusive, assignable, transferrable, sub-licensable, worldwide, perpetual license. All intellectual property rights that arise due to the execution of the delivery by the Supplier and by its employees or third parties involved by the Supplier for the performance of the contract shall be promptly notified by the Supplier to the Buyer and shall be deemed to belong to the Buyer. The Supplier shall be obligated to cooperate with the Buyer and do everything necessary to obtain or perfect the above-mentioned rights in favour of the Buyer.</p> <p>The Supplier represents and guarantees that the delivery does not infringe on any of the intellectual property rights of third parties. In the event a third party makes a claim, the Supplier shall also be obligated to do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged) claims by third parties.</p>

	<p>The Supplier agrees to indemnify, defend and hold harmless the Buyer, its officers, employees, agents, representatives, successors, assignees or any of the Buyer's customers buying or using the goods or services specified herein, against any actual or alleged infringement of such intellectual property interests, claims by third parties in this regard and shall pay to the Buyer merely on demand without demur and without requiring the Buyer to furnish any proof of such claim, such sum as indicated in the demand towards any liabilities, damages, penalties, injuries, claims, demands, actions, cost and expenses etc. suffered as a result thereof.</p> <p>The Supplier agrees that its liability under this clause shall be unlimited.</p>
<b>28</b>	<p>Bidders to, Ensure compliance of Ministry of Finance (MoF) Order (Public Procurement No. 4) F. No. 7/10/2021(1) PPD dt. 23.02.23.</p> <p>to submit "Model Certificate for Tenders" as per Annexure-III of Ministry of Finance (MoF) Order (Public Procurement No. 4), dt:- 23/02/23</p> <p>Note: Subsequent orders/circulars to be checked and to be complied.</p>
<b>29</b>	PVC is not applicable.
<b>30</b>	Being non- divisible package, MSE preference shall not be given.
<b>31</b>	Quantity variation - Nil
<b>32</b>	Demonstration & Handing over charges shall be as per ANNEXURE-I TO SECTION-II of technical Specification No. PE-TS-426-556-E003, Rev-00. These are fixed charges and the same will not be part of evaluation. Separate PO's as applicable (vendor/item wise) for Demonstration & Handing over charges shall be placed separately outside GeM.
<b>33</b>	All other terms & conditions shall be as per GeM bid, above GeM Additional Terms & Condition and GTC on GeM 4.0 (version 1.14 dated 31.01.24).

**1X660 MW PANKI UNIT-6, T.P.S**  
**PACKAGE- ELECTRICAL LAB (Metering & Testing)**  
**ANNEXURE-I**

**BOQ-CUM PRICE SCHEDULE**

**ELECTRICAL TESTING LAB EQUIPMENTS**

SL. NO.	CODE	ITEM DESCRIPTION	QUANTITY	UNIT	MAKE	MODEL NO.
1	556-13049-A	Portable Digital DC Resistance Meter	1	No.		
2	556-13054-A	Portable Automatic Earth Tester	1	No.		
3	556-13044-A	Portable Digital Frequency Meter	2	Nos.		
4	556-13007-A	Portable Light Intensity Meter (Lux Meter)	3	Nos.		
5	556-13092-A	Demonstration-Man Days Rate	1	Set	Refer Note-4 below	
6	556-13093-A	Demonstration-Visit Rate	1	Lot	Refer Note-4 below	
Note:-						
1	EQUIPMENT TO BE SUPPLIED ALONG WITH ESSENTIAL ACCESSORIES FOR SUCCESSFUL OPERATION OF EQUIPMENT AT SITE i.e. CLAMPS, CLIPS, LEADS, CARRYING CASE etc.					
2	ALL EQUIPMENTS SHALL BE SUPPLIED WITH VALID CALIBERATION CERTIFICATE, WHEREVER APPLICABLE.					
3	ALL EQUIPMENT SHALL BE PROPERLY PACKED IN GALVANIZED SHEET STEEL TRUNK/BOX WITH PROPER LOCK & KEY ARRANGEMENT EXCEPT FOR EQUIPMENTS WHICH ARE TROLLEY MOUNTED OR ARE ALREADY AVAILABLE IN RUGGED STEEL/WOODEN BOX PACKING. FURTHER, ANY DAMAGE(READING ERROR/CALIBERATION ERROR/BROKEN PARTS etc.) FOUND ON RECEIPT AT SITE, LEADING TO REPLACEMENT OF PARTS/WHOLE ITEM, SHALL BE TO BIDDER'S ACCOUNT					
4	DEMONSTRATION & HANDING OVER TO BHEL/BHEL'S CUSTOMER CHARGES SHALL BE AS PER ANNEXURE-I (SECTION-II) OF TECHNICAL SPECIFICATIONS #PE-TS-426-556-E003A					

