

## SPECIAL TERMS & CONDITIONS

**Enquiry No:- 02G2300022 dated 25.04.2022**

**Item: Supply of 4 and 4.5 Inch AL Tubes**

**Project: WBPDCS SAGARDIGHI TPS, TANGEDCO Ennore SEZ, NTPC North Karanpura & PHPA Bhutan Punatsangchu II**

In case any discrepancy between the requirements mentioned under General Terms and Conditions and Special Terms and Conditions, Special Terms and Conditions shall prevail.

1. **Clause No. 1.7 of GTC** - For any technical clarification, please contact Sh. Jai Kumar, Sr. Manager (TBEM) / Sh. Vivek Kapil, AGM (TBEM); Contact No. 0120-06748534 / 8539; e-mail: [jaik@bhel.in](mailto:jaik@bhel.in) / [Vivekk@bhel.in](mailto:Vivekk@bhel.in).
2. **Clause No. 1.8 of GTC** - For any commercial clarification, please contact Ms. Archana Kumari, Manager (TBMM) / Sh. Sunil Kumar, Sr. DGM (TBMM); Contact No. 0120-6748474 / 8471; e-mail: [archanak@bhel.in](mailto:archanak@bhel.in) / [sunil.kumar@bhel.in](mailto:sunil.kumar@bhel.in).

3. **Offer Submission Mode** - Tender is invited through NIC Portal System only. The bidder shall submit their bid through e-Procurement platform at <https://eprocurebhel.co.in/>.

Vendors participating through e-procurement portal for this tender should have Class-III Digital Signature Certificate (DSC) for Signing & Encryption of bids issued by any of the valid Certifying Authorities (approved by Controller of Certifying Authorities) in India.

**Offer Submission / Opening Time** - Offer Submission Time: 11 Hrs IST, Offer Opening Time: 16 Hrs IST

4. **Project Status** –

**PHPA II** - Export. GST @0.1% is applicable. Govt. Notification No. 40/2017 and 41/2017 dated 23.10.2017. Custom clearance is in scope of vendor.

**Sagardighi, Ennore & North Karanpura** - Domestic. GST as applicable.

5. **Pre-Qualification Requirement (PQR)** - As per Annexure\_TQR.

6. **Deviation** - No Technical Deviation is envisaged.

**No Commercial Deviation envisaged except as defined in GTC.**

7. **Delivery Plan** – As per Activity Schedule [Annexure II].

8. **Payment Terms** - As per clause 3.1 of GTC (Endorsed LR is not required in GST regime).

100% of payment within 60 days (45 Days for MSEs) from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :

- LR / GR
- Material Receipt Certificate issued by BHEL Site Official
- GST Compliant Tax Invoice
- Packing List (Case-wise)
- Copy of Transit Insurance Certificate from underwriters
- Material Inspection Clearance Certificate (MICC) issued by BHEL Quality Management
- Guarantee / Warrantee Certificate

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OR

“100% payment with full taxes and F&I shall be made through irrevocable letter of credit with Usance Period of 120 days from the date of submission of all the documents as mentioned in clause 3.1 of GTC for payment to BHEL bank. All LC charges will be in vendor/beneficiary account.”

**Clause 3.2 to 3.7 Not Applicable.**

BHEL TBG is registered RXIL (TReDS) platform. MSME Bidders are requested to get registered with RXIL (TReDS) platform to avail the facility as per GOI guidelines.

9. **Performance Bank Guarantee - Clause No. 7 of GTC - Not Applicable.**
10. **Guarantee/ Warranty - Applicable.**
11. **Liquidated Damage** – Clause no. 13 of GTC - In case of delay in execution of Purchase Order beyond the contractual delivery time, an amount of 0.5% of delayed lot value (Ex Works and F&I charges) for supply per week of delay or part thereof subject to a maximum of 10% of delayed lot value (Ex Works and F&I charges) shall be deducted as Liquidated Damages (LD) along with applicable GST (if any) on LD.

LD will be calculated for lotwise and Manufacturing Clearance (MFC) date will be the last date of inputs for that particular lot.

Lot-1: items for which MFC is issued from 1-15 days of calendar month

Lot-2: items for which MFC is issued from 16-30/31 days of calendar month

Lot-3: items for which MFC is issued from 1-15 days of next calendar month,

Lot-4: items for which MFC is issued from 16-30/31 days of next calendar month and so on...

12. **Reverse Auction - Applicable.**

“BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on [www.bhel.com](http://www.bhel.com)) for this tender. RA shall be conducted among the techno commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.”

Abridged Version of “**Guidelines for Reverse Auction-2021**” may also be seen at BHEL website ([www.bhel.com](http://www.bhel.com)) on “Supplier Registration” Page.

13. **Integrity Pact** - Not Applicable.

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14. **Clause No. 2.1 of GTC** - Prices shall be on PVC basis including packing and forwarding charges (export worthy packing for PHPA Bhutan II project). Vendor to quote prices on FOR destination basis including GST (for all projects).

The prices to be quoted are with PVC based on NALCO Metal price in rupees per MT declared by them just prior to tender opening date. In case of any change in the NALCO Aluminium ingot price of IE07 grade, the same shall be neutralized as formula follow.

Price basis: - With PVC based on following formula

$$Ps=Po + (Ns-No)$$

Where: - Ps- Ex-works price of supply.

Po- Ex-works price quoted in offer.

Ns- NALCO Aluminium ingot price of IE07 in Nalco price list on date of dispatch or just prior to dispatch.

No- NALCO Aluminium ingot price of IE07 in Nalco price list on date of bid opening or just prior to bid opening.

The date of delivery shall be P.O. Delivery Date (including any agreed extension thereto) or Date of Actual Dispatch, whichever is earlier shall be considered for PV calculation.

NOTE:

- a. The price adjustment of Ex-Works price component of Aluminium Tube shall be subject to a ceiling of  $\pm 50\%$  (plus or minus fifty percent).
  - b. If price adjustment amount works out to be positive, the same will be payable to supplier and if it works out to be negative, the same will be recovered from supplier.
  - c. The supplier should ensure submission of price adjustment invoice after dispatch of material (positively within one month), whether such adjustment is positive or negative.
15. **Make in India (PPP – MII)** - For this procurement, the local content to categorize a supplier as class-I local supplier / class-II local supplier / Non-Local supplier and purchase preference to class-I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020, issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT but before opening of part-II bids against this NIT.

"Bidder to specify the percentage of local content as per the format of self-declaration for local content" as per Annexure-V."

"This tender is not a global tender and only class-I ~~and Class-II~~ suppliers as defined under the DPIIT order no. P-45021/2/2017-PP (BE-II) dated 04.06.2020 are eligible to bid in this tender. Bids received from Class-II & Non-Local supplier shall be rejected."

16. Bidder to comply the MOP circular dated 02-07-2020 (Annexure-IX) and its subsequent amendment, if any, in prescribed format (Annexure-X). Non-compliance/ Non-submission will lead to rejection of Offer [Not Applicable for cases where local content is 100%].

Vendor to quote as per specified price format of NIT, otherwise their offer shall be liable to be rejected.

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Following confirmation to be provided by vendor: "We confirm that we have quoted as per specified price format provided along with this tender".

17. **Validity of Purchase Order** - Purchase order shall be valid for two years from date of Purchase Order.
18. **ADJUSTMENT OF RECOVERY**: Any amount payable by the supplier under any of the condition of this contract shall be liable to be adjusted against any amount payable to the supplier under any other works/contract (Applicable for IPS tubes only) awarded to him by any BHEL unit. This is without prejudice to any other action as may be deemed fit by BHEL.
19. **Acceptance of Offer** – Acceptance of offer is subject to following – i) Approval of vendor by end customer, ii) Qualification of Technical PQR and iii) Techno-Commercial evaluation by BHEL.
20. **Weight Tolerance**: The maximum positive tolerance on nominal weight (Kg/m) is 8%. No negative tolerance is allowed (as per technical specification TB-STD-316-055 Rev 01). However during tender stage, if the vendor exceeds the tolerance as a deviation, then the additional prices shall be loaded on the offer of bidder. However payment shall be made on the basis of actual weight supplied, subject to a maximum tolerance of 8% on the GTP weight quoted by the supplier.
21. **MQP (Manufacturing Quality Plan)** - Inspection shall be carried out as per approved Quality Plan. For the same, Supplier to submit Quality Plan to BHEL for Customer approval.
22. **Inspection Required** - Yes (Pre Dispatch) - As per approved QAP / Technical Specification.  
Inspection Agency - BHEL / CUSTOMER / THIRD PARTY.
23. **Clause No. – 17 of GTC - Tender Evaluation – Grand Total Package Wise**. Comparative statement shall be prepared and evaluated on overall quantity for all the projects on total cost basis at destination /site (Delivery Requirement for PHPA Bhutan II project is also up to site). Vendor to quote freight and insurance charges separately as per format against each projects accordingly. However, separate POs shall be placed for each projects.

**Evaluation in case of more than one L-1 bidders** - In the course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discount from respective L-1.

In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s).

Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

24. **Clause No. 39 of GTC** – Quantity Variation BHEL shall have the right to variation in quantities of items within +/- 30% of the total Purchase Order / Contract value at the time of placement of PO or award of Contract on overall basis for all amendments together within two years from the date of original Purchase Order the purchaser shall have the right to increase or

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decrease quantity and scope up to the above extent of value and seller/contractor shall be bound to accept the same at the contracted prices without any escalation.

Note: In case of package is broken into purchase orders of main supply, services and spares, quantity variation clause shall be applicable.

25. **GeM Seller ID-** GeM seller ID is mandatory for the bidders and must be mentioned in their offer. In case at the time of submission of offer GeM seller ID is not available with bidder, then successful tenderer should ensure to have GeM Seller ID prior to award of contract. Department of Expenditure (DOE) OM no. 6/9/2020-PPD dated 24.08.2020 may be referred in this regard.

### **(Sign and seal of Bidder)**

Name:

Signature:

Stamp:

**BHARAT HEAVY ELECTRICALS LTD.  
(TRANSMISSION BUSINESS GROUP)**

**GENERAL TERMS AND CONDITIONS FOR TENDER ENQUIRY / CONTRACT**

**This is to be submitted duly signed by bidder in original. Clause-wise deviations and / or additional conditions / clarifications, if any, are to be brought out clearly in “Schedule of Commercial Deviation”. Deviations and / or additional conditions / clarifications, if any, mentioned elsewhere in the bid / offer, shall not be considered.**

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1.	<p><b>INSTRUCTION TO BIDDERS :</b></p> <p>1.1 Sealed bids are invited for the items mentioned in the tender enquiry conforming to the NIT including Technical Specifications. Bids should be typed and free from overwriting and erasures. Corrections or additions / deletions, if any, must be clearly written and attested, otherwise offer may be rejected.</p> <p>1.2 Bidder must ensure that their bid is submitted / dropped in the tender box on or before <b>14-00 Hrs.</b> IST on the due date of opening, unless otherwise specified in the NIT, at the address as follows :-</p> <p style="padding-left: 40px;">Tender Box, Materials Management, Transmission Business Group, Bharat Heavy Electricals Limited, 5<sup>th</sup> Floor, Tower-A, Advant Navis IT Business Park, Plot-7, Sector-142, Noida Expressway, Noida, Dist. G. B. Nagar, U. P. . 201305</p> <p>1.3 In case tender enquiry is floated through the e-procurement system, offer / bid has to be submitted through the e-procurement system <b>ONLY</b> as per instructions given in the e-procurement portal (<a href="https://bheleps.buyjunction.in">https://bheleps.buyjunction.in</a>).</p> <p>1.4 The bids shall be opened at 14-30 Hrs. IST on the due date of opening, in the presence of participating bidders who may like to be present, unless otherwise specified in the NIT. Bids received late are liable for rejection. Bidders sending bids by courier or post will have to ensure that it is timely delivered at the above address.</p> <p>1.5 Bids are to be submitted duly signed with seal in two parts :-</p> <p style="padding-left: 40px;">a) <b>Techno-commercial Bid (Part-I)</b> . To be submitted in 2 sets (original + copy). A copy of Price Bid (Part-II) clearly mentioning all the necessary information as per format <b>without prices</b> Un-Priced Bid+is also to be enclosed in Part-I Bid.</p> <p style="padding-left: 40px;">b) <b>Price Bid (Part-II)</b> . To be submitted only in one set in a separate sealed envelope. This should not contain any Technical and / or Commercial Terms and Conditions. The rates should be quoted both in figures and words.</p> <p>1.6 The Part-I and Part-II Bids are to be sealed in separate envelopes and marked</p>

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	<p>as %Techno-commercial Bid (Part-I)+and %Price Bid (Part-II)+respectively. Both the envelopes are to be kept in another common envelope and marked as %BID+ Each envelope should be sealed and super scribed with tender enquiry no., item / package name, project name and due date of opening. Bidder's name and address shall also be mentioned on each envelope.</p> <p>1.7 For any technical clarification, please contact official mentioned in the tender enquiry / NIT.</p> <p>1.8 For any commercial clarification please contact official issuing tender enquiry / NIT.</p> <p>1.9 Price bid (Part-II) should not contain any additional information / description other than given in %Un-Priced Bid+ submitted with %Techno-commercial Bid (Part-I)+except prices, otherwise bid is liable for rejection.</p> <p>1.10 Price Bid submitted along with the bid shall remain valid up to validity of offer. Any discount / revised offer submitted by the bidder on its own shall be accepted provided it is received before the due date and time of offer submission (i.e. Part-I Bid). The discount shall be applied on pro-rata basis to all items including optional items, if any, unless specified otherwise by the bidder. Discount offered shall be valid for full duration of validity of the offer including extension of validity, if any. Unsolicited Supplementary / Revised Price Bid submitted after the due date and time of offer submission (i.e. Part-I Bid), during validity period of offer, unless asked by BHEL, shall not be considered. Withdrawal of quotation by the bidder, at any stage after its opening, may entail suitable action against such bidder by BHEL.</p> <p>1.11 The consultants / firm (and any of its affiliates) shall not be eligible to participate against tender enquiry for the related goods or works or services for the same project, if they were engaged by BHEL-TBG for the consultancy services.</p> <p>1.12 In case any Foreign OEM / Foreign Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer / supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer / supplier or the manufacturer / supplier could bid directly but not both. In case bids are received from the manufacturer / supplier and the agent, bid received from the agent shall be ignored.</p> <p>1.13 Non-conformities / errors / discrepancies in quoted prices in price bids shall be dealt as follows :-</p> <p>a) If, in the price structure quoted for the required goods / services / works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of BHEL there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.</p> <p>b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.</p> <p>c) If there is a discrepancy between words and figures, the amount in</p>

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	<p>words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.</p> <p>d) If there is such discrepancy in an offer as mentioned in (a), (b) &amp; (c) above, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the BHEL, the bid is liable to be ignored.</p> <p>1.14 In case the scope of the successful bidder / supplier against this tender enquiry includes Erection, Testing and Commissioning (ETC) of the equipment / material at site in addition to Supply, Purchase Order shall be placed for Supply Portion and Contract shall be separately awarded for ETC at Site Portion. General Terms and Conditions for Tender Enquiry / Contract mentioned herein shall be applicable for both Supply &amp; ETC at Site. Additional Terms and Conditions for Tender Enquiry / Contract for Erection, Testing and Commissioning at Site %BHEL/TBG/GTC-ETC/2016 Rev. 01+ shall be applicable for ETC at Site only which is to be read in conjunction with General Terms and Conditions for Tender Enquiry / Contract mentioned herein. However, any breach of either the Purchase Order or the Contract shall be deemed to be breach of the other.</p> <p>1.15 Taxes and Duties payable extra as per Clause No. 2.3 in NIT, if not specified/quoted clearly as extra shall be considered as included in Ex-works Price and therefore shall not be reimbursed. Taxes and duties not payable extra as per NIT shall be deemed to be included in Ex-works Price.</p> <p>1.16 If the rates for taxes and duties in respect of the quoted materials and / or services assumed by the Supplier are less than the tariff prevailing at the time of tendering, Supplier will be responsible for such under quotations. However if the rates assumed are higher than the correct rates prevailing at the time tendering, the difference will be to the credit of BHEL.</p> <p>Note : Representative / official deputed by the bidder to witness tender opening must produce authorization letter for the same.</p>
2.	<p><b>PRICES :</b></p> <p>2.1 Unless specifically indicated in the NIT, all prices shall be FIRM. No enhancement of rate for whatsoever reasons unless and until asked by BHEL shall be allowed.</p> <p>2.2 Unless specifically indicated in the NIT, the prices shall be on INR basis.</p> <p>2.3 Unless specifically indicated in the NIT, the prices are to be quoted on FOR (Site / Destination) basis excluding GST. The break-up of prices shall be as under :-</p> <p>a) <b>Ex-works Price:</b> Ex-works price including packing &amp; forwarding charges.</p> <p>b) <b>Freight:</b> Freight for door delivery up to destination / site / store are to be quoted separately.</p> <p>c) <b>Insurance:</b> Insurance for door delivery up to destination / site / store are to be quoted separately.</p>

