



Bid Number/बोली क्रमांक (बिड संख्या):
GEM/2023/B/3225133
Dated/दिनांक : 04-03-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	14-03-2023 17:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	14-03-2023 17:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	80 (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	123750
Item Category/मद केटेगरी	GI CONDUITS 1.6MM THK EPOXY 20MM DIA , GI CONDUITS,1.6MM THICK, 20MM DIA , GI CONDUITS,1.6MM THICK, 25MM DIA , GI CONDUITS,2.0MM THICK, 40MM DIA , GI CONDUITS,2.0MM THICK, 50MM DIA
BOQ Title/बीओक्यू शीर्षक	Rigid Steel Conduits for Panki Project
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/अनुभव के वर्षों से एमएसई छूट/ and Turnover	No
Startup Exemption for Years of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover	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

Bid Details/बिड विवरण

RA Qualification Rule	H1-Highest Priced Bid Elimination
Type of Bid/बिड का प्रकार	Two Packet Bid
Primary product category	GI CONDUITS 1.6MM THK EPOXY 20MM DIA
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	7 Days
Payment Timelines	Payments shall be made to the Seller within 90 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)
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation

EMD Detail/ईएमडी विवरण

Required	No
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ePBG Detail/ईपीबीजी विवरण

Advisory Bank	State Bank of India
ePBG Percentage(%) / ईपीबीजी प्रतिशत (%)	5.00
Duration of ePBG required (Months) / ईपीबीजी की अपेक्षित अवधि (महीने).	26

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

Beneficiary/लाभार्थी :

Branch CAG II New Delhi
10250020-PEM, Noida, Department of Heavy Industry, Bharat Heavy Electricals Limited (BHEL), Ministry of Heavy Industries and Public Enterprises
(A/c No. 39922687394 Ifsc Sbin0017313)

Splitting/विभाजन

Bid splitting not applied.

Reserved for Make In India products

Reserved for Make In India products	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता

Yes

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. Bid reserved for Make In India products: : Procurement under this bid is reserved for purchase from 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. However, eligible micro and small enterprises will be allowed to participate. The minimum local content to qualify as a class 1 local supplier is denoted in the bid document. All bidders 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 the bid is liable to be rejected. 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 . In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

3. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.

4. 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.

5. 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.

6. 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

GI CONDUITS 1.6MM THK EPOXY 20MM DIA

(Minimum 60% Local Content required for qualifying as Class 1 Local Supplier)

Brand Type/ब्रांड का प्रकार	Unbranded
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Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

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	250	999

GI CONDUITS,1.6MM THICK, 20MM DIA

(Minimum 60% Local Content required for qualifying as Class 1 Local Supplier)

Brand Type/ब्रांड का प्रकार	Unbranded
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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	101000	999

GI CONDUITS,1.6MM THICK, 25MM DIA**(Minimum 60% Local Content required for qualifying as Class 1 Local Supplier)**

Brand Type/ब्रांड का प्रकार	Unbranded
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Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्र

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्र	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	17500	999

GI CONDUITS,2.0MM THICK, 40MM DIA

(Minimum 60% Local Content required for qualifying as Class 1 Local Supplier)

Brand Type/ब्रांड का प्रकार	Unbranded
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Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

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	4500	999

GI CONDUITS,2.0MM THICK, 50MM DIA

(Minimum 60% Local Content required for qualifying as Class 1 Local Supplier)

Brand Type/ब्रांड का प्रकार	Unbranded
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Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

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	500	999

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

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

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's works

Post Receipt Inspection at consignee site before acceptance of stores:
NA

3. Buyer Added Bid Specific ATC

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

4. 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 %.

5. 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.

6. Generic

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

7. 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.

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. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

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.
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 Rigid Steel Conduits for 1x 660 MW Panki Project

Sl. No.	Description	Annexures
1.	Additional terms and conditions (ATC)	Annexure I
2.	BOQ	Annexure II
3.	Delivery Schedule	Annexure III
4.	Land border certificate	Annexure IV
5.	Certificate for local Content	Annexure V
6.	Technical PQR	-
7.	Technical Specification	-
8.	Price Variation Clause (PVC)	-

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

Additional Terms and Conditions for subject Tender Enquiry to be complied by Bidders for Consideration in this tender:

1. Dispatch Markings: -

Each box shall be marked with Capital Letters in “Red” indicating the PEM supply (Main Supply/ Commissioning spare/ Mandatory Spare) for 1x 660 MW Panki Thermal Power Station Project. Each package delivered under the Contract shall be marked by Supplier and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated). Such marking shall show the description and quantity of contents, the name and address of consignee, the Gross weight and Net weight of the package, the name of the Supplier, PEM P.O. reference number, with a distinctive number of mark sufficient for purposes of identification. Besides above necessary, packing shall bear a special marking `TOP`, `BOTTOM`, `DO NOT TURN OVER`, “KEEP DRY”, “HANDLE WITH CARE”, etc.

IMPORTANT

- Two copies of respective standard manufacturer’s erection instruction/operation instruction manual shall be kept in each package / container for immediate reference by BHEL site and same shall be reflected in packing slip also
- The Packing list details for the consignment must be put inside the Box/Boxes.

