

# General Note: BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE: 0431-2574111 GRAMS: BHARATELEC FAX NO: 0431-2520719

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E-mail : Web :

429-002/A

| Collective No. | Enquiry Date | Due Date For<br>Quotation |
|----------------|--------------|---------------------------|
| 1802500225     | 30.07.2025   | 05.08.2025                |

#### **OFFICE COPY**

Please quote Enquiry No, Date and due date in all correspondences.

This is only a request for quotation and not an order

| Item | Description   | Unit | Quantity | Delivery<br>Quantity | Schedule<br>Date |
|------|---|------|----------|----------------------|------------------|
| 10   | 964241020000  MAIN DRIVE-GEAR RATIO  128:1_GRAVI FEEDER Specification for Main Drive with Gear Reducer for 36# Gravimetric Feeder MPC System with Two Tacho generators and VFD motor: GF-351 Rev.06 | NO   | 188.000  | 188.00               | 10.09.25         |
| 20   | 964241030000  MAIN DRIVE-GEAR RATIO 200:1_GRAVI FEEDER Specification for Main Drive with Gear Reducer for 36# Gravimetric Feeder MPC System with Two Tacho generators and VFD motor: GF-351 Rev.06  | NO   | 30.000   | 30.00                | 10.09.25         |

# General Note:

#### **Enclosures:**

#### "LD clause has to be confirmed without fail."

The bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants /service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

## <u>PR Links</u>

| Material.    | PR. No    | PR.Item. | Quanity | Acc. Assign   | Customer Number |
|--------------|-----------|----------|---------|---------------|-----------------|
| 964241020000 | 142862334 | 00010    |         | Y.001.04-MPLG | Y.001.0         |
|              |           |          | 188.000 |               |                 |
| 964241030000 | 142862334 | 00020    |         | Y.001.04-MPLG | Y.001.0         |
|              |           |          | 30.000  |               |                 |

#### list of suppliers

| Th  | ne offers should reach us 30 minutes before the time of opening of tenders.            |  |  |  |
|-----|--|--|--|--|
| Τh  | ne offers will be opened at 14.30 hrs on the due date of tender in the presence of     |  |  |  |
| ter | tenderers who have submitted their offer and who may like to be present for the tender |  |  |  |
| ор  | pening.Late and delayed offers are liable to be rejected.                              |  |  |  |

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED** 

MANAGER / PURCHASE (FOSSIL BOILERS)

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BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )
HIGH PRESSURE BOILER PLANT PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

| 1802500225 / 30.07.2025  | 23505   |
|--|---|
| RFQ-5200009862   |   |
| Open Tender Dummy Code   |   |
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| The offers should reach us 30 minutes before the time of opening of tenders.  The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected. | Yours faithfully, For <b>BHARAT HEAVY ELECTRICALS LIMITED</b> |
|  | MANAGER / PURCHASE<br>(FOSSIL BOILERS)<br>Yours faithfully,   |

# BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI-620 014.

# Annexure – A GENERAL TERMS AND CONDITIONS

Note: This Annexure A has to be mandatorily filled & signed by the manufacturer (or) mill and submitted along with Technical bid.

Any deviation to the below mentioned terms shall be stated specifically in the comments column for each term and also in case of acceptance to our terms, it will be construed that the whole term is understood and agreed in totality without any deviation. (If otherwise mentioned).

**BHEL Enquiry No.:** 1802500225

| Description of the Equipment:   | Main Drive with Gear Ratio 128:1 & Main Drive with Gear Ratio 200:1 |  |
|---|---|--|
| The present tender is for establishing a Framework Agreement (Rate Contract) for the supply of Main |   |  |
| Drive (128:1 & 200:1). The Rate Contract shall  | be valid for a period of 12 months from the date of RC              |  |
| issuance.   |   |  |
|   |   |  |
| Projects  | Various Projects  |  |
| BHEL Tender No. & Date  | : 1802500225  |  |
| Name of the firm (Bidder)   | :   |  |
| Address   | :   |  |
| Contact details   | Contact person 1  |  |
|   | Name:   |  |
|   | Designation: Office Phone:  |  |
|   | Mobile:   |  |
|   | e-mail:   |  |
|   | Contact person 2  |  |
|   | Name:   |  |
|   | Designation:  |  |
|   | Office Phone:   |  |
|   | Mobile: e-mail:   |  |