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	<p>d) <b>Type Test Charges:</b> If asked in the technical specification, it is to be quoted separately for each test.</p> <p>e) <b>Charges for Supervision of Erection, Testing &amp; Commissioning (ETC) at Site:</b> To be quoted separately if specified in NIT/Price Schedule.</p> <p>f) <b>Charges for Testing &amp; Commissioning at Site:</b> To be quoted separately if specified in NIT/Price Schedule.</p> <p>g) <b>Charges for Erection, Testing &amp; Commissioning at Site:</b> To be quoted separately if specified in NIT/Price Schedule.</p> <p>h) Training Charges: To be quoted separately if specified in NIT/Price Schedule.</p> <p>2.4 <b>GST rates</b> along with HSN/SAC code as applicable on Sr No (a) to (h) above is to be mentioned separately in percentage in both un-priced bid and price bid.</p> <p>Note :</p> <p>i) Unless otherwise specified in the NIT, the purchase order shall be placed on Ex-works basis for Indian bidders.</p> <p>ii) Prices quoted by Indian bidders shall be in Indian Rupees only.</p> <p>iii) In case Supervision of Erection, Testing &amp; Commissioning (ETC) at Site or Testing &amp; Commissioning at Site or Erection, Testing &amp; Commissioning at Site is also in scope of the bidder along with supply, bidder has to ensure that prices quoted for such services also are in line with special terms &amp; conditions of the NIT, if any.</p> <p>iv) Unless otherwise specified in the NIT, Unloading at Site / Destination shall not be in the scope of the supplier.</p> <p>v) Prices in respect of Sr No (a) to Sr No (h) of Clause 2.3 above are to be quoted inclusive of all taxes &amp; Duties, charges. Levies, royalty etc. if any, excluding GST.</p>
3.	<p><b>TERMS OF PAYMENT :</b></p> <p><b>3.1 For Supply only in scope of the supplier</b></p> <p>100% of payment within 60 days from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :</p> <ul style="list-style-type: none"> <li>• LR / GR duly endorsed by BHEL Site Official.</li> <li>• Material Receipt Certificate issued by BHEL Site Official.</li> <li>• GST Compliant Tax Invoice</li> <li>• Packing List (Case-wise)</li> <li>• Copy of Transit Insurance Certificate from underwriters.</li> <li>• Material Inspection Clearance Certificate (MICC) issued by BHEL Quality Management</li> <li>• Guarantee Certificate</li> <li>• Copy of Performance Bank Guarantee (PBG)</li> <li>• Certificate of acceptance of Type Test Reports issued by BHEL Engineering Management wherever specifically mentioned in the Purchase Order.</li> </ul> <p><b>3.2 For Supply where Supervision of Erection, Testing &amp; Commissioning (ETC) at Site is in scope of the supplier or Supply where Testing &amp; Commissioning at Site is in scope of the supplier</b></p>

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	<p>a) 95% of payment within 60 days from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :</p> <ul style="list-style-type: none"> <li>· LR / GR duly endorsed by BHEL Site Official.</li> <li>· Material Receipt Certificate issued by BHEL Site Official.</li> <li>· GST Compliant Tax Invoice</li> <li>· Packing List (Case-wise)</li> <li>· Copy of Transit Insurance Certificate from underwriters.</li> <li>· Material Inspection Clearance Certificate (MICC) issued by BHEL Quality Management</li> <li>· Guarantee Certificate</li> <li>· Copy of Performance Bank Guarantee (PBG)</li> <li>· Certificate of acceptance of Type Test Reports issued by BHEL Engineering Management wherever specifically mentioned in the Purchase Order.</li> </ul> <p>b) 5% of payment within 60 days from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :</p> <ul style="list-style-type: none"> <li>· Certificate of successful completion of Supervision of Erection, Testing &amp; Commissioning at Site if it is in the scope of the supplier or Certificate of successful completion of Testing &amp; Commissioning at Site if it is in the scope of the supplier.</li> <li>· Certificate of completion of final documentation as per Purchase Order / Technical Specification issued by BHEL Engineering Management</li> </ul> <p><b>3.3 For Supply where Erection, Testing &amp; Commissioning (ETC) at Site is in scope of the supplier</b></p> <p>a) 90% of payment within 60 days from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :</p> <ul style="list-style-type: none"> <li>· LR / GR duly endorsed by BHEL Site Official.</li> <li>· Material Receipt Certificate issued by BHEL Site Official.</li> <li>· GST Compliant Tax Invoice</li> <li>· Packing List (Case-wise)</li> <li>· Copy of Transit Insurance Certificate from underwriters.</li> <li>· Material Inspection Clearance Certificate (MICC) issued by BHEL Quality Management</li> <li>· Guarantee Certificate</li> <li>· Copy of Performance Bank Guarantee (PBG)</li> <li>· Certificate of acceptance of Type Test Reports issued by BHEL Engineering Management wherever specifically mentioned in the Purchase Order</li> </ul> <p>b) 10% of payment within 60 days from the date of receipt of complete invoice along with documents in 3 sets (original + 2 copies) as follows :</p> <ul style="list-style-type: none"> <li>· Certificate of successful completion of Erection, Testing &amp; Commissioning at Site issued by BHEL Site Official / Construction Management</li> <li>· Certificate of completion of final documentation as per Purchase Order / Technical Specification issued by BHEL Engineering Management</li> </ul> <p><b>3.4 For Type Test Charges</b></p> <p>100% payment along with applicable GST within 60 days from the date of receipt of complete GST compliant Tax invoice along with copy of Certificate of acceptance of Type Test Reports issued by BHEL Engineering Management in 3 sets (original + 2 copies) on completion of delivery (at site, if F&amp;I is in scope of</p>

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	<p>supplier) of main supplies (excluding spares) for which Type Tests are applicable. List of main supplies (excluding spares) for which Type Tests are applicable shall be certified by BHEL Engineering Management.</p> <p>3.5 For Charges for Supervision of Erection, Testing &amp; Commissioning at Site</p> <p>100% payment along with applicable GST within 60 days from the date of receipt of complete GST compliant Tax invoice along with certificate of successful completion of Supervision of Erection, Testing &amp; Commissioning at Site issued by BHEL Site Official / Construction Management in 3 sets (Original + 2 copies).</p> <p>3.6 For Charges for Testing &amp; Commissioning at Site</p> <p>100% payment along with applicable GST within 60 days from the date of receipt of complete GST compliant Tax invoice along with certificate of successful completion of Testing &amp; Commissioning at Site issued by BHEL Site Official / Construction Management in 3 sets (Original + 2 copies).</p> <p>3.7 For Training Charges</p> <p>100% payment along with applicable GST within 60 days from the date of receipt of complete GST compliant Tax invoice along with certificate of completion of training issued by BHEL Engineering Management in 3 sets (original + 2 copies).</p> <p>Note :</p> <ul style="list-style-type: none"> <li>i) Supplier has to submit invoice(s) as per PO or approved billing break-up of prices (if applicable as per NIT).</li> <li>ii) In case of supplies for overseas project, Material Receipt Certificate issued by BHEL Authorized Representative shall also be acceptable.</li> <li>iii) In case of Transit Insurance under Open Insurance Policy, Intimation / Declaration of Transit Insurance as per terms of the relevant Open Insurance Policy along with copy of Open Insurance Policy from underwriters shall also be acceptable.</li> <li>iv) Supplier has to ensure commencement of transit insurance from the date not later than LR / GR date.</li> <li>v) Supplier has to submit Tax Invoice(s). Supplier should ensure that Tax Invoice should comply all statutory requirements under GST Law to enable BHEL to avail input credit</li> <li>vi) MSMED Act, 2006 and the rules made thereunder as amended from time to time shall be applicable for release of payment to suppliers qualified &amp; registered as Micro &amp; Small Enterprises based on documents mentioned in the NIT for MSME.</li> <li>vii) Supplier has to submit PBG (as per BHEL format) &amp; Guarantee Certificate as per PO terms.</li> <li>viii) In case any shortages and / or damages in supplies, an amount calculated</li> </ul>

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	<p>based on comments against Material Receipt Certificate issued by the BHEL Site Official shall be withheld from the supply payment against 3.1(a) or 3.2(a) above to be deemed fit by BHEL subject to a minimum of 10% of the total ex-works value of the invoice corresponding to the LR / GR against which any shortages and / or damages are reported. The withheld amount shall be released after the shortages and / or damages in supplies are supplied / replenished against Certification by BHEL Site Official.</p> <p>ix) Payment of GST component shall be made only if vendor has deposited the Tax and credit for the same is reflected in GSTN (GST Network). In case credit of the same is not reflected in GSTN , vendor may alternatively furnish BG of GST Amount for a period valid for not less than 1 month .In case of disallowance of credit /non reflection of credit in GSTN , amount will be recovered from supplier along with applicable Interest , penalty etc from any of his dues.</p> <p>x) If GST is payable by BHEL on reverse Charge Mechanism basis, vendor should ensure the submission of GST compliant Tax invoice immediately on dispatch/ performance of service. In case of non-compliance any additional charges towards interest, penalty etc, will be to vendors account.</p> <p>xi) TDS under GST Act, if applicable, shall be deducted unless Exemption Certificate If applicable, from the appropriate authority is furnished to BHEL along with Invoice.</p>
4.	<p><b>INTEREST LIABILITY :</b></p> <p>In case of any delay in payment due to any reason, BHEL shall not pay any interest on delayed payment. Also, no interest shall be payable by BHEL on the bank guarantee / deposit amount or balance payment or any other money which may become due owing to difference or misunderstanding or any dispute before any quasi judicial authority between BHEL and the Supplier / Contractor.</p>
5.	<p><b>GUARANTEE :</b></p> <p>The equipment / material supplied and services rendered (if applicable) shall be guaranteed to be free from all defects and faults in design &amp; engineering, material, workmanship &amp; manufacture and in full conformity with the Purchase Order / Contract, Technical Specifications &amp; approved drawings / data sheets, if any, for 18 months from the date of last delivery or 12 months from the date of commissioning, whichever is earlier.</p> <p>Wherever Erection, Testing &amp; Commissioning at Site are also in the scope of the Supplier, the guarantee period shall be 18 months from the date of last delivery or 12 months from the date of commissioning, whichever is later.</p> <p>The defective equipment / material / component shall be replaced free of cost at site. Freight &amp; Insurance during transit shall also be in the scope of the supplier / contractor. Any expenditure for dismantling and re-erection of the replaced equipment / material / component shall be to suppliers / contractors account. All replacements during the guarantee period shall be delivered at site promptly and satisfactorily within a period not more than 45 days from the date of reporting the defect / rejection etc.</p> <p>In the event of the supplier / contractor failing to replace the defective equipment / material / component within the time period mentioned above, BHEL may proceed to undertake the replacement of such defective equipment / material / component at the risk and cost of the supplier / contractor without prejudice to any other rights under the contract and recover the same from PBG / other dues of this Purchase</p>

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	<p>Order / Contract or any other Purchase Order / Contract executed by the supplier / contractor.</p> <p>Note :</p> <p>i) In case of Illumination System, items viz. Lamps, Tubes, Ballast, Starters, Capacitors &amp; Fuses will not be under Guarantee after commissioning.</p> <p>ii) In addition to the above guarantee period, Extended Guarantee / Warranty, if any, shall be as per NIT / Technical Specifications.</p> <p>iii) In case offer of agent of Foreign OEM / Foreign Principal is considered, as per Clause No. 1.12 above, Guarantee as mentioned above has to be provided by the Foreign OEM / Foreign Principal also.</p>
6.	<p><b>LATENT DEFECT :</b></p> <p>Liability for latent defects shall be for defects inherently lying within material or arising out of design deficiency which does not manifest itself during guarantee period but later and shall be limited to five years from the expiry of the guarantee period.</p>
7.	<p><b>PERFORMANCE BANK GUARANTEE (PBG) :</b></p> <p>Supplier shall arrange to submit Performance BG / Deposit on a non-judicial stamp paper of appropriate value along with first invoice or within 60 days from placement of Purchase Order (PO) whichever is earlier, in line with one of the applicable options as follows :-</p> <p><u>Option %A+</u></p> <p>A single rolling PBG for Rs. 50 Lakhs initially valid for 18 months with claim period of 3 months extra over and above 18 months for all the Purchase Orders being executed for Transmission Business Group, BHEL. However, validity of the PBG shall be extended till 18 months from the date of last delivery with 3 months claim period extra over and above 18 months.</p> <p>Single Rolling PBG option shall not be applicable in case Ex-works value of the PO at the time of placement of PO exceeds Rs. One Crore.</p> <p><u>Option %B+</u></p> <p>PBG for 10% of the total Ex-works PO value, valid for 18 months from the date of last delivery with claim period of 3 months extra over and above 18 months. Ex-works PO value at the time of placement of PO shall be considered for calculation of the PBG amount.</p> <p><u>Option %C+</u></p> <p>In case the total Ex-works PO value at the time of placement of PO does not exceed Rs. Ten Lakhs, interest free Deposit of 10% of the total Ex-works PO value at the time of placement of PO in form of Demand Draft favouring %Bharat Heavy Electricals Limited+ and payable at New Delhi / Delhi / Noida shall also be acceptable to BHEL in lieu of PBG, which shall be released after expiry of 21 months from the date of last delivery after deduction, if any, within 60 days from receipt of invoice in 3 sets (original + 2 copies) to be submitted by the supplier.</p> <p>Note :</p> <p>i) The Bank Guarantee shall be from any bank as per Annexure for List of Banks (32 Nos.). The original PBG should be sent by issuing Bank directly to AGM (Finance), TBG, BHEL, Noida.</p> <p>ii) Extension of validity of the PBG in original, as per above clause, should be sent by issuing Bank directly to AGM (Finance), TBG, BHEL, Noida at least 45 days before expiry of validity of the PBG.</p> <p>iii) Unless otherwise specified in the NIT, deviation taken for non-submission of PBG / Deposit, as applicable, shall not be accepted.</p>

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	<p>iv) Supplier has to confirm one of the applicable options for submission of PBG / Deposit before placement of PO.</p> <p>v) In case of non. submission PBG / Deposit, as applicable, BHEL reserve the right for Risk Purchase as per terms of the NIT and impose Suspension of Business Dealings with the Supplier / Contractor.</p> <p>vi) BHEL reserve the right to encash the Bank Guarantee and forfeit the amount in the event of any default, failure or neglect on part of the Supplier in fulfilment of performance of the Purchase Order.</p> <p>vii) Value of the Bank Guarantee (at the time of submission) shall remain unchanged for any subsequent variations in Purchase Order value up to <math>\pm 20\%</math>. Beyond this variation of <math>\pm 20\%</math>, the Supplier shall arrange to enhance or may reduce the value of the Bank Guarantee accordingly for the total variation promptly.</p> <p>viii) Vendor to ensure submission of Certificate of Final Documentation /Confirmation regarding Non applicability of Final Documentation, as the case may be, as referred in clause No 9 regarding Final Documentation. BG shall be released only after submission of the same to BHEL TBMM.</p>
8.	<p><b>SUBMISSION OF DRAWINGS / DOCUMENTS FOR APPROVAL :</b></p> <p>Supplier shall submit the master document list within 7 days from date of Purchase Order / Contract, unless otherwise specified in the NIT, with planned dates for submission which shall be in line with activity schedule as per Purchase Order / Contract and shall be finalized with BHEL Engineering Management. Date of first submission of drawings / documents shall be certified by BHEL Engineering Management after the receipt of applicable drawings / documents (e.g. project specific cover sheet, GTP, OGA drawings, schemes, type test reports etc.) by BHEL. During detailed engineering stage, necessary hard copies of the engineering drawings / documents shall also be submitted by the supplier as per the Purchase Order / Contract requirement. The supplier shall also submit the packing drawings as per technical specifications.</p> <p>In case item(s) offered require any interface details of other item (not in the scope of supplier &amp; required for operating the equipment), the supplier has to submit interfaces schedule along with submission of engineering drawings / documents. It shall be responsibility of the supplier to get the details of the interfaced item from BHEL before manufacturing to avoid any mismatch at site.</p>
9.	<p><b>FINAL DOCUMENTATION :</b></p> <p>Final documentation as called in the Technical /contract specification is to be submitted within 3 months from the date of first delivery of respective equipment, item/material. After submission of Final Documentation, BHEL Engineering Management (TBEM) will issue a Certificate of Completion of Final Documentation. Wherever Final Documentation is not applicable, BHEL Engineering Management (TBEM) will issue confirmation regarding the same, Vendor to submit the Certificate of Final Documentation /Confirmation regarding Non applicability of Final Documentation, as the case may be, to BHEL TBMM. In case of Non Submission of Certificate of Final Documentation /Confirmation regarding Non applicability of Final Documentation, BG will be liable for encashment.</p>
10.	<p><b>INSPECTION :</b></p> <p>BHEL / customer / third party shall inspect equipment / material before despatch. Stage inspection during manufacturing may also be carried out. Material to be despatched only after getting Material Despatch Clearance Certificate (MDCC) / MICC issued by BHEL.</p> <p>Supplier shall send inspection call on prescribed format / web site only, with an advance notice of 15 days.</p> <p>Supplier to ensure submission of all routine / acceptance test reports, inspection</p>

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	<p>reports and all other documents related to inspection, immediately to BHEL.</p> <p>BHEL representative is authorised to carry out audits along with Third Party Inspection Agency at vendor's / supplier's works before clearing the items for despatch.</p>
11.	<p><b>DESPATCH DOCUMENTS :</b> Despatch documents to be immediately sent to BHEL on despatch are as follows :-</p> <ul style="list-style-type: none"> <li>• Copy of Invoice</li> <li>• Copy of LR / GR in case of Indian suppliers or BL / AWB in case of foreign suppliers</li> <li>• Copy of Packing List (Case-wise)</li> <li>• Copy of Transit Insurance Certificate from underwriters</li> <li>• Copy of Guarantee Certificate</li> </ul>
12.	<p><b>DELIVERY PERIOD :</b> Delivery / Completion requirement shall be mentioned in the NIT. Bidder to specify best delivery / completion period possible in weeks from the date of LOI / PO as per activity schedule for consideration by BHEL. Time required for type test, if applicable, is to be separately indicated. Note :</p> <p>LR / GR date or invoice date (whichever is later) for indigenous supplies and BL / AWB date for FOB / CIF (if applicable) contracts shall be considered as delivery date.</p>
13.	<p><b>LIQUIDATED DAMAGES FOR DELAYED DELIVERY:</b> In case of delay in execution of Purchase Order beyond the contractual delivery time, an amount of 0.5% of the total Purchase Order value for supply (incl. taxes and duties, freight &amp; insurance as applicable) per week of delay or part thereof subject to a maximum of 10% of the total Purchase Order value for supply (incl. taxes and duties, freight &amp; insurance as applicable) shall be deducted as Liquidated Damages (LD) along with applicable GST (if any) on LD.</p> <p>However, in case of staggered (lot-wise) contractual delivery schedule, an amount of 0.5% of the total Purchase Order value for supply (incl. taxes, duties, freight &amp; insurance as applicable) of delayed lot per week of delay or part thereof subject to maximum of 10% of the total Purchase Order value. (Incl taxes, duties, Freight &amp; Insurance as applicable) shall be deducted as Liquidated Damages (LD) along with applicable GST (if any) on LD.</p> <p>Note :</p> <ol style="list-style-type: none"> <li>i) In case of any amendment / revision in PO /WO, the LD shall be linked to the amended / revised Purchase Order / Contract value and delivery / completion time / schedule, if applicable.</li> <li>ii) LR / GR date or invoice date (whichever is later) for indigenous supplies and BL / AWB date for FOB / CIF (if applicable) for imported supplies shall be treated as the date of dispatch for levying LD as above.</li> <li>iii) However, for indigenous supply, if time period between date of receipt of material at site / destination by Site Official &amp; the date of LR / GR or invoice (whichever is later) is more than 30 days, where distance from place of despatch as per LR / GR is upto 1000 Kms or if time period between date of receipt of material at site / destination by Site Official &amp; the date of LR / GR or invoice (whichever is later) is more than 45 days, where distance from place of despatch as per LR / GR is more than 1000 Kms, such excess period shall also be considered for LD purpose.</li> <li>iv) If, as per supplier, delay is not attributable to the supplier, delay analysis with documentary evidence may be submitted by the supplier at the earliest but not</li> </ol>