Commissioning Spares: - The commissioning spares shall be properly packed separately in separate box and each spare shall be properly tagged giving details i.e. dispatch (to match the description given in the packing slip) to facilitate their proper identification. One Copy of Packing list must be put inside the Box.

Note:- Main Supply items and items for comm. spares must be packed separately.

2. Liquidated Damages: -

a) **Main Supply:-** Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half (½) percent and applicable GST thereon, of the total main supply & commissioning spares contract price excluding GST per week or part thereof, subject to a maximum of ten(10) percent of the total main supply & commissioning Spares contract price excluding GST, if the Seller/ Contractor fails to deliver any part of the ordered goods/stores within the period stipulated in the Order/ Contract.

NOTE:

i. LR/RR date for indigenous supplies (Bill of Lading/AWB for Foreign supplies) shall be treated as the date of dispatch for levying LD. However, if receipted LR date for indigenous supply is beyond 30 days for FTL/ 45 days for PTL from the date of LR (PTL to be clearly mentioned in LR), such excess period shall be considered for LD purpose irrespective of dispatch date. Import General Manifest (IGM)/Bill of entry date (whichever is earlier), for foreign supplies, is beyond 90 days from the date of Bill of Lading/AWB, such excess period shall be considered for LD purpose irrespective of dispatch date.

ii. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s).

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

iii. If Order/ Contract involves two or more Units/ Sets/ Lots/ Stages, then Liquidated Damages shall be levied on order/ contract value excluding GST of the delayed Unit/ Set/ Lot/ Stage, provided delivery stipulated in the Order/ Contract is Unit/ Set/ Lot/Stage wise, however total LD amount shall be limited to 10% of total order/ amended order value excluding GST of delayed Unit/ Set/ Lot/Stage. Any subsequent lot released (not envisaged in original contract) due to increase in quantity within permissible quantity variation shall be treated as separate lot for the purpose of LD.

iv. The sum specified above is not a penalty but a genuine pre-estimate of the loss/ damage which will be suffered by purchaser on account of delay on the part of the Contractor/Seller and the said amount will be deductible without proof of actual loss or damage caused by such delay.

3. Risk & Cost Purchase

BHEL reserves the right to terminate the contract or withdraw portion of work and get it done through other agency, at the risk and cost of the contractor after due notice of a period of 14 days' by BHEL in any of the following cases:

i) If the Seller/Contractor fails to deliver the goods or materials or any instalment thereof within the period(s) fixed for such delivery or the Seller's poor progress of the supply/ services vis-à-vis delivery/execution timeline as stipulated in the Contract, backlog attributable to seller including unexecuted portion of supply does not appear to be executable within balance available period;

ii) Delivers goods or materials not of the contracted quality and failing to adhere to the contract specifications;

iii) Withdrawal from or repudiation/ abandonment of the supply/ services by Seller before completion as per contract or if the Seller refuses or is unable to supply goods or materials covered by the Order/Contract either in whole or in part or otherwise fails to perform the Order/Contract;

iv) Non-supply by the Seller within scheduled completion/delivery period as per Contract or as extended from time to time, for the reasons attributable to the Seller;

v) Termination of Contract on account of any other reason (s) attributable to Seller.

vi) Assignment, transfer, subletting of Contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.

vii) If the Seller be an individual or a sole proprietorship Firm, in the event of the death or insanity of the Seller;

viii) If the Seller/Contractor being an individual or if a firm on a partnership thereof, shall at any time, be adjudged insolvent or shall have a receiving order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any assignment of the Order/Contract or enter into any arrangement or composition with his creditors or suspend payment or if the firm dissolved under the Partnership Act;

ix) If the Seller/Contractor being a company is wound up voluntarily or by order of a Court or a Receiver, Liquidator or Manager on behalf of the debenture holders and creditors is appointed or circumstances

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

shall have arisen which entitles the Court of debenture holder and creditors to appoint a receiver, liquidator or manager;

x) Non-compliance to any contractual condition or any other default attributable to Seller.

Such defaulting vendor/Seller shall not be eligible to participate in re-tendering conducted on account of risk purchase made due to fault of such vendor/Seller.

3.1 Risk & Cost Amount against Balance Work:

Risk & Cost amount against balance work shall be calculated as follows:

$$\text{Risk \& Cost Amount} = [(A-B) + (A \times H/100)]$$

Where,

A= Value of Balance scope of Work (*) as per rates of new contract

B= Value of Balance scope of Work (*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC & ORC, if any.

H = Overhead Factor to be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).

3.2 * Balance scope of work (in case of termination of contract):

Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Work for calculating risk & cost amount.

Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

Items for which total quantities to be executed have exceeded the Contract Quantities based on drawings issued to contractor from time to time till issue of Termination letter, then for these items total Quantities as per issued drawings would be deemed to be contract quantities.

Substitute/ extra items whose rates have already been approved would form part of contract quantities for this purpose.

Substitute/ extra items which have been executed but rates have not been approved, would also form part of contract quantities for this purpose and rates of such items shall be determined in line with contractual provisions.