## **Annexure II**

**An undertaking regarding Model Clauses on company letter head only**

**(To be provided along with bid)**

Reference: NIT No.-

Package: - Electrical Lab Equipment (Metering & Testing)

Project: 1x 660 MW Panki TPS

### **TO WHOM SO IT MAY CONCERN**

This is with reference to Ministry of Finance circular dated 23.02.23 reg. restriction under rule 144 (xi) of GFR.

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I hereby certify that M/s ..... (bidder name) is not from such a country and is eligible to be considered/participate in tender enquiry for against aforesaid tender enquiry.

Sign & Signature (Not below Director/owner of the company)

Date:

Place:

**ANNEXURE III**  
**1x 660 MW Panki TPS**  
**Electrical Lab Equipment (Metering & Testing)**  
**Letter head of Company**

Ref.....

Date.....

To,  
Bharat Heavy Electricals Limited  
PEM, PPEI Building, Plot No 25,  
Sector -16A, Noida (U.P) -201301

**Subject: - Certification regarding local content**

Reference: Tender Enquiry No-.....

Package: - Electrical Lab Equipment (Metering & Testing)

Project: 1x 660 MW PANKI TPS

Dear Sir,

We hereby certify that items offered by us of Electrical Lab Equipment (Metering & Testing) for 1x 660 MW Panki Project .....(minimum % of local content) meets the requirement of minimum local content in line with applicable clause of Make In India and the Public Procurement (Preference to Make in India), Order 2017 dated- 15.06.2017, 28.05.2018 & 29.05.2019, 04.06.20, 16.09.20 and subsequent order dated 16.11.21.

We further confirm that details of location at which the local value addition is made will be our registered works at .....(address of the works)

Yours very truly

..... (authorized signatory of company)

..... (firm name)

authorized signatory  
of company

**1 X 660 MW PANKI TPS**

**VOLUME II B**

**TECHNICAL SPECIFICATION  
FOR  
ELECTRICAL LAB EQUIPMENT (METERING & TESTING)**

**SPECIFICATION NO.: PE-TS-426-556-E003, REV. 00**



**BHARAT HEAVY ELECTRICALS LIMITED  
POWER SECTOR PROJECT ENGINEERING MANAGEMENT  
NOIDA, 201301**



1X660 MW PANKI TPP  
TECHNICAL SPECIFICATION FOR  
ELECTRICAL LAB EQUIPMENT (METERING & TESTING)

Doc. No. PE-TS-426-556-E003

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	<b>1X660 MW PANKI TPS</b> <b>TECHNICAL SPECIFICATION FOR ELECTRICAL</b> <b>LABORATORY EQUIPMENTS (METERING &amp; TESTING)</b>	<b>Doc. No. PE-TS-426-556-E003</b>	
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<b>COMPLIANCE CERTIFICATE</b>		<b>Rev. : 00 DATE-</b>	

### COMPLIANCE CERTIFICATE

The bidder shall confirm compliance to the following by signing/ stamping this compliance certificate and furnishing same with the offer.