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	later than six months from the end of the financial year in which the payment is withheld. Based on the above details / documents submitted by the supplier, BHEL shall take final decision and if considered appropriate by BHEL, withheld amount (full or part as the case may be) shall be released, otherwise, full or balance withheld amount shall be treated as deduction of Liquidated Damages (LD) towards delayed delivery.
14.	<p><b>VALIDITY OF OFFER :</b>  The offer shall be valid for 120 days from the due date of opening of tender (i.e. techno-commercial bid unless otherwise specified in the NIT).  Prices of Spares, wherever they optional items, shall be valid till two years from the date of placement of PO.</p>
15.	<p><b>ACCEPTANCE / REJECTION OF TENDER :</b>  BHEL reserve the right to reject in full or part, any or all tender without assigning any reason thereof.  BHEL also reserve right to vary the quantities as mentioned in the NIT. Acceptance of offer is subject to vendor approval by customer before opening of price bid.</p> <p>BHEL shall not be bound by any power of attorney granted by tenderer or by changes in composition of the firm made subsequent to award of order / contract. BHEL may however recognize such power of attorney and changes after obtaining proper legal advice, cost of which will be chargeable to the seller / contractor concerned. If the tenderer deliberately gives wrong information, BHEL reserves the right to reject such an offer at any stage or cancel the order / contract, if awarded, and forfeit the security deposit and bank guarantee.</p>
16.	<p><b>DEVIATION :</b>  The bids having deviation(s) w.r.t. tender are liable for rejection. However, BHEL, at its discretion, may load the prices for evaluation of offer with prior intimation to bidder.</p>
17.	<p><b>TENDER EVALUATION :</b>  Comparative statement shall be prepared and evaluated on total cost basis at destination/site (as per terms of NIT) considering overall quantity indicated in NIT unless contrary to same is specifically mentioned in the tender enquiry / NIT. Total cost for this purpose shall include cost of scope of work as mentioned in NIT along with applicable taxes &amp; duties, and other services etc. (if applicable). GST input credit available to BHEL shall be reduced from prices while determining L1 status.</p> <p>In case all bidders are foreign &amp; Port of Import (destination port) is same for all the bidders, evaluation of offers shall be done on CIF (Port of Import) basis. Otherwise, evaluation of offers shall be done on the basis of delivered cost at site /destination to BHEL. Further, in case of foreign bidders, marine freight &amp; insurance are to be quoted separately &amp; the purchase order may be placed on FOB basis with an option for delivery on CIF / CFR basis, if required, later.</p> <p>In case of foreign bidders, Exchange Rate (TT selling rate of State Bank of India) as on date of tender opening (Part-I Bid in case of two part bid) shall be considered. If the relevant day happens to be a bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken for tender evaluation.</p>
18.	<p><b>LOADING CRITERIA :</b>  List of permissible deviations &amp; loading criteria thereof are as follows :-</p> <p>a) Payment Terms  Base rate of SBI (as applicable on the date of bid opening / techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidder(s) against terms of payment in the NIT.</p> <p>b) Liquidated Damages (LD) for Delayed Delivery</p>

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	<p>Loading on LD clause shall be to the extent to which it is not agreed to by the bidder (at offered value).</p> <p>c) In case of foreign bidders, if the quoted prices is on CIF basis only, it shall be loaded to arrive at total FOR (Site / Destination) price, as applicable, by factors as follows :-</p> <ul style="list-style-type: none"> <li>i) Port handling / clearing charges: @ 1% of CIF value to arrive at Customs Assessable Value.</li> <li>ii) Custom Duty (including CVD &amp; SAD) as per NIT prevailing on date of price bid opening.</li> <li>iii) Inland Freight &amp; Transit Insurance: @ 5% of CIF value where distance between site / destination and Port of Discharge is upto 1000 Kms or @ 7% of CIF value where distance between site / destination and Port of Discharge is more than 1000 Kms.</li> </ul> <p>Note : Additional deviations (if considered acceptable by BHEL) &amp; the loading criteria shall be communicated to all the qualified bidders before price bid opening.</p>
19.	<p><b>ARBITRATION :</b></p> <p>In the event of any dispute emanating from and relating to this contract, the matter shall be referred to the sole arbitration of the person appointed by the competent authority of BHEL. Subject to aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 and the rules made thereunder as amended from time to time in India shall apply to the arbitration proceedings. The venue of arbitration shall be in New Delhi.</p> <p>Further there shall be no claim for any pre-reference or pendente-lite interest on the claims and any claim for such interest made shall be void.</p> <p>However, in case of contract with Public Sector Enterprise / Undertaking (PSE/PSU) or Govt. Dept., the extant guidelines of Govt. of India shall be followed.</p>
20.	<p><b>LEGAL SETTLEMENT :</b></p> <p>Indian Courts at New Delhi / Delhi shall have exclusive jurisdiction to decide the dispute, if any, arising out of or in respect of the contract(s) to which these conditions are applicable. Contract, including all matters connected with contract, shall be governed by the Indian Law, both substantive and procedural, for the time being in force including modification thereto.</p>
21.	<p><b>SUB-CONTRACTING :</b></p> <p>In case further subcontracting of BHEL Purchase Order / Contract or part thereof is envisaged by supplier, the same can be done after written permission is obtained from BHEL. However it shall not absolve the Supplier / Contractor of the responsibility of fulfilling BHEL Purchase Order / Contract requirements. In case of subcontracting of Purchase Order / Contract awarded by BHEL or part thereof without such permission, BHEL reserve the right to cancel the Purchase Order / Contract and source such material / component / equipment / system from any other agency at the risk and cost of the Supplier / Contractor.</p> <p>If Supplier / Contractor is an individual or proprietary concern and the individual or the proprietor dies or the partnership is dissolved or substantially affected, then unless BHEL is satisfied that legal representative of individual Supplier / Contractor or proprietor of proprietary concern and surviving partners of partnership firm are capable of carrying out and completing the Purchase Order / Contract, BHEL shall be entitled to cancel the Purchase Order / Contract as to its incomplete portion and without being in any way liable to payment of any compensation to legal representative of Supplier / Contractor and / or to surviving partners of Supplier / Contractor firm on account of cancellation of the Purchase Order / Contract.</p> <p>Decision of BHEL that legal representatives of deceased Supplier / Contractor or</p>

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	<p>surviving partners of the Supplier / Contractor's firm cannot carry out and complete the Purchase Order / Contract shall be final and binding on the parties hereto.</p> <p>Terms and Conditions shall not get affected in case of de-merger / amalgamation / taking-over / re-constitution etc.</p>
22.	<p><b>RISK PURCHASE :</b>  In case the Supplier / Contractor fails to supply or fails to comply with terms &amp; conditions of the Purchase Order / Contract or delivers equipment / material not of the contracted quality or fails to adhere to the contract specifications or fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery / completion period to justify that supplies shall be inordinately delayed beyond contractual delivery / completion period, BHEL reserve the right to cancel the Purchase Order / Contract either in whole or in part thereof without compensation to Supplier / Contractor and if BHEL so desires, may procure such equipment / material / items not delivered or others of similar description where equipment / material / items exactly complying with particulars are not readily procurable in the opinion of BHEL which is final and in such manner as deemed appropriate, at the risk and cost of the Supplier / Contractor and the Supplier / Contractor shall be liable to BHEL for any excess cost to BHEL. However, the Supplier / Contractor shall continue execution of the Purchase Order / Contract to the extent not cancelled under the provisions of this clause.</p> <p>Recovery amount on account of purchases made by BHEL at the risk and cost of Supplier / Contractor shall be the difference of total value of new Purchase Order (PO) value and total value of old Purchase Order for applicable items, where the total value of new PO is more than total value of old PO for applicable items, plus additional 15% of the total ex-works value of new PO as overheads.</p> <p>The Supplier / Contractor shall on no account be entitled to any gain on such risk &amp; cost purchase. In case the purchase order (PO) value of the new PO is less than the PO value of the old PO, 15% of the total ex-works value of the new PO shall be recovered as overheads and the difference between the PO value of the old PO and the new PO shall not be considered for calculation of the recovery amount.</p>
23.	<p><b>ADJUSTMENT OF RECOVERY :</b>  Any amount payable by the Supplier / Contractor under any of the condition of this contract shall be liable to be adjusted against any amount payable to the Supplier / Contractor under any other Purchase Order / Contract awarded to him by any BHEL unit. This is without prejudice to any other action, as may be deemed fit, by BHEL.</p>
24.	<p><b>FORCE MAJEURE CONDITION :</b>  If by reason of war, civil commotion, act of god, Government restrictions, strike, lockout which are not in control of Supplier / Contractor the deliveries / services are delayed, Supplier / Contractor shall not be held responsible.</p> <p>If at any time during the continuance of the Purchase Order / Contract, the performance in whole or in part by either party of any obligations under the Purchase Order / Contract is prevented or delayed by reason of any war hostilities, acts of the public enemy, restrictions by Govt. of India, civil commotion, sabotage, fires, floods, explosion, epidemics, quarantine restrictions, strike, lock-outs or acts of God (hereinafter referred to as <del>event</del>), which are not in control of Supplier / Contractor or BHEL, then provided notice of the happening of such event is given by either party to the other within fifteen (15) days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate the Purchase Order / Contract nor shall have any claim for damages against each other in respect of such non-performance and delay in performance. Performance under the Purchase Order / Contract shall be resumed immediately after such event has come to an end or</p>

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	<p>ceased to exist and decision of BHEL as to whether the deliveries have to be resumed or not shall be final, conclusive and binding on the parties hereto.</p> <p>In the event of the parties hereto not able to agree that a force majeure event has occurred, the parties shall submit the disputes for resolution pursuant to the provisions hereunder, provided that the burden of proof as to whether a force majeure event has occurred shall be upon the party claiming such an event.</p> <p>Notwithstanding above provisions, BHEL shall reserve the right to cancel the Purchase Order / Contract, wholly or partly, in order to meet the overall project schedule and make alternative arrangements for completion of delivery and other schedules.</p>
25.	<p><b>MANUFACTURING QUALITY PLAN (MQP) :</b> Supplier to submit approved MQP in line with requirement of BHEL/customer.</p>
26.	<p><b>SUPPLIER PERFORMANCE MONITORING AND RATING SYSTEM :</b> BHEL reserve the right for evaluation of Supplier Performance Rating as per Supplier Performance Monitoring and Rating System of BHEL for necessary action. Details are available at BHEL Website <a href="http://www.bhel.com">www.bhel.com</a> for reference.</p>
27.	<p><b>DEALING WITH BANNED SUPPLIERS / CONTRACTORS IN BHEL :</b> Offers of the bidders, who are on the banned list, as also the offers of the bidders who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website <a href="http://www.bhel.com">www.bhel.com</a> for reference.</p>
28.	<p><b>ORDER OF PRECEDENCE :</b> The order of precedence shall be as follows :-</p> <ol style="list-style-type: none"> <li>Special Terms &amp; Conditions (STC) for Tender Enquiry / Contract, if any</li> <li>General Terms &amp; Conditions (GTC) for Tender Enquiry / Contract &amp; Additional General Terms &amp; Conditions (GTC) for Tender Enquiry / Contract for Erection Testing &amp; Commissioning (ETC) at Site, if applicable</li> </ol> <p>Provisions in (a) above shall prevail over (b). In case of conflict, between Technical Specifications and STC / GTC, bidder to seek necessary clarifications from BHEL concerned official as specified in NIT.</p>
29.	<p><b>PACKING :</b> 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>In case of shipment by sea or air, the packing shall be sea-worthy or air-worthy respectively and of international standards.</p> <p>Different types of spares i.e. start-up / commissioning spares and initial spares (mandatory spares and recommended O&amp;M spares) are to be packed separately.</p> <p>Packing List shall be submitted as per standard format along with advance set of documents for claiming payment which shall also indicate :-</p> <ol style="list-style-type: none"> <li>Case / Packing size (as applicable).</li> <li>Gross weight and net weight of each package.</li> <li>Detailed contents of the package with quantity of each item separately.</li> </ol> <p>Project, Item / Package Description, BHEL's PO No. with date &amp; Case / Packing Mark should also be clearly mentioned on the Case / Packing and Packing List for identification. Also, Packing List must be duly signed &amp; should include respective Invoice No. &amp; LR No.</p> <p>Note :</p> <p>Foreign suppliers to furnish details to arrange inland transportation by BHEL, if applicable, as follows :-</p> <ol style="list-style-type: none"> <li>No. of Packages</li> <li>Size with Weight (Gross &amp; Net) of each Package</li> <li>No. of Containers with type &amp; size required for inland transportation</li> </ol>

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	iv) Type of Cargo (Break Bulk / LCL / FCL) v) Customs Tariff No.
<b>30.</b>	<p><b>COLOUR CODING :</b> Aluminium stickers are required to be attached to large components but plastic sheet tags should be tied with small components, giving details like purchase order, description of the component, quantity etc. Tags should be of the colour as follows :- a) Main equipment : Yellow or White tag b) Start-up / Commissioning spares : Blue tag c) Mandatory spares : Pink or Red tag d) Recommended / O&amp;M spares : Green tag</p>
<b>31.</b>	<p><b>MICRO, SMALL &amp; MEDIUM ENTERPRISES (MSME) :</b> MSMED Act 2006 as amended from time to time &amp; extant regulations of Govt. of India for MSME will be applicable. Micro &amp; Small Enterprises (MSE) can avail the intended benefits only if they submit along with the offer / bid, attested copies of either Acknowledgement of Entrepreneur Memorandum Part-II (EM-II certificate) having deemed validity (five years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM-II certificate along with attested copy of a CA certificate (As per BHEL format where deemed validity of EM-II certificate of five years have expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of opening (for Techno-commercial Bid : Part-I in case of two part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or arrested (in original) by a Gazetted officer. Copy of Udyog Aadhaar Memorandum with Acknowledgement of Ministry of Micro, Small &amp; Medium Enterprises should also be furnished.</p>
<b>32.</b>	<p><b>BUSINESS ETHICS / SUSPENSION OF BUSINESS DEALINGS WITH SUPPLIERS / CONTRACTORS :</b> If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution, indulges in malpractices cheating, bribery, fraud or other misconduct or formation of cartel so as to influence the bidding process or influences the price or fails to perform or is in default without any reasonable cause etc or performs any act considered objectionable as per extant %Guidelines for Suspension of Business Dealings with Suppliers/Contractors+ Abridged version of same is available at BHEL website (<a href="http://www.bhel.com">www.bhel.com</a>) on %Supplier Registration+Page.</p>
<b>33.</b>	<p><b>REVERSE AUCTION :</b> BHEL reserve the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder or price bid submitted by the bidder through e-procurement system. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA. In case BHEL decides to go for Reverse Auction, only those bidders who have given their unconditional acceptance to participate in RA will be allowed to participate in the Reverse Auction. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit %online sealed bid in the Reverse Auction. Non-submission of %online sealed bid by the bidder will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue. General Terms and Conditions of RA are available at Annexure. Business Rules for</p>

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	<p>RA shall be sent to the bidders before conducting RA.  Abridged Version of %Common Guidelines for Conducting Reverse Auction+may also be seen at BHEL website (<a href="http://www.bhel.com">www.bhel.com</a>) on %Supplier Registration+ Page &amp; %Tender Notifications+Page.</p>
34.	<p><b>INTEGRITY PACT :</b>  Bidders shall have to enter into Integrity Pact with BHEL, duly signed with seal in original, if specified in NIT / RFQ failing which bidder's offer shall be liable for rejection.</p>
35.	<p><b>TERMINATION OF CONTRACT :</b>  BHEL shall have the right to cancel the Purchase Order / Contract without any financial implication to BHEL if vendor approval by end user / customer is withdrawn or in case of Suspension of Business Dealings with the Suppliers / Contractors by BHEL.</p> <p>BHEL shall have the right to cancel Purchase Order / Contract, wholly or in part, in case they are obliged to do so on account of any decline, diminution, curtailment or stoppage of their business and in that event, the Supplier's / Contractor' compensation claim shall be settled mutually.</p> <p>In case of cancellation of Purchase Order / Contract for main supply, all other associated Purchase Orders / Contracts like those for Mandatory Spares / Recommended Spares / Erection, Testing &amp; Commissioning (ETC) / Supervision of ETC, if any, would also get cancelled.</p>
36.	<p><b>SHELF LIFE :</b>  Supplier has to inform the list of the items / sub-items which have limited shelf life like consumables or those required for the first fill and shall indicate the corresponding shelf life period in the offer. Such items / sub-items shall be manufactured / despatched only after getting formal clearance from BHEL.</p>
37.	<p><b>LIMITATION OF LIABILITY :</b>  Notwithstanding any other provisions, except in cases of wilful misconduct and / or criminal negligence / acts,</p> <p>a) Neither the Supplier / Contractor nor BHEL shall be liable to the other, whether in Purchase Order / Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production or loss of profits or interest costs, provided however that this exclusion shall not apply to any obligation of the Supplier / Contractor to pay Liquidated Damages to the BHEL and</p> <p>b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under the Contract, in tort or otherwise, shall not exceed total Contract Price, provided however that this limitation shall not apply to any obligation of the Vendor to indemnify BHEL with respect to Patent Infringement or Intellectual Property Rights.</p>
38.	<p><b>SHORTAGES / DAMAGES :</b></p> <p>a) Against Supply only or Supply where Supervision of Erection, Testing &amp; Commissioning (ETC) at Site or Supply where Testing &amp; Commissioning at Site is in scope of the supplier :</p> <p>Any shortages and / or damages in supplies shall be supplied / replenished free of cost by the supplier as early as possible but not later than 30 days from the date of intimation by BHEL to the supplier.</p> <p>b) Against Supply where Erection, Testing &amp; Commissioning (ETC) at Site is in scope of the supplier :</p>