However, increase in quantities on account of additional scope in new tender shall not be considered for this purpose.

NOTE: In case portion of work is being withdrawn at risk & cost of contractor instead of termination of contract, contract

quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work' for calculating Risk & Cost amount.

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

3.3 LD against delay in executed work in case of Termination of Contract:

LD against delay in executed work shall be calculated in line with above LD clause, for the delay attributable to contractor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of work till termination of contract.

Method for calculation of LD against delay in executed work in case of termination of contract” is given below.

i. Let the time period from scheduled date of start of work till termination of contract excluding the period of

Hold (if any) not attributable to contractor = T1

ii. Let the value of executed work till the time of termination of contract = X

iii. Let the Total Executable Value of work for which inputs/fronts were made available to contractor and were

planned for execution till termination of contract = Y

iv. Delay in executed work attributable to contractor i.e. T2 = $[1-(X/Y)] \times T1$

v. LD shall be calculated in line with LD clause (clause 16) of the Contract for the delay attributable to contractor taking “X” as Contract Value and “T2” as period of delay attributable to contractor.

3.4 Recoveries arising out of Risk & Cost and LD or any other recoveries due from Contractor

Without prejudice to the other means of recovery of such dues from the Seller recoveries from the Seller on whom risk & cost has been invoked shall be made from the following:

a) Dues available in the form of Bills payable to seller, SD, BGs against the same contract.

b) Dues payable to seller against other contracts in the same Region/Unit/ Division of BHEL.

c) Dues payable to seller against other contracts in the different Region/Unit/ division of BHEL.

In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor.

4. For recognition of dispatch, vendor to submit following documents to BHEL by e-mail/ fax immediately on dispatch: - GST compliant invoice, LR (indicating Invoice No., no. of boxes, PTL (if applicable) etc.), Packing List (Must be indicating No. of boxes, Packing size, Gross weight and net weight of each package, Contents of the package with cross reference to BoM item code no. or item serial no. and Quantity of each item separately), Insurance Intimation to underwriter through email/fax, Dispatch Clearance.

B. Following ATC available in GEM shall also be made part of NIT: -

i. 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.

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

- ii.** 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 %.
- iii.** 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.
- iv.** The bidder is required to upload, along with the bid, all relevant certificates such as BIS license, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.
- v.** While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

Additional Terms and Conditions for subject Tender Enquiry to be complied by bidders for consideration in this tender:

- A. Bidders to ensure that Third party/Customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document/certificate issuing authority such as name & designation of Issuing Authority and its organization contact number and E-mail Id. In case the same is found not available, BHEL has the right to reject such document from evaluation.
- B. "This item /package/system falls under the list of items defined in para 3 of ministry of finance guideline date 20.09.16 (procurement of items related to public safety, health, critical security operations and Equipment's etc.) & hence criteria of prior experience /turnover shall be same for all bidders including start up /MSME".
- C. **Guarantee & Warrantee** shall be as per Cl. No. 10 of GTC on GeM for the bid. However, Guarantee & Warrantee time period shall be 18 months from the date of last supply in the contract.
- D. Evaluation shall be on the basis of total all inclusive, landed price at consignee destination (Refer Cl. No. 6 of GTC on GEM).
- E. **Terms of Delivery:** FOR Dispatch Station Basis. However, Transit insurance shall be in the scope of seller and unloading of items (at delivery point) shall be in buyer scope. Further, w.r.t. Transit Insurance supplier has to inform the details of dispatches (such as Policy No., Consignee Name, Consignment Packing details, Project Name, Purchase Order No., LR No. & date, Invoice No. & date, Dispatch Origin & destination details etc.) to policy underwriter under intimation to BHEL.
- F. PQR criteria uploaded with Buyer uploaded Bid Specific document shall prevail value of Experience criteria and Past performance parameter mentioned in GeM bid.
- G. "Due to COVID-19 pandemic condition prevailing in the country BHEL/PEM may go for Remote Inspection of Offered items if required. Vendors are requested to be equipped with the facilities/gadgets as indicated in the guidelines available at : <https://pem.bhel.com/Documents/VendorSection/Vendor/Guidelines.pdf> to take up the inspection remotely.
- H. **Inspection call to be raised by bidder on BHEL CQIR portal** (details shall be shared at the of execution of order) and Inspection agency shall attend at the inspection within seven (07) days of the date on which the material is notified as being ready. In case of delay in witnessing of inspection beyond stipulated time (i.e. 7 days from the date on which the material is notified as being ready), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in carrying out inspection. If BHEL is not able to witness inspection up to 15 days then in addition to delay beyond stipulated period, extension in delivery time of 07 days for arranging fresh inspection will be given.

When the tests have been satisfactorily completed at Seller/ Contractor'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 Purchaser.

Purchaser will issue MDCC to the Seller/ Contractor 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 successful inspection report), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in issuing

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

MDCC. If BHEL is not able to issue MDCC up to 15 days then in addition to delay beyond stipulated period, 7 days' additional time shall be given to vendor to facilitate the vendor for arranging logistics arrangements.