| SI | BHEL Terms and Conditions   | Supplier                |
|----|---|-------------------------|
| No | Pre-Qualification Criteria:   | Comments                |
|    | 1.1 Technical   |                         |
|    | Offer shall be considered only if bidder is meeting Tender Prequalification requirement. Vendor to  |                         |
|    | comply with Pre-Qualification requirement of the tender and submit along with their technical bid - the   |                         |
|    | credentials and other documents as indicated in the PQR in the format prescribed.   |                         |
|    | 1.1 a   |                         |
|    | Package 1: MAIN DRIVE-GEAR RATIO 128:1_GRAVI FEEDER Specification for Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor: GF-351 Rev.06 |                         |
|    | Package 2: MAIN DRIVE-GEAR RATIO 200:1_GRAVI FEEDER Specification for Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor: GF-351 Rev.06 |                         |
|    | Documents enclosed: SPEC: Include the GF-351 Rev.06 with SQP and PQR  |                         |
|    | Important Points  |                         |
|    | a) Standard Quality plan attached in the specification is applicable  |                         |
|    | b) Painting shall be suitable for usage in coal based thermal power plants with high coal dust  |                         |
|    | environment c) Technical specification shall be referred for Packing requirements   |                         |
|    | Evaluation will be based on <b>Package wise evaluation</b> . Deviation to specification is not acceptable. As   |                         |
| 01 | confirmation to acceptance of the specification, suppliers shall submit signed specification along with offer.  | Confirmed/Not Confirmed |
|    | Bidder shall comply with the enquiry specification requirements as per respective catalogues along with   |                         |
|    | the offer.  |                         |
|    | SUB DELIVERY – ENQUIRY – DEVIATION FORMAT to be specifically filled in and submitted along with   |                         |
|    | your offer.   |                         |
|    | Any clarifications/deviations to the specification requirements given in NIT are to be clearly indicated in   |                         |
|    | the SUB DELIVERY – ENQUIRY – DEVIATION FORMAT provided along with the enquiry. Even if no   |                         |
|    | deviation is taken, deviation format needs to be submitted with 'NIL' deviation.  |                         |
|    | Any other deviations indicated elsewhere in the offer will not be considered while evaluating the offer.  |                         |
|    | If vendor is taking any deviation/s to the specification given in the NIT which is/are not mentioned in the   |                         |
|    | SUB DELIVERY – ENQUIRY – DEVIATION FORMAT, BHEL shall have the right to reject the offer/cancel the   |                         |
|    | PO at any stage and in such case BHEL shall have no liability to compensate the supplier in any manner.   |                         |
|    | 1.2 Financial   |                         |
|    | 1.3 Integrity Pact  |                         |
|    | 1.4 Bidder must not be admitted under Corporate Insolvency Resolution Process or Liquidation as on date,  |                         |
|    | by NCLT or any adjudicating authority/authorities, and shall submit undertaking (Annexure-4) to this  |                         |
|    | effect.   |                         |
|    | 1.5 Customer Approval (if required)   |                         |
|    | Explanatory Notes for the PQR:  |                         |

|    | i. 'Supplied' in PQR – 1.1 means, bidder should have delivered the Enquiry item. Bidder shall submit the relevant documents against the above PQRs inclusive of Purchase order (wherein PO no., date, etc. is legible) along with proof of supply (i.e Completion Certificate/ Copy of Invoices / LR Copies/ Store Receipt Vouchers/ Payment Advice etc.) in the respective attachments in their offer in support of PQR. The "Contract" referred in Technical PQR may be Rate Contract/ Framework Agreement/ Purchase Order/ Work Order.  ii. Bidder to submit Audited Balance Sheet and Profit and Loss Account for the respective years as indicated against Financial Turnover PQR – 1.2 above along with all annexures.  iii. In case of audited Financial Statements have not been submitted for all the three years as indicated against Financial Turnover PQR above, then the applicable audited statements submitted by the bidders against the requisite three years, will be averaged for three years i.e. total divided by three.  iv. If Financial Statements are not required to be audited statutorily, then instead of audited Financial Statements, Financial Statements are required to be certified by Chartered Accountant.  v. Credentials furnished by the bidder against "PRE-QUALIFYING CRITERIA" shall be verified from the issuing authority for its authenticity. In case, any credential (s) is/are found to be spurious, offer of the bidder is liable to be rejected. BHEL reserves the right to initiate any further action as per extant guidelines for Suspension of Business Dealings as applicable in BHEL.  vi. Price Bids of only those bidders shall be opened who stand qualified after compliance of QR – 1.1 to 1.5 |                            |
|----|---|----------------------------|
|    | Scope of Supply:  |                            |
| 02 | Supply MAIN DRIVE With GEAR RATIO 128:1 & MAIN DRIVE With GEAR RATIO 200:1 to Trichy BHEL Store on F.O.R. Destination Basis.  Unloading of materials at Destination / Site shall be in BHEL's scope.  | Confirmed/Not<br>Confirmed |
|    | PRICE BASIS:  |                            |
|    | Price in INR should be quoted for delivery to <b>Trichy BHEL Store</b>  | Confirmed/Not              |
| 03 |   | Confirmed                  |
|    | GSTIN: 33AAACB4146P2ZL  |                            |
| 04 | TAXES & DUTIES:   |                            |
|    | <b>4.1</b> The Supplier/Vendor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit along with the applicable overheads @5% and interest on the total value (i.e. amount paid by BHEL + overhead).   | Confirmed/Not<br>Confirmed |
|    | However, provisions regarding <b>GST</b> on output supply (goods/service) and TDS/TCS as per Income Tax Act shall be as per following clauses.  |                            |
|    | 4.2 GST (Goods and Services Tax)  |                            |
|    | <b>4.2.1</b> GST as applicable on output supply (goods/services) are excluded from Supplier/Vendor's scope; therefore, contractor's price/rates shall be <b>exclusive</b> of GST. Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition.   |                            |
|    | <b>4.2.2</b> The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Supplier/Vendor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Supplier/Vendor.  |                            |
|    | <b>4.2.3</b> Supplier/Vendor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Supplier/Vendor.  |                            |
|    | <b>4.2.4</b> Supplier/Vendor has to submit GST registration certificate of the concerned state. Supplier/Vendor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period.  |                            |
|    | <b>4.2.5</b> Supplier/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.   |                            |