1. The scope of supply, technical details, construction features, design parameters etc. shall be as per technical specification & there are no exclusion/ deviation with regard to same.
2. There is no deviation with respect to specification other than those furnished in the 'schedule of deviations'
3. Only those technical submittals which are specifically asked for in NIT to be submitted at tender stage shall be considered as part of offer. Any other submission, even if made, shall not be considered as part of offer.
4. Any comments/ clarifications on technical/ inspection requirements furnished as part of bidder's covering letter shall not be considered by BHEL, and bidder's offer shall be construed to be in conformance with the specification.
5. Any changes made by the bidder in the price schedule with respect to the description/ quantities from those given in Annexure-A [BOQ-Cum-Price schedule] of the specification shall not be considered (i.e., technical description & quantities as per specification shall prevail).
6. All essential accessories for each electrical laboratory equipment required for testing various electrical equipment /devices during Commissioning, Operation and Maintenance of power plant to be ensured by bidder in their offer.

-----  
 BIDDER'S STAMP & SIGNATURE

	<b>4X270 MW PANKI TPS</b> <b>TECHNICAL SPECIFICATION FOR ELECTRICAL</b> <b>LABORATORY EQUIPMENTS (METERING &amp; TESTING)</b>	<b>Doc. No. PE-TS-426-556-E003</b>	
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	<b>SPECIFIC TECHNICAL REQUIREMENTS</b>		<b>Rev. : 00 DATE-</b>

### 1.0 SCOPE


- 1.1 Design, manufacture, inspection and testing at manufacturer's work, proper packing and delivery to site of Electrical Laboratory Equipment as mentioned in different sections of this specification.
- 1.2 General technical requirements of the Electrical Laboratory Equipment are indicated in Section – II. Project specific technical requirements/changes are listed in section-I.
- 1.3 Electrical Laboratory Equipment shall be supplied along with all essential accessories required for the successful operation of the equipment.
- 1.4 Detailed technical parameters of Electrical laboratory equipment are listed in Annexure – I of Section-I.
- 1.5 The requirement of section-1 shall prevail and govern in case of conflict between the corresponding requirements of Section-I and section-II.

### 2.0 BILL OF QUANTITIES

- 2.1 Quantity requirement shall be as per 'BOQ cum price schedule' enclosed in NIT.
- 2.2 Supplier to also give the following undertaking in the BOM: "The BoM provided herewith completes the scope (in content and intent) of material supply under PO No. -----, dated -----. Any additional material which may become necessary for the intended application of the supplied item(s)/package will be supplied free of cost in most reasonable time."

### 3.0 SPECIFIC TECHNICAL REQUIREMENT

S.No.	Reference Clause No. of Section-II (if any)	Specific Requirement/Change
1	Cl. No. 1.9	In addition to the clause 1.9 of section-II, Bidder to note that "During contract stage , if it is found that the offered model is not meeting the specification requirement , bidder shall offer higher model of same make meeting specification requirement without any techno commercial implication to BHEL"
2	Cl. no 4.1	Shall be read as "BHEL/BHEL's customer shall witness the testing of equipment. Vendor to furnish test report/calibration certificate to BHEL for review/ acceptance. "

	<b>4X270 MW PANKI TPS</b> <b>TECHNICAL SPECIFICATION FOR ELECTRICAL</b> <b>LABORATORY EQUIPMENTS (METERING &amp; TESTING)</b>	<b>Doc. No. PE-TS-426-556-E003</b>	
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## 9.0 DOCUMENTATION

- 9.1 Documents required after award of LOI/PO shall be follows (to be submitted by successful bidder):

### DOCUMENTS SUBMISSION SCHEDULE

<i>BHEL Drawing No.</i>	<i>Drawing Title</i>
<b>Primary Documents</b>	
PE-V0-426-556-A001	GA/DATA SHEET OF EQUIPMENT WITH DETAILED BOM
PE-V0-426-556-A002	CATALOGUE OF EQUIPMENT
<b>Secondary Documents</b>	
PE-V0-426-556-A003	O&M MANUAL if applicable
PE-V0-426-556-A004	CALIBRATION/TC

#### NOTES:

a) Primary documents shall be considered for Delay analysis

b) Vendor shall submit the dates for drawing/document submission/BHEL comments/ resubmission after approval of documents.