- I. All Bidders shall be required to submit applicable Freight % & GST % included in their prices during clarification stage of Tender.
- J. Performance Bank Guarantee: shall be as per Cl. No. 7 of GTC of GeM. Performance Security amount shall be @5% of the value of contract value.
- K. **Payment Terms:** As per clause no. 12 (i) of GTC on GeM. Payments shall be made to the Seller within 90 days (45 days for seller qualified and registered as Micro or small and 60 days for Medium enterprises as per MSMED Act.) 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).

Supplier has to provide Original Tax Invoice + 1 copy of Tax invoice, Packing List, LR/RR or AWB, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment.

Further bidder to submit the final documents (Final drgs & Inspection document) in 12 no.s of hard copies and 04 no.s of CD along with Invoice.

Provision of offline payment in GeM shall be utilized.

- L. **Bid reserved for Make in India products:** - Procurement under this bid is reserved for purchase from Class 1 local suppliers 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 as 60%. All bidders 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 the bid is liable to be rejected.

Regarding verification of local content, the local supplier at the time of tender, bidding or solicitation shall be required to provide certification (as per enclosed **Annexure-V**) as per para 9 of PP-MII order revision dated 16.09.2020.

- M. **This is conditional tender enquiry. Financial bid opening (Part-II) of a bidder shall be subjected to following:** -

- (i) Bidder should be BIS licensee with valid CML number
- (ii) Techno-Commercial evaluation/recommendation by BHEL.
- (iii) Qualification of Technical PQR
- (iv) Offered item should mandatorily conform to PP-MII order provisions.

- N. **Consignee Details** (for PRC - Provisional Receipt Certificate & CRAC - Consignee's Receipt cum Acceptance Certificate, as applicable) shall be as per Project Site official details.

- O. The Bidder has to declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/guidelines.

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

P. Bidders to ensure the following: -

- Ensure compliance to Ministry of Power (MoP) Order No. 11/05/2018-Coord. dt. 28/07/2020, if applicable.
- Ensure compliance of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020.
- to submit “Model Certificate for Tenders” as per **Annexure-IV** of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020, 08/02/21,06/09/22 & 23.02.23. Bidder to submit the following undertaking on their letter head duly signed from the highest competent authority at your end (i.e Owner, partner, CMD, Director etc.)

Q. Delivery Period: As per attached Annexure-III. Delivery period for sake of GeM bid shall be chosen as 999 days from PO date. However, this period shall not be considered for delivery and delay analysis purpose.

R. For registration in BHEL PEM- Online registration portal is operational, Non-registered Vendors who wish to apply for registration in BHEL-PEM can apply through Online Registration Portal available at www.pem.bhel.com - vendor section - Online Supplier Registration. All credentials and/or documents duly signed and stamped related to registration can be uploaded on the website and submit the application for registration. However, registration of suppliers is not mandatory in case of open tender.

S. Quantity Variation clause of +/- 25% of GeM ATC shall be utilized using option clause.

T. CIF is not applicable for subject tender.

U. PVC shall be applicable for subject package as per enclosed PVC annexure. Base date is February 2023 (One month prior to date of tendering). Price variation shall be limited to +20% and no limit on -ve price variation. PVC shall be payable only for contractual delivery period (including delivery extensions if any) i.e no PVC shall be payable for delay in delivery attributed to vendor & in delayed delivery cases, PVC for contractual delivery date & actual delivery date shall be compared and whichever is found lower side shall be payable to vendor.

V. Integrity pact not applicable.

W. MSE Preference: - Being subject package is divisible and MSE preference (maximum 25%) shall be given. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L 1 + 15% of margin of purchase preference /price band defined in relevant policy, such Seller(s) shall be given opportunity to match L-1 price and contract will be awarded for 25% percentage of total quantity.

- a) If L1 bidder is MSE bidder, entire quantity will be given to such MSE bidder only.

ANNEXURE –I (Rigid Steel Conduits)

Additional Terms and Conditions (ATC)

b) In case of more than one such MSE, within the price band of L1 +15%, the supply shall be shared proportionately, provided the available quantum can be split.

X. Bidder to note the following: -

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- they have controlling partner (s) in common;' or
 - they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
 - they have the same legal representative/agent for purposes of this bid; or
 - 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 Bidder; or
 - Bidder participates in more than one bid in this bidding process. Participation by a Bidder 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, or
 - 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 authorize only one agent/dealer. There can be only one bid from the following:
 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 2. Indian/foreign agent on behalf of only one principal,'or
 - A Bidder 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, or
 - 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. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "
- Y.** All other terms & conditions shall be as per GeM bid, selected Additional Terms & Conditions from GeM library and GTC on GeM 4.0 (version 1.18) available on GeM Portal on enquiry floating date shall be applicable.