- **4.2.6** Supplier/Vendor has to submit GST compliant invoice within the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, Supplier/Vendor has to provide scan copy of invoice & GR/LR/RR to BHEL before movement of goods starts to enable BHEL to meet its GST related compliances. Special care should be taken in case of month end transactions.
- **4.2.7** Supplier/Vendor has to ensure that invoice in respect of such services which have been provided/completed on or before end of the month should not bear the date later than last working day of the month in which services are performed.
- **4.2.8** Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Supplier/Vendor:
  - a) Supply of goods and/or services have been received by BHEL.
  - b) Original Tax Invoice has been submitted to BHEL.
  - c) Supplier/Vendor has submitted all the documents required for processing of bill as per contract/ purchase order/ work order.
  - d) In cases where e-invoicing provision is applicable, Supplier/Vendor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder.
  - e) Supplier/Vendor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return.
  - f) Respective invoice has appeared in BHEL's GSTR 2A for the month corresponding to the month of invoice and in GSTR-2B of the month in which such invoices has been reported by the contractor along with status of ITC availability as "YES" in GSTR-2B. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the Supplier/Vendor.
  - g) Supplier/Vendor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL.
- **4.2.9** Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from Supplier/Vendor's bill or otherwise as deemed fit.
- **4.2.10** TDS as applicable under GST law shall be deducted from Supplier/Vendor's bill.
- **4.2.11** Supplier/Vendor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permits, all the e-way bills, road permits etc. required for transportation of goods needs to be arranged by the contractor.
- **4.2.12** Supplier/Vendor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of Supplier/Vendor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder.
- **4.2.13** In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/altered/deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Supplier/Vendor's due payment.
- **4.2.14** Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Supplier/Vendor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Supplier/Vendor.
- **4.2.15** In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL's decision shall be final and binding on the Supplier/Vendor.