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	<p>Any shortages and / or damages in supplies and during handling / storage, erection, testing and commissioning at site shall be supplied / replenished free of cost by the Supplier / Contractor, as early as possible, to meet the contractual completion time / schedule.</p> <p>Note: There shall not be any extension in the contractual delivery time / schedule due to any shortages and / or damages in supplies.</p>
<b>39.</b>	<p><b>VARIATION OF CONTRACT VALUE / QUANTITY VARIATION :</b>  BHEL shall have the right to variation in quantities of items within <math>\pm 30\%</math> of the total Purchase Order / Contract value at the time of placement of PO or award of Contract on overall basis for all amendments together within two years from the date of original Purchase Order / Contract or completion of execution of the Purchase Order / Contract whichever is earlier but quantities of individual items may vary to any extent or may get deleted unless otherwise specified in the technical specifications. No compensation is payable due to variation in the quantities and the Supplier / Contractor shall be bound to accept the same the contracted prices / rates without any escalation. However, if the Purchase Order / Contract is on %lumpsum+basis, no variation of Purchase Order / Contract value shall be admissible to the Supplier / Contractor within the scope of Purchase Order / Contract, as long as the inputs remain unchanged.</p>
<b>40.</b>	<p><b>STATUTORY VARIATION :</b>  GST rates prevailing at the time of dispatch of goods / completion of services shall be payable by BHEL. All other taxes, duties, charges, royalty, cess, other levies shall be deemed to be included in the Ex Works Prices / Charges quoted by bidders and no variations shall be payable in respect thereof. No other variations such as on customs duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the BHEL.</p> <p>Notwithstanding anything above, where the actual completion of the supply / services occurs beyond the period stipulated in the Purchase Order / Contract or any extension thereof, variations referred to above, will be limited to the rates prevailing on the dates of such agreed completion periods only. For variations after the agreed completion periods, the Supplier / Contractor alone shall bear the impact for the upward revisions and for downward revisions BHEL shall be given the benefit of reduction in applicable taxes /GST. This will be without prejudice to the levy of liquidated damages for delay in delivery / completion.</p> <p>If new tax is introduced by Central/ State Govt / Municipality becomes directly applicable on items specified in Bill of Quantities/Purchase Order/Contract, full reimbursements shall be made provided it becomes applicable on items specified in Bill of Quantities.</p> <p>However, any additional tax implication due to delay in delivery, beyond the Contractual Delivery, attributable to supplier shall be borne by supplier.</p>
<b>41.</b>	<p><b>MODE OF PAYMENT :</b>  Payment shall be made directly to the Supplier / Contractor by BHEL through NEFT / RTGS.</p>
<b>42.</b>	<p><b>CONFIDENTIALITY :</b>  Supplier / Contractor shall, at all times, undertake to maintain complete confidentiality of all data, information, software, drawings &amp; documents etc. belonging to BHEL and also of systems, procedures, reports, input documents, manuals, results and any other BHEL documents discussed and / or finalized during the course of execution of Purchase Order / Contract.</p>
<b>43.</b>	<p><b>INDEMNIFICATION :</b>  The Supplier / Contractor shall indemnify and keep indemnified and hold harmless BHEL and its employees and officers from and against any and all claims, suits, actions or administrative proceedings, demands, losses, damages, costs and</p>

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	expenses and any other claim of whatsoever nature in respect of the death or injury of any person or loss of or damage to any property arising during the course and out of the execution of the Purchase Order / Contract.
<b>44.</b>	<p><b>TITLE OF GOODS :</b></p> <p>a) Ownership of the equipment / material procured in India, shall be transferred to BHEL upon loading on to the mode of transport to be used for transportation of the said equipment / material from the works to the site / destination and upon endorsement of the dispatch documents in favour of BHEL.</p> <p>b) Ownership of the equipment / material to be imported into the country where the site is located, if not procured in India, shall be transferred to BHEL upon loading on the mode of transport to be used for transportation of the equipment / material from the country of origin to that country / destination and upon endorsement of despatch document in favour of BHEL.</p> <p>c) Notwithstanding the transfer of ownership of the equipment / material, the responsibility for care and safe custody thereof together with the risk of loss or damage thereto for whatsoever reason shall remain with the Supplier.</p>
<b>45.</b>	<p><b>COMPLIANCE OF STATUTORY REQUIREMENTS :</b></p> <p>The vendor shall comply with all State and Central Laws / Acts, Statutory Rules, Regulations etc., as may be enacted by the Government during the tenure of the Purchase Order / Contract and having in force and applicable to the Purchase Order / Contract and nothing shall be done by the Supplier / Contractor in contravention of any Law / Act and / or Rules / Regulations, thereunder or any amendment thereof.</p> <p>The Supplier / Contractor shall pay all taxes, fees, licence charges / deposits, duties, tolls, royalty, commissions or other charges which may be levied on account of any of his operations connected with the Purchase Order / Contract. In case BHEL is constrained to make any of such payments, BHEL shall recover the same from the Supplier / Contractor either from moneys due to him or otherwise as deemed fit.</p>
<b>46.</b>	<p><b>ACCEPTANCE OF ORDER :</b></p> <p>Supplier should acknowledge and accept the Letter of Award / Purchase Order issued by BHEL within 7 days of the issue of Letter of Award / Purchase Order.</p> <p>In case of any discrepancy / typographical error in issue of Purchase Order / Contract, the agreed terms &amp; conditions, scope of work, rates / prices for placement of PO / award of contract shall be applicable and BHEL reserves the right to issue amendment(s) to PO / Contract for correction of discrepancies / typographical errors in the PO / Contract at a later date.</p>
<b>47.</b>	<p><b>FRAUD PREVENTION POLICY :</b></p> <p>The Bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <a href="http://www.bhel.com">http://www.bhel.com</a> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.</p>

Signature of Bidder (Authorized Signatory) with Date & Seal

SCHEDULE OF PRICE (Part II) / UNPRICED COPY)

**( BIDDER TO STRICTLY ENSURE SUBMITTING THE PRICE BIDS IN THIS FORMAT )**

VENDOR NAME / OFFER REF:

ENQUIRY No. - 02G2300022 dated 25.04.2022

S.No.	Description of Item	HSN Code	Unit	Quantity	Unit Price Ex-works (Rs.)	Total Ex-Works (Rs.)	GST @__on Ex Works	Unit Freight & Insurance	Total Freight & Insurance	GST @__ on Freight & Insurance	TOTAL (FOR Destination) PRICE (Rs.)
1	ALUMINUM TUBE AL TUBE 4" IPS (EH TYPE) - FOR NTPC NORTH KARANPURA PROJECT		MT	3.71							
2	ALUMINUM TUBE AL TUBE 4" IPS (EH TYPE) - FOR TANGEDCO ENNORE SEZ PROJECT		MT	2							
3	ALUMINUM TUBE AL TUBE 4" IPS (EH TYPE) - FOR PHPA BHUTAN PUNATSANGCHHU-II PROJECT		MT	2.33							
4	ALUMINUM TUBE : AL TUBE 4.5" IPS (EH TYPE) - FOR WBPDCS SAGARDIGHI TPS PROJECT		KG	3250							

1. It is certified that M/s \_\_\_\_\_ have quoted as per the specified price format of the tender, otherwise offer shall be liable for rejection.
2. PLEASE NOTE THAT UNPRICED COPY OF PRICE BID ( i.e. WITH ALL PRICE BLANKED) SHALL BE FURNISHED ALONGWITH TECHNO-COMMERCIAL BID.
3. Bidder to mention the word "QUOTED" against each item in UNPRICED SCHEDULE.
4. Bidder to quote the Freight and Insurances charges project wise as the delivery requirement is up to site for all projects.





**ACTIVITY SCHEDULE [ANNEXURE II] – PROJECT WISE**

SL. NO.	ACTIVITY	ACTIVITY TIME IN WEEKS	CUMULATIVE TIME IN WEEKS FROM LOI/PO DATE	REMARKS IF ANY
1.	Submission of P.O Acceptance [In scope of vendor]	01	01	
2.	Input by BHEL given to vendor to enable vendor to submit the documents necessary for getting manufacturing clearance accordingly [In scope of BHEL]	01	02	
3.	Submission of documents necessary for getting manufacturing clearance like Drawings, data sheet, QAP etc. [In scope of vendor]	02	04	
4.	Review and Approval of documents and issue of manufacturing clearance [In scope of BHEL]	03	07	
4.	Manufacturing Time [In scope of vendor] - Inspection call to be raised at least 7 days prior to inspection	12	19	
5.	Inspection [In scope of BHEL]	03	22	
6.	Issue of MICC [In scope of BHEL]	01	23	
7.	Dispatch [In scope of vendor]	02	25	

**Note :**

1. Supplier must ensure the completeness and correctness of the requisite documents before submission for approval. Delay in approval on account of incomplete / inadequate information shall be the responsibility of supplier.
2. Inspection call should be given in the prescribed format only. Inspection calls not in the prescribed format shall not be entertained.
3. Qty to be offered for inspection should be in accordance within Delivery-schedule – lot. BHEL reserves the right not to entertain multiple inspection calls for a Delivery – lot and delay on this account shall be the responsibility of Supplier.
4. **R-0 within 14 days from PO & subsequent revisions within 7 days of comments received from BHEL. BHEL shall furnish comments / approval on each submission within 14 days from receipt.**
  - i. **Delay in BHEL's comments/approval beyond 14 days shall also be considered for delay analysis.**
  - ii. **In case of any delay in submission/re-submission of drawing/documents, then same shall be reduced from the given delivery period.**
5. Wherever schedule of drawings/documents submission / re-submission is stipulated in the Technical Specifications, same shall be superseded by delivery specified in NIT.
6. The delivery conditions specified are for contractual LD purposes, however BHEL may ask for early deliveries without any compensation thereof.

Signature &amp; Seal of

Supplier

Date:

### Check List for Supply bills (ANNEXURE III)

Name Of the Project							
Package Description							
Invoice No. & Date							
PO No. & date							
Sr. No	Documents Required	Copies	Check Points	Page no.	Vendor Remarks (Y/N/NA)	Verification by MM (Y/N/NA)	Verification by Fin (Y/N/NA)
1	Original for Buyer Invoice - GST compliant invoice	1 Original+2 Copy	1. Please ensure GST complaint invoice in original 2. Consignee address : BHEL C/o followed by site address 3. Item description and unit of quantity are matched with PO 4. Buyer address and GSTN No as required ( TBG Noida or Nodal 5. PO No and date, LR No and date, Vehicle No and Project name are 6. Invoiced quantity are not more than th PO quantity and MICC 7. Ex works unit rate , Taxes and F&I rates are same as per PO 8. Signed and stamped by vendor				
2	Received LR (signed & stamped)/ confirmation from site regarding receipt of packages/ Boxes	1Original+2 Copy	1. Consignee address : BHEL C/o followed by Site address 2. In case of material purchased from sub vendor , Consignee address Vendor's name C/o BHEL C/o Site address 3. Vendor's Invoice no and Vehicle No are mentioned 4. No of boxes/No of packages are same as per Packing list 5. In case of and adverse remark on LR (Like shortages/damages/broken etc) , clarification from site/TBMM/TBCM is needed 6. LR is readable 7. In case of photo copy, LR is verified by TBMM 8. LR date is after the date of MICC/(MDCC if issued) or same date				
3	Packing List - showing number of packages, and gross weight/net Weight (if applicable)	1Original+2 Copy	1. PO No and date, LR No and date, Invoice No and date, Site Name and address, Consignor and consignee address are mentioned 2. Item description and quantity are matched with Invoice and PO 3. Signed and stamped by vendor 4. No of packages/ Item descriptions are matched with MRC and LR				
4	MICC from BHEL	1Original+2C opy	1. BHEL MICC has been issued prior to the date of dispatch or on same date 2. In case where MICC date is after the date of dispatch then MDCC date is same or prior to the date of dispatch 3. Project Name, PO, Po Date, Vendor's name and address is correct 4. Item description, Quantity and unit of quantity are same as per PO 5. All hold point in MICC , if any, have been resolved before submission of bill 6. Signed and stamped by BHEL Executive 7. MICC and MDCC quantity are not less than Invoice quantity and cover all invoiced items.				
5	Guarantee Certificate	1 Original+2 Copy	1. Project Name, PO No., Invoice No , LR No and date are mentioned 2. Guarantee Certificate is strictly matched with PO T&C 3. Signed and stamped by vendor				
6	Bank Guarantee	1 Copy	1. Ensure submission of BG directly from Bank before supply of material so that BG confirmation may be arranged before processing 2. Bill can be processed only after receipt of BG confirmation directly from bank 3. It should be in the name of BHEL , TBG Noida with registered office address Siri Fort, New Delhi 4. It should be in prescribed format. 5. BG value and validity plus claim period should be minimum as specified in PO / RC. Please check before supply , If BG extension is required please arrange the same 6. Vendor's name address should be same as per PO 7. Po No / RC No and date should be correct				
7	Insurance Certificate	1 Original+2 Copy	1. Invoice No and date, Vendor's Name,Place from Consignor to Consignee are mentioned 2. It has not been issued later than the LR date 3. Insured value is not less than the Invoice value 4. Signed and stamped by Insurance Company 5. In case of Open Insurance Policy, declaration has been submitted to Insurance Company as per declaration clause of Open policy and 6. In case of any discrepancy , consent of TBCM is required for processing the bill and amount will be deducted for invalid Insurance				
8	PVC (If applicable) Invoice is submitted along with the Despatch Invoice	1Original+2C opy	PVC (If applicable) Invoice is submitted along with the Despatch Invoice 1. PVC invoice is attched along with supply Invoice 2. Calculation sheet and applicable PVC indices are also enclosed 3. If delay in delivery, then PVC indices are as per PO conditions.				
9	Material receipt Certificate		1. LR No and date, Invoice No and date, Vehicle No and date , Site Name an address are mentioned 2. Date of receipt of material 3. Item description and quantity are same as per Invoice / Packing List 4. It is signed and stamped by Site executive 5. In case of any shortages / damages / adverse remark , clarification is needed				
10	Other Documents		To be seen as per specific requirement of PO.				

**(A) CONCILIATION (MODEL CONCILIATION CLAUSE FOR CONDUCTING CONCILIATION PROCEEDINGS UNDER THE BHEL CONCILIATION SCHEME, 2018)**

The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the agreement, contract or the Memorandum of Understanding (whichever is inapplicable), which the Parties are unable to settle mutually), arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.

**Notes:**

1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators.
2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators.

The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in **Annexure-A to this GCC (Enclosed)**.

The Annexure-A together with its appendices will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in these GCC.”

**(B) ARBITRATION (WITH SOLE ARBITRATOR)**

- 1.1. Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the Sole Arbitrator and such Arbitrator appointed by Head of the BHEL Unit/Region/Division issuing the Contract.
- 1.2. The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.
- 1.3. Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) and amended in 2015 and further amendment passed in 2019 or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall

be New Delhi. The language of arbitration shall be English and the documents shall be submitted in English.

- 1.4. The cost of arbitration shall initially be borne equally by the Parties subject to the final apportionment of the cost of the arbitration in the award of the Arbitrator.
- 1.5. Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

1.6. **SETTLEMENT OF COMMERCIAL DISPUTES BETWEEN CPSES INTER SE AND CPSE(S) AND GOVERNMENT DEPARTMENT(S)/ ORGANISATION(S) – ADMINISTRATIVE MECHANISM FOR RESOLUTION OF CPSES DISPUTES (AMRCD) – REGARDING**

Vide Dept. of Public Enterprises OM No. F. No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22.05.2018 it has been conveyed that *"To make the mechanism more effective and binding on the disputing parties, a new mechanism namely Administrative Mechanism for resolution of CPSEs Disputes (AMRCD) having two level (tier) structure has been evolved in consultation with various stakeholders to replace the existing PMA mechanism which stands wound up from the date of issue of this OM."* Accordingly, the existing Permanent Machinery of Arbitration (PMA) stands wound up with effect from 22.05.2018 and cases relating to disputes or differences relating to the interpretation and application of the provisions of commercial contract(s) between CPSEs / Port Trust / Central or State Government Department / Organisations (excluding disputes concerning Railways, Income Tax, Customs and Excise Departments) shall be taken up by either party for its resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD).

**(C) JURISDICTION AND GOVERNING LAWS**

The Courts at New Delhi shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract. This Contract shall be construed as per and be governed by the Laws of India.

**ANNEXURE TO MODEL CONCILIATION CLAUSE FOR CONDUCT OF CONCILIATION UNDER THE BHEL CONCILIATION SCHEME, 2018**

**BRIEF PROCEDURE FOR CONDUCT OF CONCILIATION PROCEEDINGS**

1. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided herein:
2. The party desirous of resorting to Conciliation shall send an invitation/notice in writing to the other party to conciliate specifying all points of Disputes with details of the amount claimed. The party concerned shall not raise any new issue thereafter. Parties shall also not claim any interest on claims/counter-claims from the date of notice invoking Conciliation till the conclusion of the Conciliation proceedings.
3. The party receiving the invitation/notice for Conciliation shall within 30 days of receipt of the notice of Conciliation intimate its consent for Conciliation along with its counter-claims, if any.
4. The Conciliation in a matter involving claim or counter-claim (whichever is higher) up to Rs 5 crores shall be carried out by sole Conciliator nominated by BHEL while in a matter involving claim or counter-claim (whichever is higher) of more than Rs 5 crores Conciliation shall be carried out by 3 Conciliators nominated by BHEL.
5. The Parties shall be represented by only their duly authorized in-house executives/officers and neither Party shall be represented by a Lawyer.
6. The first meeting of the IEC shall be convened by the IEC by sending appropriate communication/notice to both the parties as soon as possible but not later than 30 days from the date of his/their appointment. The hearings in the Conciliation proceeding shall ordinarily be concluded within two (2) months and, in exceptional cases where parties have expressed willingness to settle the matter or there exists possibility of settlement in the matter, the proceedings may be extended by the IEC by a maximum of further 2 months with the consent of the Parties subject to cogent reasons being recorded in writing.
7. The IEC shall thereafter formulate recommendations for settlement of the Disputes supported by reasons at the earliest but in any case within

15 days from the date of conclusion of the last hearing. The recommendations so formulated along with the reasons shall be furnished by the IEC to both the Parties at the earliest but in any case within 1 month from the date of conclusion of the last hearing.