PROJECT:- 1X 660 MW PANKI TPS
ANNEXURE II TO BOQ CUM UNPRICED PRICE SCHEDULE
FOR RIGID STEEL CONDUITS

S. No.	ITEM CODE	DESCRIPTION	UNIT	QUANTITY
1	558-15001-A	GI CONDUITS 1.6MM THK EPOXY 20MM DIA	MTR	250
2	558-15002-A	GI CONDUITS,1.6MM THICK, 20MM DIA	MTR	101,000
3	558-15003-A	GI CONDUITS,1.6MM THICK, 25MM DIA	MTR	17,500
4	558-15004-A	GI CONDUITS,2.0MM THICK, 40MM DIA	MTR	4,500
5	558-15005-A	GI CONDUITS,2.0MM THICK, 50MM DIA	MTR	500
Note :	Please refer technical specification PE-TS-426-558-E002 for technical details of the required items.			

ANNEXURE III - 1x 660 MW Panki TPS - DELIVERY SCHEDULE - RIGID STEEL CONDUITS

Sl. No.	Package Code	Package name	DEPTT	BHEL Drawing No	Drawing Title	Primary/Secondary	BHEL Inputs	Drg Sch for Vendors	Standard Delivery Terms for Supply Portion
1	558-15000-A	RIGID STEEL CONDUIT	ELECT	PE-V0-426-558-E701	DATA SHEET OF RIGID STEEL CONDUIT	Primary		R-0 within 14 days from PO & subsequent revisions within 10 days of comments received from BHEL.	Delivery completion for PO Quantity shall be "180" days from PO date. Supplier to complete the package engineering in time and get the applicable engineering Drgs. /docs approved from BHEL/End Customer before start of manufacturing and supply. BHEL shall furnish comments / approval on each submission / re-submission of drawing/documents within 18 days from receipt of same. Subsequent Lots, if any (released within validity of contract under Qty. var. clause): Supply within "120" days from the date of Quantity clearance by BHEL.
				PE-V0-426-558-E906	QUALITY PLAN OF RIGID STEEL CONDUIT	Primary			

Notes :-

1. The end period specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
2. The delivery conditions specified are for contractual LD purposes, however BHEL may ask for early deliveries without any compensation thereof.
3. Drawings /documents submission/re-submission schedule shall be as indicated in NIT which shall be used for progress monitoring purpose and required course correction, if any. Wherever schedule of drawings/documents submission / re-submission is stipulated in the Technical Specifications, same shall be superseded by delivery specified in NIT.
4. **Delivery Extension:Extension of contractual delivery time**
Delivery time mentioned in the NIT includes Engineering completion time (time for drawing/document submission/resubmission by the vendor and review/approval of the same by the BHEL\End customer), manufacturing, inspection, Packing and dispatch time. Due diligence is to be exhibited by the vendor to ensure timely completion of engineering and supply.

During the execution of the contract, time loss occurred owing to the reason attributable to BHEL besides force majeure shall be considered for delivery time extension to the vendor as given below:-

- i. Delay in providing comments/ approval on Primary drawing/documents beyond 18 days or as specified in drawing/ documents submission/re-submission schedule enclosed with NIT for each iteration.
- ii. Time Loss in approval of the drawing/document as a result of increase in the iteration not attributable to the vendor as certified by BHEL. Time extension equivalent to the resubmission time specified in the NIT and consequential increase in the approval time shall be applicable.
- iii. Delay in providing engineering input/material by BHEL.
- iv. Delay in deputing inspector for inspection and delay in release of MDCC in line with GCC/ GEM ATC terms.
- v. Any HOLD put by BHEL for whatever reasons.

Note: No delay analysis will be applicable if supply is completed within delivery schedule as specified in Purchase order.

5. Validity of contract:

5.a) Validity of the contract for main supply including subsequent lots:

Contract shall be valid for 730 days from the PO date. However, delay at vendor's end (if any) shall be added to the validity period and contract validity shall get extended by the delay period at vendor's end.

For example: Delivery period: A (in days)

Delay at vendor's end: B (in days)

Contract validity: 730+B (in days)

Note: B is the Vendor delay days beyond contractual delivery period "A" / extended delivery period owing to time taken by BHEL at point no. 3 above.

5.b) Subsequent lots including quantity variation released within contractual validity period, to be supplied by vendor/supplier at PO rates, terms and condition.

5.c) Execution of the contract beyond contract validity period or PO delivery date whichever is later shall be decided on mutual consent basis.

Annexure IV

An undertaking regarding Model Clauses on company letter head only

(To be provided along with bid)

Reference: NIT No.-

Package: - Rigid Steel Conduits

Project: 1x 660 MW Panki TPS

TO WHOM SO IT MAY CONCERN

This is with reference to Ministry of Finance circular dated 23.07.20, 08.02.21,06.09.22 & 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 V
1x 660 MW Panki TPS
Rigid Steel Conduits
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.....