#### 4.2.16 Variation in Taxes & Duties:

Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely

|    | attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability.  In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its Supplier/Vendor only and within the contractual delivery period only.  In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/ Supplier/Vendor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.  4.3 Income Tax:  TDS/TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from Supplier/Vendor's bill.  4.4 Supplier HSN Code & Applicable GST % (To be filled by Supplier) |                            |
|----|---|----------------------------|
| 05 | MATERIAL DISPATCH CLEARANCE CERTIFICATE (MDCC):  MDCC shall be issued by BHEL. No material shall be dispatched by supplier unless and until Material Dispatch Clearance Certificate (MDCC) issued by BHEL Site. In case any material is dispatched without MDCC and any loss is incurred by Supplier/Vendor for any reason whatsoever, BHEL shall not be responsible in any manner to compensate the supplier in this regard.   | Confirmed/Not<br>Confirmed |
| 06 | INSPECTION / INSPECTION & TESTING AT SUPPLIERS WORKS:  BHEL reserves the right to inspect the material during manufacturing and also to get tested the material under dispatch from third party. The test results of third party test shall be final and binding on the Supplier/Vendor.  BHEL will reserve the right to inspect/test the material during/after manufacturing at suppliers' works, and/or at BHEL Site. In case of rejection at any stage, Supplier/Vendor shall be liable to replace the materials at his own cost.  | Confirmed/Not<br>Confirmed |
| 07 | Delivery period:120 days from PO  DELIVERY:     TRICHY BHEL STORE:  NOTE:  a) If the delivery of supply as detailed above gets delayed beyond the delivery period, the Supplier/Vendor shall request for a delivery extension and BHEL at its discretion may extend the Contract. However, if any 'Delivery extension' is granted to the Supplier/Vendor for completion of supply, due to backlog attributable to the Supplier/Vendor, then it shall be without prejudice to the rights of BHEL to impose LD for the delays attributable to the Supplier/Vendor.  b) In case BHEL increase the quantity during currency of the contract in line with quantity variation clause Option clause, delivery extension shall be given for supply of these additional quantity.  | Confirmed/Not<br>Confirmed |
| 08 | TRANSIT INSURANCE:  Transit Insurance of material is in BHEL's scope.   | Confirmed/Not<br>Confirmed |
| 09 | i) FOR NON MSME Bidders, 100% payment shall be released within 90 days from the date of Material Acceptance Date/ Site Receipt of material at site subject to submission of billing documents as mentioned in sl. no. 10 below.  ii) FOR MSE Bidders, 100% payment shall be released on 45th day from the date of Vehicle Gate/Site Entry / Site Receipt of material at site subject to submission of billing documents as mentioned in sl. no. 10 below.  iii) FOR MEDIUM ENTERPRISES Bidders, 100% payment shall be released within 60 days from the date of Material Acceptance Date/ Site Receipt of material at site subject to submission of billing documents as mentioned in sl. no. 10 below.  | Confirmed/Not<br>Confirmed |

|    | However, GST amount shall be reimbursed in line with compliance to Cl. No. 4 (Taxes & Duties) above.   |               |
|----|--|---------------|
|    |  |               |
|    | b) NO INTEREST PAYABLE TO CONTRACTOR   |               |
|    | No interest shall be payable on the security deposit or any other money due to the Supplier.   |               |
| 10 | DOCUMENTS REQUIRED FOR BILL PROCESSING:  |               |
|    |  |               |
|    | The following documents are required to be sent with Material Dispatch/Billing Documents:  |               |
|    |  |               |
|    | Original Tax Invoice (As per Cl. No. 4 above).   |               |
|    | <ul><li>Copy of LR</li><li>Warranty Certificate</li></ul>  | Confirmed/Not |
|    | Duplicate for Transporter  | Confirmed     |
|    | Original Consignee copy of LR  |               |
|    | Site acknowledged copy of LR   |               |
|    | • E Way bill   |               |
|    | Bank Guarantee   |               |
|    | GeM Invoice  |               |
|    | Packing list   |               |
| 11 | BANK DETAILS FOR EMD & PERFORMANCE SECURITY SUBMISSION:  |               |
|    | For Electronic Fund Transfer the details are as below:   |               |
|    | a) Name of the Beneficiary: Bharat Heavy Electricals Limited   |               |
|    | a) Name of the Beneficiary. Bharac fleavy Electricals Elimited   |               |
|    | b) Bank Particulars (Details of Respectively executing region):  |               |
|    |  | Confirmed/Not |
|    | Name of the Company - BHARAT HEAVY ELECTRICALS LTD.  | Confirmed     |
|    | Address of the company   |               |
|    | Name of the bank - Bank branch BRANCH  |               |
|    | City   |               |
|    | Branch code -  |               |
|    | Account Number –   |               |
|    | Account type   |               |
|    | IFSC code  |               |
|    | MICR code –  |               |
| 12 | EARNEST MONEY DEPOSIT: Not Applicable.   |               |
|    | The state of the s |               |
|    | 12.1-Every tender must be accompanied by the prescribed amount of Earnest Money Deposit (EMD) in the   |               |
|    | manner described herein.   |               |
|    | i EMD shall be furnished before tender opening / along with the offer in full as per the amount  | NA            |
|    | indicated in the NIT.  ii The EMD up to an amount of Rsis to be paid only in the following forms:  |               |
|    | a) Electronic Fund Transfer credited in BHEL account (before tender opening).  |               |
|    | b) Banker's cheque/ Pay order/ Demand draft, in favour of 'Bharat Heavy Electricals Limited' and   |               |
|    | payable at Regional HQ issuing the tender (along with offer).  |               |
|    | c) Fixed Deposit Receipt (FDR) issued by Scheduled Banks/ Public Financial Institutions as defined in  |               |
|    | the Companies Act (FDR should be in the name of the Contractor, a/c BHEL marking lien in favour of   |               |
|    | BHEL) (along with offer). The Fixed Deposit in such cases shall be valid for a period of 45 (forty-five)   |               |
|    | days beyond the final bid validity period.   |               |
|    | d) Bank Guarantee from any of the Scheduled Banks. In such cases shall be valid for a period of 45 (forty-five) days beyond the final bid validity period.   |               |
|    | e) <b>Insurance Surety Bonds.</b> In case the EMD is more than Rs. Two lakh and in case of foreign bidders,  |               |
|    | it may be in the form of a bank guarantee (in equivalent Foreign Exchange amount, in case of foreign   |               |
|    | bidders) issued/ confirmed from any of the scheduled commercial bank in India in the prescribed  |               |
|    | format. The EMD shall remain valid for a period of 45 (forty-five) days beyond the final bid validity  |               |
|    | <del>period.</del>   |               |
|    | iii No other form of EMD remittance shall be acceptable to BHEL.   |               |
|    | 12.2 EMD by the Bidder will be forfeited as per NIT conditions, if:  |               |
|    | TETE LIVID BY the blader will be forteled as per 1911 conditions, it.  |               |
|    |  | •             |