1X660 MW PANKI TPS		
TECHNICAL SPECIFICATION FOR ELECTRICAL LABORATORY EQUIPMENT		
PE-TS-426-556-E003 R00		
Annexure-I of SECTION-I DETAILED TECHNICAL PARAMETERS		
Item no.	Description	Purpose
1.	<p><b>Portable Digital DC Resistance Meter (1 No)</b> Dual channel, direct-reading ohm meter; having a safe discharge circuitry and in-built printer with date &amp; time stamping, software for remote PC control heavy duty connecting cables, clamps, operating manual, test/calibration certificate and transportable case. Having following features : <i>Resistance ranges 25 micro ohm to 6 kilo ohm Resolution</i></p> <p><b>Nom. Range</b> : 0.1 micro ohm  <b>Power Supply</b> : 240V, 50 Hz, 1 phase AC  <b>Accuracy</b> : <math>\pm 0.1\%</math> of reading + 5 digit  <b>Display</b> : 4½ digit backlit LCD (256 x 128)  <b>Data Storage</b> : Upto 1000 measurements  Reading rate : 2 sec  Interface for remote Control : RS232  Test Voltage : 50 V pure DC (Noise &lt; 10mVpp)  Test Current : 0.1 A to 60 A (selectable) pure DC with compliance open circuit voltage of 50V  Measuring inputs : 2- current, 4- Potential (2Channels)</p>	For simultaneous measurement of HV & LV winding resistance and check on OLTC operation
2.	<p><b>Portable Automatic Earth Tester</b> Microprocessor-controlled, user-friendly, with self-diagnostic features and alpha-numeric display, re-chargeable battery. Mounted in a robust case and provided with hammer &amp; 4 GI spikes and 50M long cable on a cable winder. Having following features:</p> <p><b>Earth resistance</b> : 0 Ohm-20K Ohms (Auto ranging)  <b>Resolution Range</b>  Range in ohm Resolution  0-2 0.001  2-20 0.01  20-200 0.1  200-2000 1  2000-20k 10  Accuracy : <math>\pm 2\%</math>, <math>\pm 2</math> digit  <b>Test frequency</b> : 100-160 Hz in 0.5 Hz steps  <b>Test current</b> : 50 mA  <b>Maxm output voltage</b> : &lt;50V (RMS)  <b>Maxm. Interference</b> : 40V peak to peak (50 Hz)  <b>Display</b> : 3½ digit Alpha numeric LCD  <b>Standards</b> : IEC 1010-1, EN 50081-1, EN 50082-1</p>	For measuring earth electrode resistance and soil resistivity using Warner 4- terminal method
3.	<p><b>Portable Digital Frequency Meter (2 Nos)</b> Rugged, high accuracy portable frequency meter/calibrator in a dust-tight, water resistant case. Having LCD display complete with test leads, carrying case, 9V battery and instruction manual.</p> <p><b>Ranges</b> : 0-100 KHZ / 0-1000 Hz  <b>Resol.</b> : 1 KHZ / 0.1 Hz  <b>Accuracy</b> : <math>\pm 0.1\%</math> FS <math>\pm 1</math> LSD</p>	
4.	<p><b>Portable Light Intensity Meter (3 Nos)</b> With selenium/silicon photocell, 2 metres lead and filters.</p> <p><b>Ranges</b> : 0-200/0-2000/0-20000 Lux  <b>Accuracy</b> : <math>\pm 4\%</math> of full scale  <b>Response time</b> : 2.5 times per sec  <b>Other feature</b> :  a) Single-hand-held unit  b) Display resolution : 0.01, 0.1, 1 lux  c) Backlit LCD display  d) Power source : 9V alkaline (re-chargeable)</p>	