8. Response/modifications/suggestions of the Parties on the recommendations of the IEC are to be submitted to the IEC within time limit stipulated by the IEC but not more than 15 days from the date of receipt of the recommendations from the IEC.
9. In the event, upon consideration, further review of the recommendations is considered necessary, whether by BHEL or by the other Party, then, the matter can be remitted back to the IEC with request to reconsider the same in light of the issues projected by either/both the Parties and to submit its recommendations thereon within the following 15 days from the date of remitting of the case by either of the Parties.
10. Upon the recommendations by the Parties, with or without modifications, as considered necessary, the IEC shall be called upon to draw up the Draft Settlement Agreement in terms of the recommendations.
11. When a consensus can be arrived at between the parties only in regard to any one or some of the issues referred for Conciliation the draft Settlement Agreement shall be accordingly formulated in regard to the said Issue(s), and the said Settlement Agreement, if signed, by the parties, shall be valid only for the said issues. As regards the balance issues not settled, the parties may seek to resolve them further as per terms and conditions provided in the contract.
12. In case no settlement can be reached between the parties, the IEC shall by a written declaration, pronounce that the Conciliation between the parties has failed and is accordingly terminated.
13. Unless the Conciliation proceedings are terminated in terms of para 22 (b), (c) & (d) herein below, the IEC shall forward his/its recommendations as to possible terms of settlement within one (1) month from the date of last hearing. The date of first hearing of Conciliation shall be the starting date for calculating the period of 2 months.

14. In case of 3 members IEC, 2 members of IEC present will constitute a valid quorum for IEC and meeting can take place to proceed in the matter after seeking consent from the member who is not available. If necessary, videoconferencing may be arranged for facilitating participation of the members. However, the IEC recommendations will be signed by all members. Where there is more than one (1) Conciliator, as a general rule they shall act jointly. In the event of differences between the Members of IEC, the decision/recommendations of the majority of the Members of IEC shall prevail and be construed as the recommendation of the IEC.
15. The Draft Settlement Agreement prepared by the IEC in terms of the consensus arrived at during the Conciliation proceedings between the Parties shall be given by the IEC to both the parties for putting up for approval of their respective Competent Authority.
16. Before submitting the draft settlement agreement to BHEL's Competent Authority viz. the Board Level Committee on Alternative Dispute Resolution (BLCADR) for approval, concurrence of the other party's Competent Authority to the draft settlement agreement shall be obtained by the other party and informed to BHEL within 15 days of receipt of the final draft settlement agreement by it. Upon approval by the Competent Authority, the Settlement Agreement would thereafter be signed by the authorized representatives of both the Parties and authenticated by the members of the IEC.
17. In case the Draft Settlement Agreement is rejected by the Competent Authority of BHEL or the other Party, the Conciliation proceedings would stand terminated.
18. A Settlement Agreement shall contain a statement to the effect that each of the person(s) signing thereto (i) is fully authorized by the respective Party(ies) he/she represents, (ii) has fully understood the contents of the same and (iii) is signing on the same out of complete freewill and consent, without any pressure, undue influence.
19. The Settlement Agreement shall thereafter have the same legal status and effect as an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal passed under section 30 of the Arbitration and Conciliation Act, 1996.
20. Acceptance of the Draft Settlement Agreement/recommendations of the Conciliator and/or signing of the Settlement Agreement by BHEL shall

however, be subject to withdrawal/closure of any arbitral and/or judicial proceedings initiated by the concerned Party in regard to such settled issues.

21. Unless otherwise provided for in the agreement, contract or the Memorandum of Understanding, as the case may be, in the event of likelihood of prolonged absence of the Conciliator or any member of IEC, for any reason/incapacity, the Competent Authority/Head of Unit/Division/Region/Business Group of BHEL may substitute the Conciliator or such member at any stage of the proceedings. Upon appointment of the substitute Conciliator(s), such reconstituted IEC may, with the consent of the Parties, proceed with further Conciliation into the matter either de-novo or from the stage already reached by the previous IEC before the substitution.

22. The proceedings of Conciliation under this Scheme may be terminated as follows:

- a. On the date of signing of the Settlement agreement by the Parties; or,
- b. By a written declaration of the IEC, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or,
- c. By a written declaration of the Parties addressed to the IEC to the effect that the Conciliation proceedings are terminated, on the date of the declaration; or,
- d. By a written declaration of a Party to the other Party and the IEC, if appointed, to the effect that the Conciliation proceedings are terminated, on the date of the declaration.
- e. On rejection of the Draft Settlement Agreement by the Competent Authority of BHEL or the other Party.

23. The Conciliator(s) shall be entitled to following fees and facilities:

<b>Sl No</b>	<b>Particulars</b>	<b>Amount</b>
1	Sitting fees	Each Member shall be paid a Lump Sum fee of Rs 75,000/- for the whole case payable in terms of paragraph No. 27 herein below.
2	Towards drafting of settlement agreement	In cases involving claim and/or counter-claim of up to Rs 5crores. Rs 50,000/- (Sole Conciliator)

Sl No	Particulars	Amount
		<p>In cases involving claim and/or counter-claim of exceeding Rs 5 crores but less than Rs 10 crores. Rs 75,000 (per Conciliator)</p> <p>In cases involving claim and/or counter-claim of more than Rs 10 crores. Rs 1,00,000/- (per Conciliator)</p> <p>Note: The aforesaid fees for the drafting of the Settlement Agreement shall be paid on Signing of the Settlement Agreement after approval of the Competent Authority or Rejection of the proposed Settlement Agreement by the Competent Authority of BHEL.</p>
3	Secretarial expenses	<p>Rs 10,000/- (one time) for the whole case for Conciliation by a Sole Member IEC.</p> <p>Where Conciliation is by multi member Conciliators –Rs 30,000/- (one time)- to be paid to the IEC</p>
4	<p>Travel and transportation and stay at outstation</p> <p>i) Retired Senior Officials of other Public Sector Undertakings (pay scale wise equivalent to or more than E-8 level of BHEL)</p>	<p>As per entitlement of the equivalent officer (pay scale wise) in BHEL.</p>
	Others	<p>As per the extant entitlement of whole time Functional Directors in BHEL.</p>

Sl No	Particulars	Amount
		Ordinarily, the IEC Member(s) would be entitled to travel by air Economy Class.
5	Venue for meeting	Unless otherwise agreed in the agreement, contract or the Memorandum of Understanding, as the case may be, the venue/seat of proceedings shall be the location of the concerned Unit / Division / Region / Business Group of BHEL. Without prejudice to the seat/venue of the Conciliation being at the location of concerned BHEL Unit / Division / Region / Business Group, the IEC after consulting the Parties may decide to hold the proceedings at any other place/venue to facilitate the proceedings. Unless, Parties agree to conduct Conciliation at BHEL premises, the venue is to be arranged by either Party alternately.

24. The parties will bear their own costs including cost of presenting their cases/evidence/witness(es)/expert(s) on their behalf. The parties agree to rely upon documentary evidence in support of their claims and not to bring any oral evidence in IEC proceedings.
25. If any witness(es) or expert(s) is/are, with the consent of the parties, called upon to appear at the instance of the IEC in connection with the matter, then, the costs towards such witness(es)/expert(s) shall be determined by the IEC with the consent of the Parties and the cost so determined shall be borne equally by the Parties.
26. The other expenditures/costs in connection with the Conciliation proceedings as well as the IEC's fees and expenses shall be shared by the Parties equally.
27. Out of the lump sum fees of Rs 75,000/- for Sitting Fees, 50% shall be payable after the first meeting of the IEC and the remaining 50% of the Sitting Fees shall be payable only after termination of the conciliation proceedings in terms of para 22 hereinabove.

28. The travelling, transportation and stay at outstation shall be arranged by concerned Unit as per entitlements as per Serial No. 3 of the Table at para 23 above, and in case such arrangements are not made by the BHEL Unit, the same shall be reimbursed to the IEC on actuals limited to their entitlement as per Serial No. 4 of the Table at Para 23 above against supporting documents. The IEC Member(s) shall submit necessary invoice for claiming the fees/reimbursements.
29. The Parties shall keep confidential all matters relating to the conciliation proceedings. Confidentiality shall extend also to the settlement agreement, except where its disclosure is necessary for purposes of its implementation and enforcement or as required by or under a law or as per directions of a Court/Governmental authority/regulatory body, as the case may be.
30. The Parties shall not rely upon or introduce as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the Disputes that is the subject of the Conciliation proceedings:
  - a. Views expressed or suggestions made by the other party in respect of a possible settlement of the Disputes;
  - b. admissions made by the other party in the course of the Conciliator proceedings;
  - c. proposals made by the Conciliator;
  - d. The fact that the other Party had indicated his willingness to accept a proposal for settlement made by the Conciliator.
31. The Parties shall not present the Conciliator(s) as witness in any Alternative Dispute Resolution or Judicial proceedings in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
32. None of the Conciliators shall act as an arbitrator or as a representative or counsel of a Party in any arbitral or judicial proceeding in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
33. The Parties shall not initiate, during the Conciliation proceedings, any arbitral or judicial proceedings in respect of a Disputes that is the subject matter of the Conciliation proceedings except that a Party may initiate arbitral or judicial proceedings where, in his opinion, such proceedings are necessary for preserving his rights including for preventing expiry of period of limitation. Unless terminated as per the provisions of this Scheme, the Conciliation proceedings shall continue

notwithstanding the commencement of the arbitral or judicial proceedings and the arbitral or judicial proceedings shall be primarily for the purpose of preserving rights including preventing expiry of period of limitation.

34. The official language of Conciliation proceedings under this Scheme shall be English unless the Parties agree to some other language.

**Format 2 to BHEL Conciliation Scheme, 2018**

**FORMAT FOR SEEKING CONSENT FOR REFERRING THE DISPUTES TO  
CONCILIATION THROUGH IEC**

To,

M/s. (Stakeholder's name)

**Sub: Resolution of the Disputes through conciliation by Independent  
Expert Committee (IEC).**

Ref: Contract No/MoU/Agreement/LOI/LOA& date \_\_\_\_\_.

Sir,

With reference to above referred Contract/MoU/Agreement/LOI/LOA, you have raised certain Disputes/claims. Vide your letter dated\_\_\_\_\_ you have requested BHEL to refer the Disputes/claims to IEC for Conciliation.

We are enclosing herewith Format (3) for giving consent and the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. You are requested to give your unconditional consent to the said terms and conditions of the Scheme by returning the same duly sealed and signed on each page. On receipt of your consent, matter will be put to the Competent Authority for consideration and decision.

Please note that BHEL has also certain claims against you (if applicable). BHEL reserves its right to agree or not to agree conciliation of the said disputes through BHEL and this letter is being issued without prejudice to BHEL's rights and contentions available under the contract and law.

Yours faithfully,

**Representative of BHEL**

**Format 3 to BHEL Conciliation Scheme, 2018**  
**FORMAT FOR GIVING CONSENT BY**  
**CONTRACTOR/VENDOR/CUSTOMER/COLLABORATOR/CONSORTIUM PARTNERS FOR REFERRING THE DISPUTES TO CONCILIATION THROUGH IEC**

To,

BHEL

.....

**Sub: Resolution of Disputes through Conciliation by Independent Expert Committee (IEC).**

Ref: Contract/MoU/Agreement/LOI/LOA No & date\_\_\_\_

With reference to above referred contract, our following bills/invoices/claims submitted to BHEL are still unpaid giving rise to Disputes:

SL. no.	Claim Description	Bill submitted to BHEL (no. and date)	Amount of the bill/claim	Amount received from BHEL	Outstanding Amount

Accordingly we request you to kindly refer the Disputes in respect of above claims to IEC for Conciliation.

We hereby agree and give our unconditional consent to the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. We have signed the same on each page and enclosed it for your consideration.

Yours faithfully,

**(Signature with stamp)**

**Authorized Representative of Contractor**

**Name, with designation**

**Date**

**Format 5 to BHEL Conciliation Scheme, 2018**  
**STATEMENT OF CLAIMS/COUNTER CLAIMS TO BE SUBMITTED TO**  
**THE IEC BY BOTH THE PARTIES**

1. Chronology of the Disputes
2. Brief of the Contract/MoU/Agreement/LOI/LOA
3. Brief history of the Disputes:
4. Issues:
5. Details of Clam(s)/Counter Claim(s):

<b>SI. No.</b>	<b>Description of claim(s)/Counter Claim</b>	<b>Amount (in INR)Or currency applicable in the contract</b>	<b>Relevant contract clause</b>

6. Basis/Ground of claim(s)/counter claim(s) (along with relevant clause of contract)

**Note**– *The Statement of Claims/Counter Claims may ideally be restricted to maximum limit of 20 pages. Relevant documents may be compiled and submitted along with the statement of Claims/Counter Claims. The statement of Claims/Counter Claims is to be submitted to all IEC members and to the other party by post as well as by email.*

**Annexure-V**

Item/Package Name :	4 & 4.5 INCH AL TUBES
Enquiry No.:	02G2300022 dated 25.04.2022
Project:	North Karanpura, Ennore, PHPA II & Sagardighi
Type of project	TRANSMISSION
Percentage of Local Content	<b>(Bidder to enter the applicable % of local content)</b>

**Self-certification to be submitted in INR 100/- non judicial stamp paper**

Format of Self certification regarding Local Content in line with PPP-MII order, 2017 & its revision dated 04.06.2020.

Date:    /    /

I \_\_\_\_\_ S/o, D/o, W/o, \_\_\_\_\_ Resident of \_\_\_\_\_ hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Order, 2017 (*hereinafter PPP-MII order*) of Government of India issued vide Notification No: P-45021/2/2017-BE-II dated 15/06/2017, its revision dated 04/06/2020 and any subsequent modifications/ Amendments, if any.

That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring entity/ **BHEL** or any other Government authority for the purpose of assessing the local content of goods/ services/ works supplied by me for ..... **(Enter the name of the Equipment/Item for Project).**

That the local content for all inputs which constitute the said goods/ services/ works has been verified by me and I am responsible for the correctness of the claims made therein.

That the goods/ services/ works supplied by me for ..... **(Enter the name of the Equipment/Item for Project)** **contains.....%** **(mention the Local content in %age)** Local Content.

That the value addition for the purpose of meeting the 'Minimum Local Content' has been made by me at ..... **(Enter the details of the location(s) at which value addition is made).**

That in the event of the local content of the goods/ services/ works mentioned herein is found to be incorrect and not meeting the prescribed supplier class categorization criteria as per said order, based on the assessment of procuring agency (ies)/ **BHEL**/ Government Authorities for the purpose of assessing the local content, action shall be taken against me in line with the PPP-MII order and provisions of the Integrity pact/ Bidding Documents.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

i     Name and details of the Local Supplier  
      (Registered Office, Manufacturing unit location, nature of legal entity)

ii.    Date on which this certificate is issued

**Annexure-V**

Item/Package Name :	4 & 4.5 INCH AL TUBES
Enquiry No.:	02G2300022 dated 25.04.2022
Project:	North Karanpura, Ennore, PHPA II & Sagardighi
Type of project	TRANSMISSION
Percentage of Local Content	<b>(Bidder to enter the applicable % of local content)</b>

**Self-certification to be submitted in INR 100/- non judicial stamp paper**

- iii. Goods/services/works for which the certificate is produced
- iv. Procuring entity to whom the certificate is furnished
- v. Percentage of local content claimed and whether it meets the Minimum Local Content prescribed
- vi. Name and contact details of the unit of the Local Supplier (s)
- vii. Sale Price of the product
- viii. Ex-Factory Price of the product
- ix. Freight, insurance and handling
- x. Total Bill of Material
- xi. List and total cost value of input used to manufacture the Goods/to provide services/in construction of works
- xii. List and total cost of input which are domestically sourced. Value addition certificates from suppliers, if the input is not in-house to be attached
- xiii. List and cost of inputs which are imported, directly or indirectly

For and on behalf of..... (Name of firm/entity)

**Authorized signatory (To be duly authorized by the Board of Directors)**

<Insert Name, Designation and Contact No.>

**Clause regarding regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017 as per Government of India order OM No.6/18/2019-PPD dated 23.07.2020**

- I. 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.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not failing in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a. An entity Incorporated, established or registered in such a country; or
  - b. A subsidiary of an entity Incorporated, established or registered in such a country; or
  - c. An entity substantially controlled through entitles incorporated, established or registered in such a country; or
  - d. An entity whose *beneficial owner* is situated in such a country, or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The *beneficial owner* for the purpose of (iii) above will be as under:
  1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation-

    - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
    - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;
  2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership or entitlement to more than fifteen percent of capital or profits of the partnership;
  3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership or entitlement to more than fifteen percent of the property or capital or profits of such association or body of Individuals;
  4. Where no natural person is Identified under (1) or (2) or (3) above the beneficial owner is the relevant natural person who holds the position of senior managing official;
  5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another or to represent another in dealings with third person.