- i. The bidder withdraws or amends its/his tender or impairs or derogates from the tender in any respect within the period of validity of the tender or if the successful bidder fails to furnish the required performance security within the specified period mentioned in the Tender.
- ii. EMD by the Bidder shall be withheld in case any action on the tenderer is envisaged under the provisions of extant "Guidelines on Suspension of business dealings with suppliers/ contractors" and shall be forfeited in case of suspension
- 12.3 Subject to Clause 12.2 above, EMD of the unsuccessful bidders shall be returned at the earliest after expiry of the final bid validity period and latest by the 30th day after the award of the contract. However, in case of two packet or two stage bidding, EMD of unsuccessful bidders during first stage i.e., technical evaluation etc. shall be returned within 30 days of declaration of result of first stage i.e. technical evaluation etc.
- **12.4**EMD of successful Bidder shall be refunded on conclusion of the order/ receipt of a performance security as mentioned in NIT.

#### 12.5 EMD shall not carry any interest.

12.6 MSE / KVIC / ACASH / WDO / Colr Board / TRIFED / Kendriya Bhandar / Turnover above 500 Cr / BIS License holders / Central PSU / State PSU / Startups as recognized by Department for Promotion of Industry and Internal Trade (DPIIT) shall be exempted from payment of EMD.

#### 13 PERFORMANCE SECURITY: Applicable

- **13.1** Successful bidder awarded the contract should deposit 5 % of the contract value (PO Value) as performance security towards fulfilment of all contractual obligations, including warranty obligations.
- **13.2** Performance Security is to be furnished within 14 days after issuance of Contract/PO and should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the Supplier/Vendor, including warranty obligations.

# Confirmed/Not Confirmed

#### 13.3 Modes of deposit:

- a) Performance security may be furnished in the following forms:
  - i. Local cheques of Scheduled Banks (subject to realization)/ Pay Order/Demand Draft/ Electronic Fund Transfer in favour of 'Bharat Heavy Electricals Limited' and payable at Regional HQ
  - ii. Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee should be in the prescribed format of BHEL.
  - iii. Fixed Deposit Receipt (FDR) issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).
  - iv. Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).
  - v. Insurance Surety Bond.

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

- b) In case of GTE tenders, the performance security should be in the same currency as the contract and must conform to Uniform Rules for Demand Guarantees (URDG 758) an international convention regulating international securities.
- **13.4** The performance security will be forfeited and credited to BHEL's account in the event of a breach of contract by the Supplier/Vendor as provided herein or elsewhere in the Contract/PO.
- **13.5** Performance Security shall be refunded to the Supplier/Vendor without interest, after the Supplier/Vendor duly performs and completes the contract in all respects but not later than 60(sixty) days of completion of all such obligations including the warranty under the contract.
- 13.6 The Performance Security shall not carry any interest.
- **13.7** There is no exemption of Performance security deposit submission for MSE Vendors.

#### 14 BREACH OF CONTRACT, REMEDIES AND TERMINATION:

#### **14.1** The following shall amount to breach of contract:

- I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.
- II. The Supplier/Vendor 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
- III. The Supplier/Vendor delivers equipment/ material not of the contracted quality.
- IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.
- V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.
- VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
- VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.
- VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.
- IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.
- X. Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.

**Note**- Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.

In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract.

#### 14.2 Remedies in case of Breach of Contract.

- i. Wherein the period as stipulated in the notice issued under clause 14.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.
- ii. Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.
- iii. wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:
- iv. In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.
- v. If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:
  - a) from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.