**TECHNICAL SPECIFICATION FOR  
ELECTRICAL LABORATORY  
EQUIPMENT (METERING & TESTING)  
EQUIPMENT**

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**SECTION-II**

**STANDARD TECHNICAL SPECIFICATION**



**TECHNICAL SPECIFICATION FOR  
ELECTRICAL LABORATORY  
(METERING & TESTING) EQUIPMENT**

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**TECHNICAL REQUIREMENTS**

- 1.1 Basic technical requirements for Electrical Lab Equipment shall be as indicated in this section, in addition to technical requirements specified in Section-I.
- 1.2 The intent of specification is not to specify herein all the details of design and manufacture. However, the equipment shall confirm in all respect to high standards of design engineering and workmanship and shall be capable of performing in continuous commercial operation up to vendors guarantee.
- 1.3 The Bidder may note that the equipment range, rating, quantities as detailed herein, are the minimum requirement only. All accessories for the equipment not covered here, if necessary for satisfactory and trouble free operation of the equipment, shall be quoted by the Bidder.
- 1.4 The instrument shall be suitable for satisfactory operation at an ambient temperature from 0°C to 55°C.
- 1.5 The Analog instruments shall be provided with knife-edge pointer and anti – parallax mirror.
- 1.6 The Bidder to quote only 'one' make/model against each equipment best to suit specification requirement.
- 1.7 The instrument shall be suitable for hand held operation, rugged in construction and suitable for field use.
- 1.8 All the equipment components shall be procured from reputed manufacturers and make of equipment shall be subject to the approval of BHEL/ BHEL's Customer.
- 1.9 **Bidder to note that "In case any offered make / model becomes obsolete or is stopped manufacturing by manufacturer, next higher model of the same make may be considered for ordering / supply at contract stage, without any price implication. In such cases, bidder is required to furnish valid confirmation letter from OEM as proof of change of model (citing reason: obsolete technology or stopping of manufacturing with date of effect) and that the offered model is "technically equivalent or better".**

**2.0 CODES AND STANDARDS**

Some of the standards, which shall generally be followed, are listed below. Other applicable relevant standards for any component part, even if not covered in listed standards shall be followed.

- i) IS – 6103 Method of test for specific resistance (resistivity) of electrical insulating fluid.
- ii) IS – 6700 Requirements of general purpose Cathode Ray Oscilloscope.
- iii) IS – 722 Specification for AC electricity meters.
- iv) IS – 8143 Specification for plugs & keys for resistance boxes.
- v) IS – 6104 Method of test for interfacial tension of oil against water.
- vi) IEC-51 Direct acting indicating analogue electrical measuring instruments and their accessories.
- vii) Any other relevant National/ International standards as mentioned in Section-II with technical specification.

**3.0 DESIGN CRITERIA:**

- 3.1 Electrical Laboratory Equipment shall be used for metering & testing of various electrical equipment/ devices during Commissioning, Operation and Maintenance of power plant.
- 3.2 The Equipment will be kept in a clean but hot, humid and tropical atmosphere when not in use. Equipment will be placed in dust laden, hot, humid atmosphere during its use.



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3.3 For continuous operation at specified rating, temperature rise of various equipment/ components shall be limited to the permissible value stipulated in the relevant standards and this specification.

**4.0 TEST REQUIREMENTS:**

4.1 Vendor to furnish test report to BHEL for review/ acceptance. BHEL/BHEL's customer may witness the testing of equipment.

**5.0 PACKING:**

All equipment shall be properly packed in Galvanized sheet steel trunk/ box with proper lock & key arrangement except for equipment which are trolley mounted or are already available in rugged steel/wooden box packing. Further, any damage (reading error/calibration error/broken parts/missing parts etc) found on receipt at site, leading to replacement of parts/whole item, shall be to bidder's account.

**6.0 DEMONSTRATION TO BHEL / BHEL'S CUSTOMER**

6.1 The vendor shall be responsible for demonstration of the supplied equipment at site, conforming the satisfactory operation.

6.2 The equipment for which demonstration is required at site shall be intimated by BHEL.

6.3 The charges for visit to site for demonstration at site shall be in-line with Annexure- I of Section-II.

**7.0 PERFORMANCE GUARANTEE**

The bidder shall guarantee that the equipment offered shall meet the requirement as stipulated in this specification and as confirmed by them in Technical Data Sheet. In case the performance of equipment is not as per performance guarantee, the bidder will have to replace the equipment at site free of cost.