Name of Package: Rigid Steel Conduits

Dear Sir,

We hereby certify that items offered by us of Rigid Steel Conduits for 1x 660 MW Panki TPS(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)

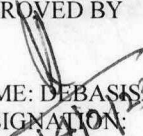
authorized signatory
of company

	PRE-QUALIFICATION REQUIRMENTS OF RIGID STEEL CONDUITS FOR 1X660MW PANKI TPS	PE-PQ-426-558-E003
		REVISION NO. 0 DATE 10/02/2023
		SHEET NO. 1 OF 1

ITEMS : RIGID STEEL CONDUITS	
SCOPE : Supply : YES; Erection & Commissioning : NO;	
1.0	<p>Vendor should be a BIS approved manufacturer of rigid steel conduits as per IS-9537 Part II.</p> <p style="text-align: center;">or</p> <p>In case, the vendor is not a BIS approved manufacturer, then vendor can offer rigid steel conduits of any BIS approved make subject to submission of following documents:</p> <p>a) Undertaking from BIS approved manufacturer of offered make (along with valid BIS certificate) to get the inspection & testing of aforesaid conduits carried out at manufacturer's works.</p> <p>b) Credentials of the manufacturer of offered make to meet the PQR requirements of S no 2.0 to 4.0 above.</p> <p>c) Vendor's Credentials to meet S no 5.0.</p>
2.0	Availability of test reports of rigid steel conduits to establish in- house capability at manufacturer's works to carry out all routine, type & acceptance tests as per relevant IS.
3.0	Capacity of manufacturing 25 MT of rigid steel conduits per month.
4.0	Manufactured and supplied at least 100 km of rigid steel conduits in one or more orders.
5.0	Minimum two (2) nos. purchase orders for rigid steel conduits shall be submitted which should not be more than five (5) years old from the date of techno-commercial bid opening for establishing continuity in business.

NOTES:

- 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.
- Notwithstanding anything stated above, BHEL reserves the light to assess the capabilities and capacity of the bidder/collaborators to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.
- After satisfactory fulfillment of all the above criteria! requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

PREPARED BY MANMOHAN MAHAPATRA NAME:MANMOHAN MAHAPATRA DESIGNATION: MANAGER	CHECKED BY HEMA KUSHWAHA NAME:HEMA KUSHWAHA DESIGNATION: SR. MANAGER	REVIEWED BY PRAVEEN DUTTA NAME: PRAVEEN DUTTA DESIGNATION: AGM	APPROVED BY  NAME: DEBASIS RATH DESIGNATION: DH-ELECT (AGM)
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VOLUME-II

UP RAJYA VIDYUT NIGAM LTD.
CONSULTANT- NTPC LTD.
1X660MW PANKI TPP

TECHNICAL SPECIFICATION

FOR

RIGID STEEL CONDUITS

SPECIFICATION NO: *PE-RC-426-558-E002*

REVISION: 00



BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA, UP (INDIA) – 201301

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-426-558-E002

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1.0	SECTION- I	
	COMPLIANCE CERTIFICATE	01
	SPECIFIC TECHNICAL REQUIREMENTS	01
	DATA SHEET – A	01
2.0	SECTION- II	
	STANDARD TECHNICAL REQUIREMENTS	02
	STANDARD QUALITY PLAN	03

Total nos. of sheets including cover & separator sheets = 12 sheets

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-TS-426-558-E002

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SHEET 1 of 1

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 are 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 BOQ-Cum-Price schedule of the specification shall not be considered (i.e., technical description & quantities as per specification shall prevail).

BIDDER'S STAMP & SIGNATURE

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-TS-426-558-E002

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SECTION – I

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-TS-426-558-E002

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SECTION I

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SHEET 1 OF 1

1.0 SCOPE

- 1.1 Manufacture, Inspection and Testing at Manufacturer's works, proper packing and delivery to site of rigid steel conduits conforming to this specification.
- 1.2 Technical requirements of rigid steel conduits are indicated in Data Sheet-A & Section-II.
- 1.3 The stipulation of Data Sheet-A shall prevail in case of any conflict between the stipulations of Data Sheet-A & Section-II.

2.0 BILL OF QUANTITIES

The bidder to quote for items as per price schedule attached with NIT.

3.0 DRAWINGS & DOCUMENTS TO BE SUBMITTED

- 3.1 Documents shall be submitted after placement of order for BHEL & customer's approval as specified in NIT.
- 3.2 Documents shall be furnished through BHEL's document management system (wrench) portal.

Notes:

1. Vendor shall submit the drawing/document submission/resubmission schedule after approval of documents.
2. In BOM each of the item to be uniquely identified with item code no. or item Sl. No. Supplier to ensure that all the items which will find separate mention in the packing list are covered in detailed BOM.

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-TS-426-558-E002

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DATA SHEET-A

1.0 APPLICABLE STANDARDS & CODES

- a) IS:9537 (Part I & II) Conduits for electrical installation.
- b) IS:2629 Recommended practice for hot dip galvanizing on iron and steel.
- c) IS:4759 Specification for hot dip zinc coatings on structural steel and allied products
- d) IS:6745 Methods for determination of mass of zinc coating on zinc coated iron and steel articles.
- e) IS:513 Cold reduced low carbon steel sheet and strip
- f) IS: 10748 Hot rolled Steel strip for welded tubes and pipes
- g) IS: 2633 Method for testing uniformity of coating on zinc coated articles
- h) IS:6005 Code of practice for phosphating iron & steel