- b) If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.
- vi. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor.
- vii. It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.
- viii. In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

#### Note:

- 1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:
  - (a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.
  - (b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners; or sole proprietorship firm owned by any partner(s) as a sole proprietor.

#### LD against delay in executed supply in case of Termination of Contract:

LD against delay in executed supply shall be calculated in line with LD clause no. 18.0 below, for the delay attributable to Supplier/Vendor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of supply till termination of contract.

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

- i. Let the time period from scheduled date of start of supply till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1
- ii. Let the value of executed supply till the time of termination of contract= X
- iii. Let the Total Executable Value of supply for which inputs/fronts were made available to Supplier/Vendor and were planned for execution till termination of contract = Y
- iv. Delay in executed supply attributable to Supplier/Vendor i.e. T2=[1-(X/Y)] x T1
- v. LD shall be calculated in line with LD clause (clause 18.0) of the Contract for the delay attributable to Supplier/Vendor taking "X" as Contract Value and "T2" as period of delay attributable to Supplier/Vendor.

#### 15 BILL TO:

BHARAT HEAVY ELECTRICALS LIMITED
HIGH PRESSURE BOILER PLANT, TIRUCHIRAPALLI - 620 014
TAMIL NADU - INDIA.
GST: 33AAACB4146P2ZL

#### **SHIP TO ADDRESS:**

Manager / Stores - 26 Fossil Boilers, BHEL Boiler Plant Project P.O. Tiruchirapalli - 620 014. Tamilnadu, India.

#### 16 GUARANTEE/WARRANTY:

Guarantee period for Supply of Main Drive With Gear Ratio 128:1 & Main Drive with Gear Ratio 200:1 shall be for a period of 18 months from the date of supply (calendar months from the date of last dispatch) or 12 months from the date of commissioning, whichever is earlier.

No Deviation is permitted. If still vendor offered any deviation on the Guarantee / warranty period, it may lead to rejection of offer.

# Confirmed/Not Confirmed

#### 17 MICRO AND SMALL ENTERPRISES (MSE):

Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.

| Type under<br>MSE | UDYAM No | SC/ST Owned | Women Owned | Others<br>(Excluding<br>SC/ST/Women) |
|-------------------|----------|-------------|-------------|--------------------------------------|
| Micro             |          |             |             |                                      |
| Small             |          |             |             |                                      |

Confirmed/Not Confirmed

Note: If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.

- a) MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) only if they submit along with the offer, attested copies of either Udyam Registration. Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of supporting document in tender will lead to consideration of their bids at par with other bidders. No benefits shall be applicable for this enquiry if the above required documents are not uploaded at the time of bid submission. Documents submitted by the bidder shall be verified by BHEL for rendering the applicable benefits.
- b) Material entry date (Gate Entry date) will be considered for payment due date calculation (when no objections are raised by BHEL). If such objection(s) is raised within 15 days of zero date /last closure of objection and payment due date will be accordingly revised considering date on which vendor has successfully replied against objection as zero date.
- c) Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/ Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference / price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 100% of total quantity.

#### 18 LIQUIDATED DAMAGE:

Liquidated Damages, wherever referred under this Tender/Agreement, shall mean and refer to the damages, not in the nature of penalty, which the contractor agrees to pay in the event of delay in delivery of supplies, breach of contract etc. as the case may be.

Liquidated Damages leviable upon the Supplier/Vendor is a sum which is agreed by the parties as a reasonable and genuine pre-estimate of damages which will be suffered by BHEL on account of delay/breach on the part of the Supplier/Vendor.

If the Seller/Service Provider fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract/PO, the Buyer/BHEL will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever.

LD shall be reckoned from the Contract delivery date to material receipt date

Material receipt date means the following

Dispatch to BHEL Trichy Stores- Vehicle /Gate Entry date

#### 19 INTEGRITY PACT (IP): Applicable

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

| SI No | IEM                                   | E Mail       |
|-------|---------------------------------------|--------------|
| 1     | Shri Otem Dai, IAS (Retd.)            | iem1@bhel.in |
| 2     | Shri Bishwamitra Pandey, IRAS (Retd.) | iem2@bhel.in |
| 3     | Shri Mukesh Mittal, IRS (Retd.)       | iem3@bhel.in |

- **b)** The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, 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 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 IEMs shall be done through email only.

#### Note:

No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, 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 whose contact details are as per Clause no. 21 below.