**8.0 DRAWING DATA & MANUAL**

8.1 To be submitted with the bid as technical offer:

a) Compliance to Technical parameters of various equipment as specified in Annexure-I of Section-I in Data Sheet – B (as enclosed).

b) Technical leaflets/ Catalogues/Product Manual of the Equipment

The Bidder may note that the drawing, data and manual listed herein are minimum requirement only. The Bidder shall ensure that the other necessary write-ups, curves and information required to fully describe the equipment are submitted with the bid.

8.2 Following documents/drawings shall be submitted after placement of order for BHEL & customer's approval:

a) Technical Datasheet for each equipment

b) Technical leaflets/ Catalogues/Product Manual of the Equipment

c) Tests Reports and calibration certificate

d) General arrangement drawing showing constructional features, accessories, connections, range and rating, mounting arrangement, space requirement etc.

e) Detail instructions for application, assembly & testing of equipment.

f) Wiring and schematic diagrams (if applicable).

g) Instruction manual/ O&M manual of individual equipment



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8.3 Instruction manual/O&M Manual of individual equipment

The manual shall clearly indicate in English the installation and connection method, check list of the tests to be carried out before commissioning of equipment. Maintenance and Calibration method shall also be provided in the manual.

8.4 Bidder to furnish all user instruction manuals, maintenance, handling, installation manuals & all test reports complete in all respect in bound volumes & soft copies to BHEL / BHEL's customer at the time of handing over the same to BHEL / BHEL's Customer.

8.5 Bidder to note that quoted item cost shall include cost of main item, cost of all accessories required for successful operation of equipment and testing cost of all equipment test as per relevant standard.



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ANNEXURE-I OF SECTION – II  
DEMONSTRATION & HANDING OVER CHARGES

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**SCHEDULE OF PRICES FOR DEMONSTRATION & HANDING OVER TO  
BHEL / BHEL'S CUSTOMER**

SL. NO.	DETAILS	ACTIVITY	UNIT CHARGES
1	LUMP SUM ALL INCLUSIVE CHARGES PER VISIT FOR EXPERIENCED / CAPABLE ENGINEER (EXCEPT DAILY CHARGES)	1 VISIT	20000/-
2	LUMP SUM ALL INCLUSIVE CHARGES FOR EXPERIENCED / CAPABLE ENGINEER PER DAY	3 DAY	5000/-

**Note:**

1. TOTAL CHARGES = (Charges as per S.No.1) + [No. of Days(\*) x Unit Charges as per Sl. No. 2]

\*: To be certified by BHEL site

2. Bidder to note that provision of maximum 1 visit amounting to total 3 man days is envisaged for respective bidders.



**1 X 660 MW PANKI TPS  
PACKAGE- ELECTRICAL LABORATORY EQUIPMENTS (Metering and Testing)**


**(ANNEXURE-A)**

**BOQ-CUM PRICE SCHEDULE**

SL. NO.	ITEM DESCRIPTION	QUANTITY	UNITS	MAKE	MODEL	UNIT EX- WORKS PRICE (Rs.)	TOTAL EX-WORKS PRICE (Rs.)	REMARKS
1	Portable Digital DC Resistance Meter	1	No					
2	Portable automatic earth tester	1	No					
3	Portable Digital Frequency Meter	2	Nos					
4	Portable Light Intensity Meter	3	Nos					

**NOTE :-**

- |  |
|--|
| 1) EQUIPMENT TO BE SUPPLIED ALONG WITH ESSNTIAL ACCESSORIES FOR SUCCESSFUL OPERATION OF EQUIPMENT AT SITE .i.e. CLAMPS, CLIPS,LEADS ,CARRYING CASE etc.  |
| 2) ALL EQUIPMENTS SHALL BE SUPPLIED WITH VALID CALIBRATION CERTIFICATE, WHEREVER APPLICABLE.   |
| 3) ALL EQUIPMENT SHALL BE PROPERLY PACKED IN GALVANIZED SHEET STEEL TRUNK/ BOX WITH PROPER LOCK & KEY ARRANGEMENT EXCEPT FOR EQUIPMENT WHICH ARE TROLLEY MOUNTED OR ARE ALREADY AVAILABLE IN RUGGED STEEL/WOODEN BOX PACKING. FURTHER, ANY DAMAGE (READING ERROR/CALIBRATION ERROR/BROKEN PARTS/MISSING PARTS ETC) FOUND ON RECEIPT AT SITE, LEADING TO REPLACEMENT OF PARTS/WHOLE ITEM, SHALL BE TO BIDDER'S ACCOUNT. |