2.0 RIGID STEEL CONDUITS

S.No.	Description	Unit	Parameters value/ type
a	Make	-	[√] BIS approved [] As per enclosed sub-vendor list
b	Material	-	Hot or Cold rolled mild steel
c	Sizes	-	As per BOQ cum price schedule
d	Standard length	meter	3 – 5
e	Classification as per mechanical properties		Heavy
f	Conduit thickness (minimum)	mm	1.6 upto 32 mm dia, 2.0 above 32 mm & upto 50 mm dia
g	Surface treatment	-	Hot dip galvanizing on inside & outside surface
h	Epoxy thickness	micron	50 (applicable for epoxy coated conduits only)

3.0 SURFACE TREATMENT

a	Pre-treatment	-	As per IS 6005 prior to galvanising
b	Type	-	Hot dip galvanizing as per IS 2629
c	Min. Thickness of zinc coating	microns	48 (upto 32 mm dia), 65 (above 32 mm & upto 50 mm dia)
d	Min. Weight of zinc coating	(gm/m ²)	340 (upto 32 mm dia) 460 (above 32 mm & upto 50 mm dia)
e	Tests for galvanizing		a) Weight of zinc coating as per IS : 6745 b) Thickness of zinc coating as per IS : 4759 c) Uniformity of zinc coating as per IS : 2633 d) Adhesion as per IS: 2629

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-TS-426-558-E002

VOLUME II

SECTION II

REVISION 00

DATE: 22.07.2021

SECTION-II

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
FOR
RIGID STEEL CONDUITS**

SPECIFICATION NO. PE-RC-999-558-E002

VOLUME II

SECTION II

REVISION 00

DATE: 16.12.2020

Sheet 1 of 2

1.0 INTENT OF SPECIFICATION

The intent of specification is not to specify all details of design & construction of material. The material shall, however, conform in all aspects to high standard of design, engineering and workmanship and be capable of performing in continuous operation up to & after bidder's guarantee period in manner acceptable to purchaser who will interpret the drawings & specification and shall have power to reject any work or material which in his judgement is not in full accordance with this specification.

2.0 CODES AND STANDARDS

- 2.1 The material shall comply with all currently applicable safety codes and statutory regulations of India as well as of the locality where the material is to be installed.
- 2.2 The material, construction, manufacture, inspection and testing of Rigid steel conduits shall conform to the latest revision of relevant standards as per Data Sheet-A.
- 2.3 In case of conflict between the applicable reference standard and this specification, the stringent requirement of the two shall govern.

3.0 TECHNICAL REQUIREMENTS

- 3.1 Rigid conduits shall generally conform to the requirements of IS: 9537 (part I & II).
- 3.2 The diameter of conduits shall be uniform throughout the length. Each end of conduit length shall be threaded. The ends of conduits shall be sealed with protective caps to prevent damage to threaded portions and entrance of moisture and foreign material.
- 3.3 The inside surface of all conduits shall be smooth and suitable for pulling insulated cables and wires without damage.
- 3.4 Technical particulars of rigid conduits are specified in Data Sheet – A.

4.0 QUALITY ASSURANCE, TESTING & INSPECTION

- 4.1 Bidder shall confirm compliance with the BHEL's Standard Quality Plan (PE-QP-999-558-E002) as attached with the specification without any deviations. At contract stage, the successful bidder shall submit the Quality Plan for BHEL/ ultimate customer's approval. In case bidder has reference Quality Plan agreed with ultimate customer, same can be submitted for specific project after award of contract for BHEL/ ultimate customer's approval. There shall be no commercial implication to BHEL on account of Quality plan approval.
- 4.2 All materials shall be procured, manufactured, inspected and tested by vendor/ sub-vendor as per approved quality plan.
- 4.3 The supplier shall perform all tests necessary to ensure that the material and workmanship conform to the relevant standards and comply with the requirements of the specification.

1311435/2023/PS-PEM-EL



**TECHNICAL SPECIFICATION
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Sheet 2 of 2

Charges for all these tests for all the equipments & components shall be deemed to be included in the bid price.

- 4.4 In case ordered quantities are manufactured and offered for inspection in more than one lot, BHEL reserves the right to witness testing on all lots without any commercial implication to BHEL.

5.0 PACKING


- 5.1 The material shall be packed to ensure protection against damage during transit, storage for prolonged periods and handling.
- 5.2 The ends of conduits shall be sealed with protective caps.
- 5.3 Each conduit shall be wrapped in plastic to prevent dust deposition.
- 5.4 The conduits should be aligned and stacked in bundles (a maximum of 25 pieces per bundle).
- 5.5 Each bundle shall be covered with jute fibre or thick plastic wrap for protection against extreme weather. Then, the bundle shall be tied with twin-strand mild steel wire, strong rope or steel strip.

6.0 MARKING

- 6.1 Rigid conduits shall be marked at least once on each manufacturing length, preferably 50 mm from one end, with the following:
- a) Manufacturer's name or trade mark, if any;
 - b) Country of manufacture; and
 - c) Nominal size of the conduits.
 - d) ISI Certification Mark.

Marking may be applied by moulding, stamping, printing, adhesive label or water slide transfers.

- 6.2 Marking shall be durable and legible.
- 6.3 Marking shall be checked by inspection and by rubbing lightly the marking by hand for 15 seconds with a piece of cloth soaked with water and again for 15 seconds with a piece of cloth soaked with petroleum spirit.