**Clause regarding regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017 as per Government of India order OM No.6/18/2019-PPD dated 23.07.2020**

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

*\* The above clause is not applicable to the bidders from those countries (even if sharing a land border with India) to which the GoI has extended lines of credit or in which the GoI is engaged in development projects.*

\* List of countries to which lines of credit have been extended or in which development projects are undertaken are available on the Ministry of External affairs website (<https://www.mea.gov.in/>)

**Compliance to be submitted in INR 100/- non judicial stamp paper**

**Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017**

<b>Sl No.</b>	<b>Description</b>	<b>Bidder's confirmation</b>
1	<i>We, M/s _____ have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; We hereby certify that we are not from such a country.</i>	<i>Agreed</i>

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead for commercial rejection of their bids by BHEL)

**Bidder's authorized signatory with stamp & seal**

**Compliance to be submitted in INR 100/- non judicial stamp paper**

**Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017**

SI No.	Description	Bidder's confirmation
1	<p><i>We, M/s_____ have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. We are from such a country which shares a land border with India &amp; have been registered with the Competent Authority as specified in above said order. We hereby certify that we fulfil all requirements in this regard and are eligible to be considered.</i></p> <p><b><i>Evidence of valid registration by the Competent Authority is attached.</i></b></p>	<p align="center"><i>Agreed</i></p>

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead for commercial rejection of their bids by BHEL)

**Bidder's authorized signatory with stamp & seal**

No.25-111612018-PG  
Government of India  
Ministry of Power  
Shram Shakti Bhawan, Rafi Marg, New Delhi • — 110001  
Tele Fax: 011-23730264

Dated 02/07/2020

ORDER

Power Supply System is a sensitive and critical infrastructure that supports not only our national defence, vital emergency services including health, disaster response, critical national infrastructure including classified data & communication services, defence installations and manufacturing establishments, logistics services but also the entire economy and the day-to-day life of the citizens of the country. Any danger or threat to Power Supply System can have catastrophic effects and has the potential to cripple the entire country. Therefore, the Power Sector is a strategic and critical sector.

The vulnerabilities in the Power Supply System & Network mainly arise out of the possibilities of cyber attacks through malware / Trojans etc. embedded in imported equipment. Hence, to protect the security, integrity and reliability of the strategically important and critical Power Supply System & Network in the country, the following directions are hereby issued:-

1. All equipment, components, and parts imported for use in the Power Supply System and Network shall be tested in the country to check for any kind of embedded malware/trojans/cyber threat and for adherence to Indian Standards.
2. All such testings shall be done in certified laboratories that will be designated by the Ministry of Power (MOP).
3. Any import of equipment/components/parts from "prior reference" countries as specified or by persons owned by, controlled by, or subject to the jurisdiction or the directions of these "prior reference" countries will require prior permission of the Government of India
4. Where the equipment/components/parts are imported from "prior reference" countries, with special permission, the protocol for testing in certified and designated laboratories shall be approved by the Ministry of Power (MOP).

This order shall apply to any item imported for end use or to be used as a component, or as a part in manufacturing, assembling of any equipment or to be used in power supply system or any activity directly or indirectly related to power supply system.

This issues with the approval of Hon'ble Minister of State for Power and New & Renewable Energy (Independent Charge).



(Goutam Ghosh)

Director Tel: 011-23716674 To:

1. All Ministries/Departments of Government of India (As per list)
2. Secretary (Coordination), Cabinet Secretariat
3. Vice Chairman, NITI Aayog

सेवा भवन, आर. के. पुरम-I, नई दिल्ली-110066 टेली: 011-26732257 ईमेल: ce-rndcea@nic.in वेबसाइट:  
[www.cea.nic.in](http://www.cea.nic.in)

Sewa Bhawan, R.K Puram-I, New Delhi-110066 Tele: 011-26732257 Email: ce-rndcea@nic.in Website: [www.cea.nic.in](http://www.cea.nic.in)

**Vendor Compliance format in bidder letter head**

In view of order No. 25-111612018-PG, Dated 02.07.2020 of Ministry of Power, GOI

**Enquiry No/ PO No & Date : 02G2300022 dated 25.04.2022**  
**Project : North Karanpura, Ennore, PHPA II & Sagardighi**  
**Name of items/Package : 4 & 4.5 inch AI Tube**

This is to certify that all equipment, components, and parts imported for use in the Power Supply System and Network are in strict compliance to directions issued by Ministry of Power, Govt. of India vide order No. 25-111612018-PG dated 02.07.2020. The imported component(s), part or assembly item(s) does not carry any malware/Trojan etc.

**Note: Non-compliance of MoP Order and its subsequent amendment(s), (if any), by vendor shall lead to rejection of their offer or cancellation of contract, which is awarded by BHEL.**

**Bidder's authorized signatory**  
**with stamp & seal**

## Annexure-XI

### **INTEGRITY PACT:**

Bidders shall have to enter into Integrity Pact with BHEL, duly signed with seal in original, if specified in NIT / RFQ failing which bidder's offer shall be liable for rejection.

(a) IP is a tool to ensure that activities and transactions between the company and its bidders/contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitor (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

**Details of IEM for this tender is furnished below**

**Name: Shri Arun Chandra Verma, IPS (Retd.)**

**Email: [acverma1@gmail.com](mailto:acverma1@gmail.com)**

**Name: Shri Virendra Bahadur Singh, IPS (Retd.)**

**E-mail: [ybsinghips@gmail.com](mailto:ybsinghips@gmail.com)**

(b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-1, in case of Two/three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this pact would be a preliminary qualification.

(c) Please refer section -8 of the IP for Role and responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEM shall be done through e-mail only.

Note: No routine correspondence shall be addressed to the IEM (Phone/post/email) regarding the clarification, time extensions or any other administrative queries, etc. on the tender issued. All such clarification/issues shall be addressed directly to the tender issuing (procurement) department's officials as mentioned on Point 2 & 3.

## INTEGRITY PACT

### Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

### and

\_\_\_\_\_, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

### Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

### **Section 1- Commitments of the Principal**

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions:

## **Section 2 - Commitments of the Bidder(s)/ Contractor(s)**

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. 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.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

## **Section 3 - Disqualification from tender process and exclusion from future contracts**

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

## **Section 4 - Compensation for Damages**

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to

demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

### **Section 5 - Previous Transgression**

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

### **Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors**

- 6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors:
- 6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

### **Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

### **Section 8 - Independent External Monitor(s)**

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

- 8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.
- 8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.12 The word 'Monitor' would include both singular and plural.

### **Section 9 - Pact Duration**

- 9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.
- 9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

### **Section 10 - Other Provisions**

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

-----

For & On behalf of the Principal

(Office Seal)

Place-----

Date-----

Witness:\_\_\_\_\_

(Name & Address) \_\_\_\_\_

\_\_\_\_\_

-----

For & On behalf of the Bidder/

Contractor

(Office Seal)

Witness:\_\_\_\_\_

(Name & Address) \_\_\_\_\_

\_\_\_\_\_

**RISK PURCHASE**

1.1. In case the Supplier / Contractor fails to supply or fails to comply with terms & conditions of the Purchase Order / Contract or delivers equipment / material not of the contracted quality or fails to adhere to the contract specifications or fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery / completion period to justify that supplies shall be inordinately delayed beyond contractual delivery / completion period, BHEL reserve the right to cancel the Purchase Order / Contract either in whole or in part thereof without compensation to Supplier / Contractor and if BHEL so desires, may procure such equipment / material / items not delivered or others of similar description where equipment / material / items exactly complying with particulars are not readily procurable in the opinion of BHEL which is final and in such manner as deemed appropriate, at the risk and cost of the Supplier / Contractor and the Supplier / Contractor shall be liable to BHEL for any excess cost to BHEL. However, the Supplier / Contractor shall continue execution of the Purchase Order / Contract to the extent not cancelled under the provisions of this clause.

1.2. Risk & Cost Clause, in line with Conditions of Contract may be invoked in any of the following cases:

- i) Contractor/ supplier's poor progress of the work vis-à-vis execution timeline as stipulated in the Contract, backlog attributable to contractor/ supplier including unexecuted portion of work/ supply does not appear to be executable within balance available period considering its performance of execution.
- ii) Withdrawal from or abandonment of the work by contractor/supplier before completion as per contract.
- iii) Non completion of work/ Non-supply by the Contractor/ supplier within scheduled completion/delivery period as per Contract or as extended from time to time, for the reasons attributable to the contractor/ supplier.
- iv) Termination of Contract on account of any other reason(s) attributable to Contractor/ Supplier.
- v) Assignment, transfer, subletting of Contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
- vi) Non-compliance to any contractual condition or any other default attributable to Contractor/ Supplier.

1.3. **Risk and Cost amount against Balance Work:**

In case Risk & Cost is invoked, the amount of Risk & Cost against balance work shall be calculated as under:

**Risk & Cost Amount [(A-B) (A x H/100)]**

Where,

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

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

**H** = Overhead Factor to be taken as 5 (five)

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

**(Balance scope of work/ supply)**

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 / Supply 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: Incase portion of work is being withdrawn, contract quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work/supply' for calculating Risk & Cost amount.**

#### 1.4. LD against delay in executed work/supply in case of Termination of Contract

LD against delay in executed Work /Supply shall be calculated in line with LD clause of the contract for the delay attributable to contractor/ supplier. For this purpose, contract value shall be taken as Executed Value of work/supply for the purpose of limiting maximum LD value.

Method for calculation of “LD against delay in executed Work/ supply” 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/ supplier= T1
- ii) Let the value of executed work/ supply till the time of termination of contract= X
- iii) Let the Total Executable Value of work/ supply for which inputs/fronts were made available to contractor/ supplier and were planned for execution till termination of contract = Y
- iv) Delay in executed work/ supply attributable to contractor/supplier i.e.  $T2 = (1 - \frac{X}{Y}) \times T1$
- v) LD shall be calculated in line with LD clause of the Contract for the delay attributable to contractor/ supplier taking “X” as Contract Value and “T2” as delay attributable to contractor/ supplier.

**Note: In case portion of service/ supply is withdrawn, no LD shall be applicable for portion of service/ supply withdrawn.**

#### 1.5. Recovery from Supplier

Recoveries from contractor/ supplier on whom risk & cost has been invoked shall be as per Clause No. 23 of GTC.

## Annexure - 2

### **Certificate by Chartered Accountant on letter head**

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

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

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006 :  
Rs.....Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:  
Rs.....Lacs

#### **(Strike off whichever is not applicable)**

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

Or

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

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant



**BHARAT HEAVY ELECTRICALS LIMITED  
TRANSMISSION BUSINESS GROUP  
MATERIAL RECEIPT CERTIFICATE**

- a) Site:
- b) LR No. with date:
- c) Vehicle no.:
- d) Date of receipt of material at site:
- e) Material details (as mentioned below):

S.no.	Item Description	Type of Packages	Unit (MT/KM/NO.)	Qty as per packing list	Qty Received	Remarks

Other Remarks:

Signature with date: \_\_\_\_\_

Name & Designation: \_\_\_\_\_

(With Seal)



ANNEXURE\_TQR

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

Name of Project :- *HTPC North Karanpura*

Name of Customer :- *NTPC*

Name of Item :- *4 inch Aluminium Tube*

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

The Manufacturer whose Aluminium Tube is being offered by the Bidder shall have supplied Al. Tube of at least 3 inch dia during the last 5 years from the date of technical bid opening of this tender

**SUPPORTING DOCUMENTS TO BE ATTACHED**

Sr	Required Criteria	Supporting Documents to be submitted by bidder along with technical bid
1	Manufacturing	Approved Drawings / GTP / Approved Quality Plan / Factory Inspection Test Report e.t.c
2	Supply	PO / Dispatch clearance / LR / Material Receipt certificate at site / installation or commissioning certificate e.t.c

Notes (General points):

1. Consideration of offer shall be subject to customer's approval of bidder's, 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 / requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

PREPARED BY

*21/11*

REVIEWED BY

*[Signature]*

APPROVED BY

*[Signature]*

ANNEXURE\_TQR

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

Name of Project :- TANGEDCO ENHORE SEZ

Name of Customer :- TANGEDCO

Name of Item :- 4 inch Aluminium Tube

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

The Manufacturer whose Aluminium Tube is being offered by the Bidder shall have supplied Al. Tube of at least 3 inch dia during the last 5 years from the date of technical bid opening of this tender

**SUPPORTING DOCUMENTS TO BE ATTACHED**

Sr	Required Criteria	Supporting Documents to be submitted by bidder along with technical bid
1	Manufacturing	Approved Drawings / GTP / Approved Quality Plan / Factory Inspection Test Report e.t.c
2	Supply	PO / Dispatch clearance / LR / Material Receipt certificate at site / installation or commissioning certificate e.t.c

Notes (General points):

1. Consideration of offer shall be subject to customer's approval of bidder's, 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 / requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

PREPARED BY



REVIEWED BY



APPROVED BY



ANNEXURE\_TQR

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

Name of Project :- PHPA BHUTAN PUNATSANGCHHU -II

Name of Customer :- PHPA

Name of Item :- 4 inch Aluminium Tube

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

The Manufacturer whose Aluminium Tube is being offered by the Bidder shall have supplied Al. Tube of at least 3 inch dia during the last 5 years from the date of technical bid opening of this tender

**SUPPORTING DOCUMENTS TO BE ATTACHED**

Sr	Required Criteria	Supporting Documents to be submitted by bidder along with technical bid
1	Manufacturing	Approved Drawings / GTP / Approved Quality Plan / Factory Inspection Test Report e.t.c
2	Supply	PO / Dispatch clearance / LR / Material Receipt certificate at site / installation or commissioning certificate e.t.c

Notes (General points):

1. Consideration of offer shall be subject to customer's approval of bidder's, 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 / requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

PREPARED BY



REVIEWED BY



APPROVED BY



**TECHNICAL PRE-QUALIFICATION REQUIREMENT**

Name of Project : 1 x 600 MW UNIT-5, PHASE-III, SAGARDIGHI

Name of Customer : WBDCL

Name of Item : 4.5 inch Aluminium Tube

**TECHNICAL PRE QUALIFICATION REQUIREMENT**

The Manufacturer whose Aluminium Tube is being offered by the Bidder shall have supplied Al. Tube of at least 3 inch dia. during the last 5 years from the date of technical bid opening of this tender

**SUPPORTING DOCUMENTS TO BE ATTACHED**

Sr	Required Criteria	Supporting Documents to be submitted by bidder along with technical bid
1	Manufacturing	Approved Drawings / GTP / Approved Quality Plan / Factory Inspection Test Report etc.
2	Supply	PO / Dispatch clearance / LR / Material Receipt certificate at site / installation or commissioning certificate etc.

*J. Gogoi*  
13/04/2022

 PREPARED BY

*M. Jay Kumar*  
13/4/22

 REVIEWED BY

*Sanku*

 APPROVED BY

**TECHNICAL SPECIFICATION**  
*for*

**ALUMINIUM TUBE**

**SPECIFICATION NO: : *TB-STD-316-055*;**  
**REVISION: 3.1**  
**DATE: 12 April 2022**



**BHARAT HEAVY ELECTRICALS LIMITED**  
**TRANSMISSION BUSINESS GROUP**  
**NOIDA, UP (INDIA) – 201305**

	Prepared by	Checked by	Approved by
Name	Jai Kumar	Vivek Kapil	Aruna Gulati
Signature			
Date			



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## SECTION – I

### 1.0 PURPOSE

This specification is intended for finalization of rate contract between BHEL TBG and Bidder. Standard technical detail as indicated in the specification shall be agreed upon between BHEL TBG and bidder. Project specific technical details shall be made available to the bidder along with project specific material requirement.

### 2.0 SCOPE

- 2.1 Design, manufacture, inspection and testing at Manufacturer's works, proper packing and delivery to site of **ALUMINIUM TUBE** conforming to this specification.
- 2.2 It is not the intent to specify herein all the details of design & manufacture of material. However, the material shall conform in all respect to high standard of design, engineering & workmanship and shall be capable of performing in continuous commercial operation at site condition.
- 2.3 Technical requirements of **ALUMINIUM TUBE** are indicated in Technical Data Sheet and Section II.
- 2.4 Bidder shall furnish list of conflict (s)/ ambiguity(ies)/ deviation(s), if any, along with their technical offer and also furnish the basis(s)/ reason(s)/ justification(s) that is considered for submitting technical offer. BHEL/Owner will resolve listed conflicts prior to award. In case of ambiguity, bidder shall inform BHEL/Owner of their interpretation. In case bidder fails to convey the same prior to award, decision of BHEL/Owner decision on interpretation shall be considered final and binding if need arises during the execution. No additional commercial implication on account of conflict(s)/ ambiguity(ies)/ deviation(s) shall be admissible.

### 3.0 BILL OF QUANTITIES

The bidder shall quote for items as per **Annexure BOQ/ PRICE SCHEDULE** attached with Notice Inviting Tender (NIT).

### 4.0 DRAWINGS & DOCUMENTS TO BE SUBMITTED

- 4.1 After finalization of rate contract; against specific project requirement following information shall be provided by BHEL,
1. BOQ and cut-length schedule
  2. Project site information
- 4.2 Following documents shall be submitted for specific project requirement after placement of order for the approval of BHEL/Customer,



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Sl. no.	Drawing / Document Description	Document no.	Document Type	First Submission	Resubmission
1	Cross Section drawing	TB-XXX-316-A111	Primary	Within 2 week of PO	Within 1 week of comments
2	Technical Data Sheet	TB-XXX-316-A112	Primary	Within 2 week of PO	Within 1 week of comments
3	Quality Plan	TB-XXX-316-A114	Primary	Within 2 week of PO	Within 1 week of comments
4	Routine & Acceptance Test Reports	TB-XXX-316-A115	Secondary	Within 1 week of acceptance test.	

**Notes:**

1. Approval on Primary documents is essential for providing manufacturing clearance.
2. The bidder/ manufacturer may note that all re-submissions must incorporate all comments given in the prior submission by the Purchaser. Adequate justification for not incorporating the same must be submitted, failing which the submitted documents may be returned.

4.3 - deleted -

**5.0 TECHNICAL PRE-QUALIFYING REQUIREMENT & EXPERIENCE**

The technical qualifying requirement & experience shall be as per attached **Annexure TQR**.