	<b>1 X660MW PANKI TPP</b> <b>PRE-QUALIFICATION REQUIRMENTS FOR</b> <b>ELECTRICAL LAB (METERING &amp; TESTING</b> <b>EQUIPMENT)</b>	DOC. NO. PE-PQ-426-556-E003
		REVISION NO. 0 DATE 26.08.2022
		SHEET NO. 1 OF 1

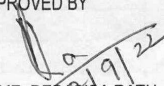
**ITEMS:** Electrical Lab Equipment for Metering, Measuring & Testing

**SCOPE:** Supply : YES; Erection & Commissioning : NO;

1	Vendor can be either OEM (Original Equipment Manufacturer) or Supplier of Electrical Lab (Metering & Testing) equipment.
2	Vendor should have supplied Electrical Lab (Metering & Testing) equipment to process plant/ refinery/ power plant/ nuclear plant / testing Lab.
3	Vendor should be in business of supplying electrical lab (Metering & Testing) equipment for at least last two (2) years from the date of techno commercial bid opening.
4	Minimum two nos. purchase orders for electrical lab (Metering & Testing) equipment shall be submitted which should not be more than 5 years old from the date of techno-commercial bid opening for establishing continuity in business.

**NOTES-**

1. Consideration of offer shall be subject to customer's approval of bidders, if applicable.
2. Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
3. Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.
4. After satisfactory fulfilment of all the above criteria/ pre-qualifying requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.
5. Typical list of Electrical Lab (metering & Testing) equipment is attached as Annexure-I.

<b>PREPARED BY</b> Manmohan Mahapatra <small>Digitally signed by Manmohan Mahapatra DN: cn=Manmohan Mahapatra, o=BHEL, ou=BHEL, email=manmohanmahapatra@bhel.in, c=IN Date: 2022.08.26 14:24:41 +05'30'</small> NAME:MANMOHAN MAHAPATRA DESIGNATION: MANAGER	<b>CHECKED BY</b> HEMA KUSHWAHA <small>Digitally signed by HEMA KUSHWAHA DN: cn=HEMA KUSHWAHA, o=BHEL, ou=PEM, email=hemakushwa@bhel.in, c=IN Date: 2022.08.26 14:07:46 +05'30'</small> NAME: HEMA KUSHWAHA DESIGNATION:SR. MANAGER	<b>REVIEWED BY</b> PRAVEEN DUTTA <small>Digitally signed by PRAVEEN DUTTA DN: cn=PRAVEEN DUTTA, o=BHEL, ou=PEM, email=praveendutta@bhel.in, c=IN Date: 2022.08.26 14:07:46 +05'30'</small> NAME: PRAVEEN DUTTA DESIGNATION: AGM	<b>APPROVED BY</b>  NAME: DEBASISA RATH DESIGNATION:DH ELECT (AGM)
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## ANNEXURE-I - ELECTRICAL LAB (METERING &amp; TESTING) EQUIPMENT