#### 20 PREFERENCE TO MAKE IN INDIA:

For this procurement, the local content to categorize a Supplier/Vendor as a Class I local supplier/ Class II local Supplier/Non-Local Supplier and purchase preferences 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 Bid, the same shall be applicable even if issued after issue of this Bid, but before opening of Part-II bids against this Bid.

#### 23.1 Compliance to Restrictions under Rule 144 (xi) of GFR 2017:

- 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. The Competent Authority for the purpose of this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- 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 falling 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 Clause 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 entities 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 shareholders 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 of 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 of or entitlement to more than fifteen percent of the property or capital or profits of the 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.
  - (i) The bidder shall provide undertaking for their compliance to this Clause, in the format provided in Annexure-13.
  - (ii) Registration of the bidder with Competent Authority should be valid at the time of submission of bids and at the time of acceptance of the bids

#### 21 | Settlement of Dispute:

If any dispute or difference of any kind whatsoever shall arise between BHEL and the Supplier/Vendor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to Designated Engineer for amicable resolution by the parties. Designated Engineer (to be nominated by BHEL for settlement of disputes arising out of the contract) who within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Supplier/Vendor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not.

If after the Designated Engineer has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Supplier/Vendor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as per Clause 21.1

#### 21.1 Conciliation:

Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. 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 - "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com)).

**Note:** Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding "Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/ Entities/agencies are to encourage mediation under the Mediation Act. 2023. The said Act has not yet been notified by the Government. Therefore, the clause "Settlement of Disputes" shall be modified accordingly as and when the Mediation Act 2023 gets notified.

#### 21.2 ARBITRATION:

- 21.2.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 14.1 herein above or otherwise) 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 (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to **Madras High Court, Arbitration Centre (MHCAC)** and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution.
- 21.2.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to arbitral institution. The Notice shall be addressed to the Head of the Unit, BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.
- 21.2.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institution- Madras High Court, Arbitration Centre (MHCAC)- and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to Madras High Court, Arbitration Centre (MHCAC)- for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.
- 21.2.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.
- 21.2.5 The Arbitration proceedings shall be in English language and the seat of Arbitration shall be Trichy.
- 21.2.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at **Trichy.**
- 21.2.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.
- 21.2.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.
- 21.2.9 In case the disputed amount Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.
- 21.2.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause 14.2.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.
- 21.3 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways,

| 22 | Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution  |                            |
|----|--|----------------------------|
| 22 |  |                            |
| 22 | Subject to clause 21 of this contract, the Civil Court having original Civil Jurisdiction at Tiruchirappalli, Tamilnadu shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract.  GOVERNING LAWS  The contract shall be governed by the Law for the time being in force in the Republic of India.  | Confirmed/Not<br>Confirmed |
| 23 | FORCE MAJEURE  23.1 "Force Majeure" shall mean circumstance which is: a) beyond control of either of the parties to contract, b) either of the parties could not reasonably have provided against the event before entering into the contract, c) having arisen, either of the parties could not reasonably have avoided or overcome, and d) not substantially attributable to either of the parties and Prevents the performance of the contract, such circumstances include but shall not be limited to: i. War, hostilities, invasion, act of foreign enemies. ii. Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war. iii. Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors. iv. Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors. v. Encountering munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio-activity. vi. Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc. vii. Epidemic, pandemic etc.  23.2 The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party: a) any strike, work-to-rule action, go-slow or similar labour difficulty (b) late delivery of equipment or material (unless caused by Force Majeure event) and (c) economic hardship.  23.3 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event.  23.4 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under t | Confirmed/Not<br>Confirmed |
|    | 23.6 BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure.  |                            |
| 24 | Non-Disclosure Agreement: The bidders shall enter into the Non-disclosure agreement separately. (Annexure 7 attached).   | Confirmed/Not              |