**6.0 QUALITY ASSURANCE, TESTING & INSPECTION**

6.1 At contract stage, the successful bidder shall submit the same Quality Plan (QP) for approval of BHEL/ customer at contract stage. In case bidder has reference Quality Plan agreed with customer, same can be submitted for specific project after award of contract for approval/ extension BHEL/customer. There shall not be any commercial implication to BHEL on account of changes in Quality Plan (QP) during contract stage.

6.2 All materials shall be procured, manufactured, inspected and tested by vendor/ sub-vendor as per approved Quality Plan (QP). 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.

6.3 - deleted -

6.4 The supplier shall perform all routine and acceptance tests during manufacturing as per requirement of the specification. The material shall be offered for inspection by BHEL/customer in accordance with agreed Quality Plan (QP) with 1 Week advance



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information. Commercial implications, if any for all these tests shall be deemed to be included in the bid price.

6.5 The contractor shall offer material for sample selection for testing, only after approval of Quality Plan.

## 7.0 PACKING AND MARKING

7.1 HDPE covering.

7.2 Each packing shall have following information marked on it along with other essential data:

1. Name of manufacturer
2. PO number / date
2. Size and length of Al Tube
4. Net weight of Al Tube

## 8.0 ABBREVIATIONS USED

NIT: Notice Inviting Tender

QP: Quality Plan

BOQ: Bill of Quantities

PO: Purchase Order

RIV: Radio Interference Voltage

NABL: National Accreditation Board for Testing and Calibration Laboratories

IEC: International Electro-Technical Commission

ISO: International Organization for Standardization

IS: Indian Standard

EN: European Standard



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## **ANNEXURE-A**

### **COMPLIANCE CERTIFICATE OF TECHNICAL SPECIFICATION**

The bidder shall confirm compliance to the following by signing and/or sealing/ 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(s) with respect to specification other than those furnished in the 'schedule of deviations'.
3. Only those technical submittals which are specifically asked for in Notice Inviting Tender (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 a 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' of the specification shall not be considered (i.e., technical description & quantities as per the specification shall prevail).

Date:  
Signature

Bidder's Stamp &



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**ANNEXURE-B**

**SCHEDULE OF DEVIATION/ CONCESSION/ CHANGE REQUEST**

Bidder shall list out all technical potential deviation (s)/ concession(s)/change request(s) along with clause with respect to technical specifications.

Sl. no.	Page no.	Contract requirement with clause no.	Potential deviation (s)/concession(s)/ change request(s)	Reason(s) / Justification(s)

Any deviation not specifically brought out in this section shall not be admissible for any commercial implication at later stage. Except to the technical deviations listed in this schedule, bidder's offer shall be considered in full compliance to the tender specifications irrespective of any such deviation indicated / taken elsewhere in the submitted offer.

Date:

Bidder's Stamp & Signature



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## SECTION - II

### STANDARD TECHNICAL REQUIREMENTS



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## 1.0 CODES AND STANDARDS

- 1.1 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.
- 1.2 The design, material, construction, manufacture, inspection and testing of Aluminium Tube shall conform to the latest revision of relevant standards as per Technical Data Sheet-A. Any other international standards will also be considered if it ensures performance equivalent or superior to standards listed.
- 1.3 In case of conflict between the applicable reference standard and this specification, this specification shall govern.

## 2.0 TECHNICAL REQUIREMENT

- 2.1 Aluminium Tube shall be supplied as per technical particulars specified in Technical Data Sheet – A and Section-II.

### 2.2 Workmanship

- 2.2.1 All tubes shall be supplied straightened & reasonably free from twist.
- 2.2.2 The surface of the Aluminium tubes shall have a bright smooth finish, free from seams, cracks & other imperfections. Special attention shall be given to avoid formation of corona. The finished tubes shall be perfectly straight.
- 2.2.3 The ingot to be used for producing the Aluminium tubular busbars of grade 63401 W.P (Range 2), shall comply with the requirements specified in Table1 (Clause 6.1) of IS:5082 when analysed in accordance with IS:504 or any other standard instrumental method of analysis.
- 2.2.4 Aluminium Tube should be suitable for bending at site as per switchyard layout requirement.
- 2.2.5 The welding of aluminium tube shall be done by the qualified welder duly approved by BHEL / Customer.

## 3.0 TESTS

In addition to routine tests on the aluminium tubes as per IS 5082, Test Reports for following tests shall also be submitted:

- Measurement of the outside diameter, wall thickness and ovality of the tube.
- 0.2% proof tests both on the parent metal and aluminium tube as per standards, as appropriate.



**TECHNICAL SPECIFICATION FOR  
ALUMINIUM TUBE**

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**TECHNICAL DATA OF ALUMINIUM TUBE**

S. No.	PARTICULARS	DATA					
		3 Inch	4 Inch	4.5 Inch	4.5 Inch	5 Inch	6 Inch
1	Nominal Size, IPS						
		(EH type)	(EH type)	(EH type)	(EH type)	(H type)	(H type)
2	Material	Aluminium Alloy 6101 T6 conforms to 63401 WP (range 2) of IS 5082: 1998					
3	Chemical Composition	Copper- 0.05% Max					
		Magnesium- 0.4 to 0.9%					
		Silicon- 0.3 to 0.7%					
		Iron- 0.5% Max					
		Manganese- 0.03% Max.					
		Aluminium - Balance					
4	Minimum Outer Diameter (in mm)	88.9	114.2	120	127	141.3	170
	Tolerance on outer diameter (in mm) no negative tolerance permitted	2.2	2.2	1.5	2.58	2.8	3.4
		0	0	0	0	0	0
5	Minimum Thickness (in mm)	7.62	8.51	12	9.02	9.53	8
	Tolerance in thickness (in mm) no negative tolerance	2.2	2.2	1	2.58	0.8	1.9
		0	0	0	0	0	0



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	<i>permitted</i>						
6	Nominal Cross Section Area (in sqmm)	1945.76	2825.61	4071.5	3343	3945.11	4071.5
7	Nominal Weight, kg/m (Maximum positive tolerance allowed is 8%, no negative tolerance is allowed.)	5.25	7.7	10.993	9.027	10.652	10.993
	Remark:	<p>Quantity variations caused by dimensional changes within the specified tolerances shall be accepted. However, for commercial purpose &amp; payable measurement of weight of aluminium tube, maximum positive tolerance on nominal weight (Kg/m) shall be 8%.</p> <p>However during tender stage, if the bidder exceeds the 8% tolerance in nominal weight (Kg/m) and submit a techno / commercial deviation, the same shall be acceptable with additional loading on bidder's quoted price (proportionate factor to derive cost to BHEL) for overall cost evaluation on cost to BHEL basis.</p>					
8	Min. Ultimate Tensile Strength	20.5Kg/Sq.mm					
9	Temp. Coefficient of resistance	0.00364 per Deg. C					
10	Min. Electrical Conductivity at 20 Deg.C	55% of IACS					
11	Linear Temperature Coefficient of Expansion (20 Deg.C -200 Deg.C)	0.000023					
12	Modulus of elasticity (kg/Sq.mm)	6700					
13	Min. Elongation on 50 mm	10%					
14	Thermal Conductivity at 100°C	0.43 Calories/Sec/Sq.mm/cm/deg.C					



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15	Min. 0.2% proof Stress	17.34Kg/Sq.mm					
16	Minimum Yield Point (Kg/Sq.mm)	17.5	17.5	14.5	As per relevant standards	17.5	As per relevant standards
17	Minimum Breaking Strength (Kg/Sq.mm)	20.42	20.42	17.5	As per relevant standards	20.42	As per relevant standards
18	Moment of Inertia	1621589.99 mm <sup>4</sup>	3972577.97 mm <sup>4</sup>	6011958.58 mm <sup>4</sup>	As per relevant standards	8610787.65 mm <sup>4</sup>	As per relevant standards
19	Section Modulus	36481.21 mm <sup>3</sup>	69572.29 mm <sup>3</sup>	100199.31 mm <sup>3</sup>	As per relevant standards	121879.51 mm <sup>3</sup>	As per relevant standards
20	Packing	HDPE					
21	Required Length	As per project specific requirement					
22	Manufacturing Process	a) Hot extrusion process through die and mandrel (Solid billet process). Heat treatment shall be done after hot extrusion of the tube; or b) Bridge extrusion process and then cold drawn. Heat treatment shall be done after hot extrusion of the tube.					
23	Constructional Features	For outer diameter (OD) & thickness of the tube there shall not be any negative tolerance, other requirements being as per IS: 2678 and IS: 2673.					
24	Applicable Standard	IS- 2678 IS- 2673 IS-5082					

**Remark - For project specific need, there may be variation in "Thickness" of Aluminium tube. The dimensions for the same shall be issued during contract stage for specific requirement, Vendor to follow the same.**

**TECHNICAL SPECIFICATION**  
*for*

**ALUMINIUM TUBE**

**SPECIFICATION NO: : *TB-STD-316-055*;**  
**REVISION: 3.1**  
**DATE: 12 April 2022**



**BHARAT HEAVY ELECTRICALS LIMITED**  
**TRANSMISSION BUSINESS GROUP**  
**NOIDA, UP (INDIA) – 201305**

	Prepared by	Checked by	Approved by
Name	Jai Kumar	Vivek Kapil	Aruna Gulati
Signature			
Date			



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## SECTION – I

### 1.0 PURPOSE

This specification is intended for finalization of rate contract between BHEL TBG and Bidder. Standard technical detail as indicated in the specification shall be agreed upon between BHEL TBG and bidder. Project specific technical details shall be made available to the bidder along with project specific material requirement.

### 2.0 SCOPE

- 2.1 Design, manufacture, inspection and testing at Manufacturer's works, proper packing and delivery to site of **ALUMINIUM TUBE** conforming to this specification.
- 2.2 It is not the intent to specify herein all the details of design & manufacture of material. However, the material shall conform in all respect to high standard of design, engineering & workmanship and shall be capable of performing in continuous commercial operation at site condition.
- 2.3 Technical requirements of **ALUMINIUM TUBE** are indicated in Technical Data Sheet and Section II.
- 2.4 Bidder shall furnish list of conflict (s)/ ambiguity(ies)/ deviation(s), if any, along with their technical offer and also furnish the basis(s)/ reason(s)/ justification(s) that is considered for submitting technical offer. BHEL/Owner will resolve listed conflicts prior to award. In case of ambiguity, bidder shall inform BHEL/Owner of their interpretation. In case bidder fails to convey the same prior to award, decision of BHEL/Owner decision on interpretation shall be considered final and binding if need arises during the execution. No additional commercial implication on account of conflict(s)/ ambiguity(ies)/ deviation(s) shall be admissible.

### 3.0 BILL OF QUANTITIES

The bidder shall quote for items as per **Annexure BOQ/ PRICE SCHEDULE** attached with Notice Inviting Tender (NIT).

### 4.0 DRAWINGS & DOCUMENTS TO BE SUBMITTED

- 4.1 After finalization of rate contract; against specific project requirement following information shall be provided by BHEL,
1. BOQ and cut-length schedule
  2. Project site information
- 4.2 Following documents shall be submitted for specific project requirement after placement of order for the approval of BHEL/Customer,



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Sl. no.	Drawing / Document Description	Document no.	Document Type	First Submission	Resubmission
1	Cross Section drawing	TB-XXX-316-A111	Primary	Within 2 week of PO	Within 1 week of comments
2	Technical Data Sheet	TB-XXX-316-A112	Primary	Within 2 week of PO	Within 1 week of comments
3	Quality Plan	TB-XXX-316-A114	Primary	Within 2 week of PO	Within 1 week of comments
4	Routine & Acceptance Test Reports	TB-XXX-316-A115	Secondary	Within 1 week of acceptance test.	

**Notes:**

1. Approval on Primary documents is essential for providing manufacturing clearance.
2. The bidder/ manufacturer may note that all re-submissions must incorporate all comments given in the prior submission by the Purchaser. Adequate justification for not incorporating the same must be submitted, failing which the submitted documents may be returned.

4.3 - deleted -

**5.0 TECHNICAL PRE-QUALIFYING REQUIREMENT & EXPERIENCE**

The technical qualifying requirement & experience shall be as per attached **Annexure TQR.**

**6.0 QUALITY ASSURANCE, TESTING & INSPECTION**

6.1 At contract stage, the successful bidder shall submit the same Quality Plan (QP) for approval of BHEL/ customer at contract stage. In case bidder has reference Quality Plan agreed with customer, same can be submitted for specific project after award of contract for approval/ extension BHEL/customer. There shall not be any commercial implication to BHEL on account of changes in Quality Plan (QP) during contract stage.

6.2 All materials shall be procured, manufactured, inspected and tested by vendor/ sub-vendor as per approved Quality Plan (QP). 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.

6.3 - deleted -

6.4 The supplier shall perform all routine and acceptance tests during manufacturing as per requirement of the specification. The material shall be offered for inspection by BHEL/customer in accordance with agreed Quality Plan (QP) with 1 Week advance



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information. Commercial implications, if any for all these tests shall be deemed to be included in the bid price.

6.5 The contractor shall offer material for sample selection for testing, only after approval of Quality Plan.

## 7.0 PACKING AND MARKING

7.1 HDPE covering.

7.2 Each packing shall have following information marked on it along with other essential data:

1. Name of manufacturer
2. PO number / date
2. Size and length of Al Tube
4. Net weight of Al Tube

## 8.0 ABBREVIATIONS USED

NIT: Notice Inviting Tender

QP: Quality Plan

BOQ: Bill of Quantities

PO: Purchase Order

RIV: Radio Interference Voltage

NABL: National Accreditation Board for Testing and Calibration Laboratories

IEC: International Electro-Technical Commission

ISO: International Organization for Standardization

IS: Indian Standard

EN: European Standard



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## **ANNEXURE-A**

### **COMPLIANCE CERTIFICATE OF TECHNICAL SPECIFICATION**

The bidder shall confirm compliance to the following by signing and/or sealing/ 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(s) with respect to specification other than those furnished in the 'schedule of deviations'.
3. Only those technical submittals which are specifically asked for in Notice Inviting Tender (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 a 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' of the specification shall not be considered (i.e., technical description & quantities as per the specification shall prevail).

Date:  
Signature

Bidder's Stamp &



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**ANNEXURE-B**

**SCHEDULE OF DEVIATION/ CONCESSION/ CHANGE REQUEST**

Bidder shall list out all technical potential deviation (s)/ concession(s)/change request(s) along with clause with respect to technical specifications.

Sl. no.	Page no.	Contract requirement with clause no.	Potential deviation (s)/concession(s)/ change request(s)	Reason(s) / Justification(s)

Any deviation not specifically brought out in this section shall not be admissible for any commercial implication at later stage. Except to the technical deviations listed in this schedule, bidder's offer shall be considered in full compliance to the tender specifications irrespective of any such deviation indicated / taken elsewhere in the submitted offer.

Date:

Bidder's Stamp & Signature

**Bill of Quantities/ Price Schedule**

<b>Sl. No.</b>	<b>Description</b>	<b>Quantity</b>
1.	ALUMINUM TUBE 3" IPS (EH type)	As per Bid Price Schedule
2.	ALUMINUM TUBE 4" IPS (EH type)	
3.	ALUMINUM TUBE 4.5" IPS (EH type)	
4.	ALUMINUM TUBE 5" IPS (H type)	
5.	ALUMINUM TUBE 6" IPS (H type)	

**NOTES:**

- a. Please refer tolerances specified in “Technical data of Aluminium tube”. The Quantity variations caused by dimensional changes within the specified tolerances shall be accepted. However, for commercial purpose & payable measurement of weight of Aluminium tube, maximum positive tolerance on nominal weight (Kg/m) shall be 8%.  
However, during tender stage, if the bidder exceeds the 8% tolerance in nominal weight (Kg/m) and submit a techno / commercial deviation, the same shall be acceptable with additional loading on bidder’s quoted price (proportionate factor to derive cost to BHEL) for overall cost evaluation on cost to BHEL basis.
- b. **Short length of Al tube (w.r.t. the issued cut length schedule) shall not be accepted even if it arises due to cutting of sample from offered Al tube lot for factory acceptance test.**
- c. Material used in testing shall be in vendor’s account and will not be payable.
- d. Overall contract value may vary +/- 30% upto contract stage.
- e. The Al tube shall be supplied in cut lengths of minimum of 4m & maximum of 7m respectively as per the cut length schedule that will be issued as per project specific requirement. The negative/positive tolerance on the length of the section shall not exceed 10 mm.



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## SECTION - II

### STANDARD TECHNICAL REQUIREMENTS



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## 1.0 CODES AND STANDARDS

- 1.1 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.
- 1.2 The design, material, construction, manufacture, inspection and testing of Aluminium Tube shall conform to the latest revision of relevant standards as per Technical Data Sheet-A. Any other international standards will also be considered if it ensures performance equivalent or superior to standards listed.
- 1.3 In case of conflict between the applicable reference standard and this specification, this specification shall govern.

## 2.0 TECHNICAL REQUIREMENT

- 2.1 Aluminium Tube shall be supplied as per technical particulars specified in Technical Data Sheet – A and Section-II.

### 2.2 Workmanship

- 2.2.1 All tubes shall be supplied straightened & reasonably free from twist.
- 2.2.2 The surface of the Aluminium tubes shall have a bright smooth finish, free from seams, cracks & other imperfections. Special attention shall be given to avoid formation of corona. The finished tubes shall be perfectly straight.
- 2.2.3 The ingot to be used for producing the Aluminium tubular busbars of grade 63401 W.P (Range 2), shall comply with the requirements specified in Table1 (Clause 6.1) of IS:5082 when analysed in accordance with IS:504 or any other standard instrumental method of analysis.
- 2.2.4 Aluminium Tube should be suitable for bending at site as per switchyard layout requirement.
- 2.2.5 The welding of aluminium tube shall be done by the qualified welder duly approved by BHEL / Customer.

## 3.0 TESTS

In addition to routine tests on the aluminium tubes as per IS 5082, Test Reports for following tests shall also be submitted:

- Measurement of the outside diameter, wall thickness and ovality of the tube.
- 0.2% proof tests both on the parent metal and aluminium tube as per standards, as appropriate.