S. No.	Item Name
1	ANALOG MULTIMETER
2	DIGITAL MULTIMETER
3	PRECISION GRADE DIGITAL MULTIMETER
4	PRECISION GRADE ANALOG MULTIMETER
5	MULTIMETER
6	PLATINUM RTD DIGITAL TEMP. INDICATOR
7	PORTABLE LIGHT INTENSITY (LUX METER)
8	PORTABLE MOISTURE METER
9	PORTABLE CAPACITANCE METER
10	PORTABLE RECORDING METERS
11	DIGITAL PHASE ANGLE METER (pf METER)
12	TONG TESTER
13	AC TONG TESTER
14	DC TONG TESTER
15	DIGITAL TONG TESTER
16	ANALOG TONG TESTER
17	VACUUM MEASUREMENT METER
18	VIBRATION / SOUND LEVEL METER
19	SOUND LEVEL METER
20	VIBRATION MEASURING EQUIPMENT PORTABLE
21	VOLTMETER (PORTABLE) AC MOVING IRON
22	VOLTMETER (PORTABLE) DC MOVING COIL
23	AC MILLIVOLTMETER
24	DC MILLI VOLTMETER
25	DIGITAL VOLTMETER
26	WATTMETER
27	MOVING IRON AMMETERS (0-5A RANGE)
28	MOVING IRON AMMETERS (0-100A RANGE)
29	AC MILLI AMMETER
30	AC MOVING IRON AMMETER
31	AMMETER (PORTABLE)
32	CLIP ON AMMETER (AC)
33	CLIP ON AMMETER (DC)
34	DC MOVING COIL AMMETER PORTABLE
35	DC MILLI AMMETER
36	DC MOVING COIL MICRO AMMETER
37	DC MOVING COIL MILLI AMMETER
38	DIGITAL MICRO AMMETER
39	Clip on Ammeter AC/DC
40	DC CLAMP ON AMMETER
41	AC CLAMP ON METER
42	DC MILLI AMMETER

*Meetha Singh*  
02/06/17

*P. Datta Das*  
02/06/17

*Arjun* 2/6/17

## ANNEXURE-II - ELECTRICAL LAB (METERING &amp; TESTING) EQUIPMENT

43	DEW POINT METER
44	DIGITAL FREQUENCY METER
45	DIGITAL LOW RESISTANCE METER
46	DIGITAL MICRO-OHM METER
47	MEGA OHM METER
48	MILLI OHM METER
49	PORT. DIGITAL DC RESISTANCE METER
50	DIGITAL TACHOMETER
51	DIGITAL TIME COUNTER
52	MERCURY IN GLASS THERMOMETER
53	PORTABLE CABLE CORE IDENTIFICATION KIT
54	EARTH RESISTANCE TESTER
55	CLAMP ON EARTH RESISTANCE TESTER
56	PORTABLE HIGH VOLTAGE/LIVE LINE DETECTOR
57	PORTABLE PHASE SEQ/CONTINUITY INDICATORS
58	PHASE SEQUENCE INDICATOR
59	RELAY REPAIR TOOL KIT
60	PANEL CUTTING MACHINE
61	SET OF SCREW DRIVERS & NUT DRIVERS
62	MAINTENANCE TOOLS FOR LT MCC
63	MAINTENANCE TOOLS FOR HT MCC
64	HYDRAULIC CRIMPING TOOLS WITH DIES
65	RHEOSTAT
66	RHEOSTATS- 2A /1000Ω
67	RHEOSTATS- 8A /200Ω
68	RHEOSTATS- 5A /100Ω
69	RHEOSTATS- 12A/18Ω
70	BATTERY OPERATED INSULATION TESTER
71	500 V INSULATION TESTER
72	1000 V INSULATION TESTER
73	2500 V INSULATION TESTER
74	5000 V INSULATION TESTER
75	10000 V INSULATION TESTER
76	POWER OPERATED MEGGER 5KV
77	ACIDITY TEST SET FOR TRANSFORMER OIL
78	D. C. SHUNTS
79	DIGITAL INSULATION RESISTANCE TESTER
80	TORQUE WRENCHES
81	TORQUE WRENCH OF VARIOUS SIZES
82	HAND OPERATED MEGGER (0-1000 VOLTS)
83	HAND OPERATED MEGGER 500 VOLTS
84	5 KV MOTORISED MEGGER
85	HAND DRIVEN EARTH RESISTANCE MEGGER
86	MOTOR BEARING PULLER
87	MOTOR GREASING DEVICE
88	TEST LAMP
89	GAUGE

*Handwritten signatures and dates:*  
 02/06/17  
 02/21/17  
 02/21/17