MANUFACTURER/ SUPPLIER NAME & ADDRESS		STANDARD QUALITY PLAN				SPEC. NO. :		DATE:		
		CUSTOMER :				QP NO. : PE-QP-999-558-E001, R04		DATE: 23.07.2020		
		PROJECT :				PO NO.:		DATE:		
		ITEM: RIGID STEEL CONDUITS		SYSTEM: STATION LIGHTING SYSTEM		SECTION: II		SHEET 2 OF 3		
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY	REMARKS
1	2	3	4	5	6	7	8	9	**	
					M	C/ N		*	M C N	
2.3B		MASS OF ZINC COAT.	CR	TEST	IS 9537-II	IS-6745/ APPD DS	IS-6745/ APPD DS	INSP. REPORT	✓ P W -	
2.3C		COATING THICKNESS	CR	TEST	IS 9537-II	IS-4759/ APPD DS	IS-4759/ APPD DS	INSP. REPORT	✓ P W -	BY ELCOMETER Refer Note 8
2.3D		EPOXY THICKNESS	MA	VISUAL/PHYSICAL	IS 9537-II	50 MICRONS	50 MICRONS	INSP. REPORT	✓ P W -	AS APPLICABLE
2.4		MARKING	CR	VISUAL/PHYSICAL	IS 9537-II	APPROVED DATA SHEET	APPROVED DATA SHEET	INSP. REPORT	P W -	
3.0 PACKING										
	PACKING	Soundness of Packing against transit damage	Major	Visual	100%	BHEL approved document	BHEL approved document	Inspection report	✓ P W -	

NOTES:

- The inspection shall be carried out once for the material offered for inspection in one lot. For subsequent lots against the same project, the material can be accepted based on certificate of compliance furnished by the vendor.
- Project specific QP shall be based on customer requirement. In case, any changes in QP commented by customer at contract stage shall be carried out by bidder without any implication to BHEL/ Customer.
- For export jobs, BHEL technical specification for seaworthy packing for export jobs is to be followed.
- Packing shall be suitable for storage at site in tropical climatic conditions.

ENGINEERING				QUALITY			
Sign & Date	Name	Sign & Date	Name	Sign & Date	Name	Sign & Date	Name
Prepared by: MEET SAGAR SINGH RAJPAL/ MUDDIT CHOPRA	MEET SAGAR SINGH RAJPAL/ MUDDIT CHOPRA	Checked by: PRAVEEN DUTTA	Checked by: KUNAL GANDHI	Reviewed by: PRAVEEN DUTTA	Reviewed by: RITESH KUMAR	Approved by: PRAVEEN DUTTA	Approved by: JAISWAL
BHEL BHEL Limited, BHEL Road, BHEL, Hyderabad Tel: 0800 000 0000, Fax: 0800 000 0001 Email: bhel@bhel.com, www.bhel.com				BIDDER/ SUPPLIER Sign & Date Seal			
FOR CUSTOMER REVIEW & APPROVAL Doc No: Sign & Date Name Seal Reviewed by: Approved by:							

Digitally signed by PRAVEEN DUTTA, DN: cn=PRAVEEN DUTTA, o=BHEL, ou=Engineering, email=p.dutta@bhel.com, c=IN, date=2023.07.25 12:27:26 +05'30'

PACKING SPECIFICATIONS- RIGID STEEL CONDUITS**PACKING**

1. The material shall be packed to ensure protection against damage during transit, storage for prolonged periods and handling.
2. The ends of conduits shall be sealed with protective caps.
3. Each conduit shall be wrapped in plastic to prevent dust deposition.
4. The conduits should be aligned and stacked in bundles (a maximum of 25 pieces per bundle).
5. Each bundle shall be covered with jute fibre / thick plastic wrap for protection against extreme weather. Then, the bundle shall be tied with twin-strand mild steel wire, strong rope or steel strip.

	<p><u>Price Variation Formulae</u></p>
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Prices shall be variable as per following PVC formulae: -

Rigid Conduit	
$P = P_o/100 (15 + 65 (S/S_o) + 20 (Zn/Zn_o))$	Indices to be taken from Cir. No.: IEEMA(PVC)/TLA&H(R-3) --- and JPC for the applicable month.

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_o = Price quoted/confirmed.

S_o = average JPC steel price of H. R. COILS 2.00 MM
This price is as applicable on the 1st working day of the month, one month prior to the date of tendering.

Zn_o = Price of Electrolytic high-grade zinc (IEEMA)
This price is as applicable on the 1st working day of the month, one month prior to the date of tendering.

S = average JPC steel price of H. R. COILS 2.00 MM
This price is as applicable on the 1st working day of the month, two 'months prior to the date of delivery.

Zn = Price of Electrolytic high-grade zinc (IEEMA)
This price is as applicable on the 1st working day of the month, two months prior to the date of delivery.

The date of delivery is the date on which materials are notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

PVC Limits: PVC ceiling limit shall be positive (+ve) 20% and negative (-ve) unlimited.