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ALUMINIUM TUBE**

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**TECHNICAL DATA OF ALUMINIUM TUBE**

S. No.	PARTICULARS	DATA					
		3 Inch	4 Inch	4.5 Inch	4.5 Inch	5 Inch	6 Inch
1	Nominal Size, IPS						
		(EH type)	(EH type)	(EH type)	(EH type)	(H type)	(H type)
2	Material	Aluminium Alloy 6101 T6 conforms to 63401 WP (range 2) of IS 5082: 1998					
3	Chemical Composition	Copper- 0.05% Max					
		Magnesium- 0.4 to 0.9%					
		Silicon- 0.3 to 0.7%					
		Iron- 0.5% Max					
		Manganese- 0.03% Max.					
		Aluminium - Balance					
4	Minimum Outer Diameter (in mm)	88.9	114.2	120	127	141.3	170
	Tolerance on outer diameter (in mm) no negative tolerance permitted	2.2	2.2	1.5	2.58	2.8	3.4
		0	0	0	0	0	0
5	Minimum Thickness (in mm)	7.62	8.51	12	9.02	9.53	8
	Tolerance in thickness (in mm) no negative tolerance	2.2	2.2	1	2.58	0.8	1.9
		0	0	0	0	0	0



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	<i>permitted</i>						
6	Nominal Cross Section Area (in sqmm)	1945.76	2825.61	4071.5	3343	3945.11	4071.5
7	Nominal Weight, kg/m (Maximum positive tolerance allowed is 8%, no negative tolerance is allowed.)	5.25	7.7	10.993	9.027	10.652	10.993
	Remark:	<p>Quantity variations caused by dimensional changes within the specified tolerances shall be accepted. However, for commercial purpose &amp; payable measurement of weight of aluminium tube, maximum positive tolerance on nominal weight (Kg/m) shall be 8%.</p> <p>However during tender stage, if the bidder exceeds the 8% tolerance in nominal weight (Kg/m) and submit a techno / commercial deviation, the same shall be acceptable with additional loading on bidder's quoted price (proportionate factor to derive cost to BHEL) for overall cost evaluation on cost to BHEL basis.</p>					
8	Min. Ultimate Tensile Strength	20.5Kg/Sq.mm					
9	Temp. Coefficient of resistance	0.00364 per Deg. C					
10	Min. Electrical Conductivity at 20 Deg.C	55% of IACS					
11	Linear Temperature Coefficient of Expansion (20 Deg.C -200 Deg.C)	0.000023					
12	Modulus of elasticity (kg/Sq.mm)	6700					
13	Min. Elongation on 50 mm	10%					
14	Thermal Conductivity at 100°C	0.43 Calories/Sec/Sq.mm/cm/deg.C					



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15	Min. 0.2% proof Stress	17.34Kg/Sq.mm					
16	Minimum Yield Point (Kg/Sq.mm)	17.5	17.5	14.5	As per relevant standards	17.5	As per relevant standards
17	Minimum Breaking Strength (Kg/Sq.mm)	20.42	20.42	17.5	As per relevant standards	20.42	As per relevant standards
18	Moment of Inertia	1621589.99 mm <sup>4</sup>	3972577.97 mm <sup>4</sup>	6011958.58 mm <sup>4</sup>	As per relevant standards	8610787.65 mm <sup>4</sup>	As per relevant standards
19	Section Modulus	36481.21 mm <sup>3</sup>	69572.29 mm <sup>3</sup>	100199.31 mm <sup>3</sup>	As per relevant standards	121879.51 mm <sup>3</sup>	As per relevant standards
20	Packing	HDPE					
21	Required Length	As per project specific requirement					
22	Manufacturing Process	a) Hot extrusion process through die and mandrel (Solid billet process). Heat treatment shall be done after hot extrusion of the tube; or b) Bridge extrusion process and then cold drawn. Heat treatment shall be done after hot extrusion of the tube.					
23	Constructional Features	For outer diameter (OD) & thickness of the tube there shall not be any negative tolerance, other requirements being as per IS: 2678 and IS: 2673.					
24	Applicable Standard	IS- 2678 IS- 2673 IS-5082					

**Remark - For project specific need, there may be variation in "Thickness" of Aluminium tube. The dimensions for the same shall be issued during contract stage for specific requirement, Vendor to follow the same.**

LOGO	MANUFACTURER'S NAME & ADDRESS			MANUFACTURING QUALITY PLAN				QP NO.		PROJECTS: NORTH Karanpura				
				ITEM: EXTRUDED ALUMINIUM TUBES NTPC DRG NO. : 4410-001-572-QVE-Q-1275A SUB SYSEM: 400kV SWITCHYARD				REV.NO. 00 DATE : PAGE NO. 1 of 1		PACKAGE: 400 kV SWITCHYARD CONTRACT NO: 4410-001-572 MAIN SUPPLIER:BHEL				
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY			REMARKS
					M	C/N				D*	**	10	N	
1	2	3	4	5	6	7	8	9					11	
1.0	Raw Material / Brought out Items													
1.1	Aluminium Billets	Chemical Composition of 63401 Alloy	Major	Spectro	One Sample / Heat or Supplier TC.		Test Report	As per IS 5082:1998	MTC		P	V	V	
2.0	Inprocess / internal Inspection													
2.1	Extruded Tube	Dimensions	Major	Vernier & Micrometer	One Sample / Extruded Lot		Dimension Report	As per IS 2673 and Approved Drawing	QA Record		P	V	V	
2.2		Visual	Major	Visual Check	100%		Free from surface defects	Free from surface defects	QA Record		P	V	V	
2.3		Tensile Strength of 63401 WP Range 2	Major	UTM	One per 2000 Kgs		As per IS 5082:1998	As per IS 5082:1998	QA Record		P	V	V	
2.4		0.2%Proof Stress of 63401 WP Range 2	Major	UTM	One per 2000 Kgs		As per IS 5082:1998	As per IS 5082:1998	QA Record		P	V	V	
2.5		% Elongation of 63401 WP Range 2	Major	UTM	One per 2000 Kgs		As per IS 5082:1998	As per IS 5082:1998	QA Record		P	V	V	
2.6		Conductivity of 63401 WP Range 2	Major	Conductivity Meter	One per 2000 Kgs		As per IS 5082:1998	As per IS 5082:1998	QA Record		P	V	V	
3.0	Final Inspection													
3.1	Extruded Tube	Tensile Strength of 63401 WP Range 2	Critical	UTM	One per 2000 Kgs	One per 2000 Kgs	As per IS 5082:1998	As per IS 5082:1998	JIR		P	W	W	
3.2		0.2%Proof Stress of 63401 WP Range 2	Critical	UTM	One per 2000 Kgs	One per 2000 Kgs	As per IS 5082:1998	As per IS 5082:1998	JIR		P	W	W	
3.3		% Elongation of 63401 WP Range 2	Critical	UTM	One per 2000 Kgs	One per 2000 Kgs	As per IS 5082:1998	As per IS 5082:1998	JIR		P	W	W	
3.4		Conductivity of 63401 WP Range 2	Critical	Conductivity Meter	One per 2000 Kgs	One per 2000 Kgs	As per IS 5082:1998	As per IS 5082:1998	JIR		P	W	W	
3.5		Dimensions (Dia ,Length, Wall Thickness,Ovality ,Straightness)	Major	Vernier & Micrometer	One per 2000 Kgs	One per 2000 Kgs	As per IS 2673 & Approved drawing	As per IS 2673 & Approved drawing	JIR		P	W	W	
3.6		Visual	Major	Visual Check	One per 2000 Kgs	One per 2000 Kgs	Free from surface defects	Free from surface defects	JIR		P	W	W	
4.0	Packing & Despatch	Proper Packing and Sealing at Both ends	Major		100%		Material will be supplied duly packed with HDPE covering & Wooden Crates				P			
MANUFACTURER/ SUB-SUPPLIER :		MAIN SUPPLIER	LEGEND: D: RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION M: MANUFACTURER/ SUB-CONTRACTOR C: CONTRACTOR/NOMINATED INSPECTION AGENCY, N: NTPC P: PERFORM, W: WITNESS, V: VERIFICATION CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS "W", JIR: JOINT INSPECTION REPORT				FOR NTPC USE		DOC. NO.	REV.....	CAT.....			
SIGNATURE		NOTE:Latest edition of IS codes or as specified in TS/Drawing shall be referred						REVIEWED BY	APPROVED BY	APPROVAL SEAL				
		MQP SHALL BE READ IN CONJUNCTION WITH TS/DRAWINGS												

MANUFACTURER'S NAME & ADDRESS				MANUFACTURING QUALITY ASSURANCE PLAN				Customer :TANGEDCO Consultant:-DESEIN PVT LTD Contractor: BHEL. PROJECTS:2x660MW ENNORE SEZ Super Critical TPP Package:- 400kV GIS & Switchyard				
WORKS:				QAP NO. -                    Rev: 0 DATE : ITEM :IPS Aluminium Tube								
SL. NO.	COMPONENT & OPERATIONS	CHARACTERSTICS	CLASS	TYPE CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY		REMARKS
					M	N				M	N	
1	2	3	4	5		6	7	8	9	10		11
I	Chemical composition	Chemical composition	Critical	Spectrometric Test	One Sample per Cast		IS:5082	IS:5082	Laboratory Test	P	V	Review to be done of Test record during final sample testing
II	Manufacturing process : It shall be produced by extruding hot billet in Press through prot hole die. The port hole consists of a die aperture & mandrel & the tube is formed by squeezing the hot metal through annular space formed between mandrel & die & die aperture. Due to high pressure general during the operation then tube has no weak joints. Heat treatment after extrusion shall be done.											
III	DIMENSIONS	a)Outer Diameter & Inner Diameter.	Critical	Physical Measurement	5%		Approved GTP &Drg IS:5082/IS:2673	Approved GTP &Drg IS:5082/IS:2673	JIR	P	W	In case of rejection during sample testing sample size to be increased 10%. on subsequent rejection,100% inspection to be carried out based on random check by customer.
		b)Ovality	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
		c)Straightness	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
		d)Length	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
		e)Wall thickness	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
IV	MECHANICAL PROPERTIES	a)Ultimate Tensile Strength	Critical	Mech	As per IS:5082 -(Range-2)		As per IS:5082 -(Range-2)	IS:5082 -(Range-2)	JIR	P	W	Applicable as specified in approved drg/GTP/ technical specification
		b)0.2% Proof Stress	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
		c)%El on 50.0mm speciman	- Do-	- Do-	- Do-		- Do-	- Do-	- Do-	P	W	
		d)Bend Test	- Do-	- Do-	One sample per lot/Size		Approved GTP/Drg Tech.spec	Approved GTP/Drg Tech.spec	- Do-	P	W	
V	ELECTRICAL PROPERTIES	Conductivity	Major	Electrical	One sample per lot/Size		Approved GTP/Drg Tech.spec	Approved GTP/Drg Tech.spec	JIR	P	W	Review of test record during final inspection
VI	SURFACE FINISH & VERIFICATION OF CUT LENGTH	Surface defects	Major	Visual Check	5%		IS:5082	IS:5082	JIR	P	W	Review of test record during final inspection
				<b>LEGEND:</b> D: RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION M: MANUFACTURER/ SUB-SUPPLIER , N: TANGEDCO P: PERFORM, W: WITNESS, V: VERIFICATION,AS APPROPRIATE, JIR: JOINT INSPECTION REPORT								
MANUFACTURER/ SUB-SUPPLIER		MAIN SUPPLIER										
SIGNATURE				NOTE:Latest edition of IS codes or as specified in TS/Drawing shall be referred				APPROVED BY CUSTOMER/CONSULTANT				

MANUFACTURER'S NAME & ADDRESS			MANUFACTURING QUALITY PLAN					PROJECTS: 6x170MW PUNATSANGHHU-II Hydroelectric Project, Bhutan				
			ITEM: IPS Aluminium tube			QP NO. -		PACKAGE/CONTRACT: EM-2/2013				
			SUB SYSEM:			REV.NO. 0		CUSTOMER NO: PHPA-II, BHUTAN				
						DATE : PAGE NO. 1 of 1		CONSULTANT		WAPCOS LTD.,GURGAON		
								CENTRAL ELECTRICITY AUTHORITY, NEW DELHI				
								CONTRACTOR: BHEL				
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
1	2	3	4	5		7	8	9	D*	**	10	11

**A. Raw Materials Test:**

I	ALUMINIUM INGOT	Chemical composition	Manufacture Test Certificate	IS:5082	IS:5082	Laboratory Test	√	V	V	V	Review to be done of Manufacturer Test Certificate
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**B. Routine Test:**

I	Chemical composition	Chemical composition	Critical	Spectrometric Test	One Sample per Cast	IS:5082	IS:5082	Laboratory Test	√	P	V	V	Review to be done of Test record during final sample testing	
II	Process of manufacture : It shall be produced by extruding hot billet in Press through prot hole die. The port hole consists of a die aperture & mandrel & the tube is formed by squeezing the hot metal through annular space formed between mandrel & die & die aperture. Due to high pressure general during the operation then tube has no weak joints. Heat treatment after extrusion shall be done													
III	DIMENSIONS	a)Outer Diameter & Inner Diameter.	Critical	Physical Measurement	5%	Approved GTP &Drg IS:5082/IS:2673	Approved GTP &Drg IS:5082/IS:2673	JIR	√	P	W	V	In case of rejection during sample testing sample size to be increased 10%. on subsequent rejection,100% inspection to be carried out based on random check by customer. Wall Thickness & Ovality shall be measured by Ultrasonic thickness gauge.	
		b)Ovality	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	V		
		c)Straightness	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W		V
		d)Length	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W		V
		e)Wall thickness	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W		V
IV	MECHANICAL PROPERTIES	a)Ultimate Tensile Strength	Critical	Mech	As per IS:5082	As per IS:5082 -(Range-2)	IS:5082 -(Range-2)	JIR	√	P	W	V	Applicable as specified in approved drg/GTP/ technical specification	
		b)0.2% Proof Stress	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	V		
		c)%El on 50.0mm speciman	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W		V
V	ELECTRICAL PROPERTIES	Conductivity	Major	Electrical	One sample per Cast.	Approved GTP/Drg Tech.spec	Approved GTP/Drg Tech.spec	JIR	√	P	W	V		
VI	SURFACE FINISH & VERIFICATION OF CUT LENGTH	Surface defects	Major	Visual Check	5%	IS:5082	IS:5082	JIR	√	P	W	V		
				<b>LEGEND:</b> D: RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION M: MANUFACTURER/ SUB-SUPPLIER C: BHEL N: CUSTOMER/CONSULTANT P: PERFORM, W: WITNESS, V: VERIFICATION, AS APPROPRIATE, CHP: THE OWNER SHALL IDENTIFY IN COLUMN "N" AS "W". JIR:- JOINT INSPECTION REPORT										
MANUFACTURER/ SUB-SUPPLIER				NOTE:Latest edition of IS codes or as specified in TS/Drawing shall be referred				Approved BY BHEL						
SIGNATURE														

MANUFACTURER'S NAME & ADDRESS			MANUFACTURING QUALITY PLAN						PROJECTS: 1x660 MW , Unit-5, SAGARDIGHI TPS Extn				
			ITEM: IPS Aluminium tube			QP NO. -			CUSTOMER : M/s WBPDCI				
			SUB SYSEM: 400kV SWITCHYARD			REV.NO. 0 DATE :			CONSULTANT : M/s DCPL				
						PAGE NO. 1 of 1			DOC No: TB-MQ-445-316-E025				
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
1	2	3	4	5		7	8	9	D*	**	10	N	11
I	Chemical composition	Chemical composition	Critical	Spectrometric Test	One Sample per Cast	IS:5082	IS:5082	Laboratory Test	√	P	V	V	Review to be done of Test record during final sample testing
II	Process of manufacture : It shall be produced by extruding hot billet in Press through prot hole die. The port hole consists of a die aperture & mandrel & the tube is formed by squeezing the hot metal through annular space formed between mandrel & die & die aperture. Due to high pressure general during the operation then tube has no weak joints. Heat treatment after extrusion shall be done												
III	DIMENSIONS												
		a)Outer Diameter & Inner Diameter.	Critical	Physical Measurement	10%	Approved GTP &Drg IS:5082/IS:2673	Approved GTP &Drg IS:5082/IS:2673	JIR	√	P	W	W	In case of rejection during sample testing sample size to be increased 20%. on subsequent rejection,100% inspection to be carried out based on random check by customer. Wall Thickness shall be measured by Ultrasonic thickness gauge.Ovality shall be measured by Vernier/Micrometer
		b)Ovality	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
		c)Straightness	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
		d)Length	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
		e)Wall thickness	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
IV	MECHANICAL PROPERTIES												
		a)Ultimate Tensile Strength	Critical	Mech	As per IS:5082	As per IS:5082 -(Range-2)	IS:5082 -(Range-2)	JIR	√	P	W	W	Applicable as specified in approved drg/GTP/ technical specification
		b)0.2% Proof Stress	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
		c)%El on 50.0mm speciman	- Do-	- Do-	- Do-	- Do-	- Do-	- Do-	√	P	W	W	
		d)Bend test	- Do-	- Do-	1 sample/ Lot/Size	Appd Drg/GTP/tech Spec	Appd Drg/GTP/tech Spec	- Do-	√	P	W	W	
V	ELECTRICAL PROPERTIES												
		Conductivity	Major	Electrical	1 sample/ Lot/Size	Approved GTP/Drg Tech.spec	Approved GTP/Drg Tech.spec	JIR	√	P	W	W	
VI	SURFACE FINISH & VERIFICATION OF CUT LENGTH												
		Surface defects	Major	Visual Check	10%	IS:5082	IS:5082	JIR	√	P	W	W	
			<b>LEGEND:</b> D: RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION M: MANUFACTURER/ SUB-SUPPLIER C: BHEL/BHEL TPIA N: CUSTOMER/CUSTOMER TPIA P: PERFORM, W: WITNESS, V: VERIFICATION, AS APPROPRIATE, IR:- JOINT INSPECTION REPORT										
MANUFACTURER/ SUB-SUPPLIER			MAIN SUPPLIER										
SIGNATURE			NOTE:Latest edition of IS codes or as specified in TS/Drawing shall be referred						Approved BY CUSTOMER/CONSULTANT				