| 25 | Cartel Formation   |  |                            |
|----|--|--|----------------------------|
|    | The Bidder declares that they will not enter into any illeg whether formal or informal with other Bidder(s). This certifications, subsidiary contracts, submission or non-sub competitiveness or to introduce cartelization in the biddindulged in above activities, suitable action shall be taken by   | Confirmed/Not<br>Confirmed   |                            |
| 26 | Fraud Prevention Policy Bidder along with its associate /collaborators /sub-contractor shall strictly adhere to BHEL Fraud Prevention Policy displated shall immediately bring to the notice of BHEL Management comes to their notice.   | yed on BHEL website http://www.bhel.com and about any fraud or suspected fraud as soon as it | Confirmed/Not<br>Confirmed |
| 27 | Suspension of Business Dealings with Suppliers / Contractors:  The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms / principal / agents, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com.  |  |                            |
|    | If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award /execution / post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860( Bhartiya Nyaya Samhita 2023) or any other law in force in India, or does anything which is actionable under the Guidelines for Suspension of Business dealings, action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on www.bhel.com and / or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: http://www.bhel.com/vender_registration/vender.php.  |  |                            |
| 28 | Bid should be free from correction, overwriting, using correction or overwriting shall be valid only if they are attested under bid shall be liable for rejection. In the event of any Technica addressed to the following BHEL concerned before Part I open   | Confirmed/Not  |                            |
|    | Varun Kirubakaran G/Asst. Engineer Prate   | eek Kumar Jain/Deputy Manager  | Confirmed                  |
|    | 4 <sup>th</sup> floor,24 building 4 <sup>th</sup> fl   | oor,24 building  |                            |
|    | BHEL Trichy-620014 BHE   | L Trichy-620014  |                            |
|    |  | -2577876, prateekkumar@bhel.in   |                            |
| 29 | Order of Precedence: In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:  a. Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL. b. Buyer Added Bid Specific ATC  |  | Confirmed/Not<br>Confirmed |
| 30 | Note:  |  |                            |
|    | <ol> <li>In the event of our customer order covering this tender being cancelled /placed on hold /otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender at any stage of execution.</li> <li>BHEL may negotiate the L1 rate, if not meeting our budget / estimated cost. BHEL may re-float the tender opened, if L1 price is not acceptable to BHEL even after negotiation. Any deviation from the conditions specified in TECHNO-COMMERCIAL TERMS AND CONDITIONS - Annexure-A, will lead to rejection of offer.</li> <li>Any change in applicable rates of Tax or any other statutory levies (Direct / Indirect) or any new introduction of any levy by means of statute and its corresponding liability for the deliveries beyond the agreed delivery date for reasons not attributable to BHEL will be to vendors account. BHEL will not reimburse the same and any subsequent claim in this respect will be summarily rejected.</li> <li>BHEL reserves its right to reject an offer due to unsatisfactory past performance by the respective Vendor in the execution of any contract to any BHEL project / Unit.</li> <li>The offers of the bidders who are under suspension and also the offers of the bidders, who engage the services of the banned firms /principal/agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</li> </ol> |  | Confirmed/Not<br>Confirmed |

|    | 6. Recovery / deduction as applicable as per Direct and Indirect taxes as notified by Govt. Of India from time      |               |
|----|---|---------------|
|    | to time will be made and information/certificate for such deduction/recoveries shall be provided by BHEL to         |               |
|    | the vendor.   |               |
|    | Any other Techno – Commercial Terms indicated by the vendor in their offer elsewhere will                           |               |
|    | be ignored. BHEL will proceed with tender evaluation as per Annexure-A(ATC)   |               |
| 31 | Enclosure:  |               |
|    | Annexure-1: Check List.   |               |
|    | Annexure-2: Offer forwarding letter / tender submission letter  |               |
|    | Annexure-3: No Deviation Certificate  |               |
|    | Annexure-4: Declaration regarding Insolvency/ Liquidation/ Bankruptcy Proceedings                                   |               |
|    | Annexure-5: Declaration by Authorized Signatory   |               |
|    | Annexure-6: Declaration by Authorized Signatory regarding Authenticity of submitted Documents                       |               |
|    | Annexure-7: Non-Disclosure Certificate  |               |
|    | Annexure-8: Integrity Pact  | Confirmed/Not |
|    | Annexure-9: Declaration confirming knowledge about Site Conditions  | Confirmed     |
|    | Annexure-10: Declaration reg. Related Firms & their areas of Activities   |               |
|    | Annexure-11: Declaration for relation in BHEL   |               |
|    | Annexure- 12: Declaration reg. minimum local content in line with revised public procurement                        |               |
|    | Annexure- 13: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017                      |               |
|    | Annexure-14: Bank Account Details for E-Payment Annexure-15: Power of Attorney for submission of tender.            |               |
|    | ·   |               |
|    | Annexure 16: Proforma of Bank Guarantee for Earnest Money.  |               |
|    | Annexure-17: Proforma of Bank Guarantee for Performance Security. Annexure-18: List of Consortium Bank.             |               |
| 32 | Conflict of Interest Among Bidders/Agents:  |               |
| 32 | A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead                 |               |
|    |   |               |
|    | to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder                          |               |
|    | found to have a conflict of interest shall be disqualified. A bidder may be considered to have                      |               |
|    | a conflict of interest with one or more parties in this bidding process, if:  |               |
|    |   |               |
|    | a. they have controlling partner (s) in common; or  |               |
|    | b. they receive or have received any direct or indirect subsidy/ financial stake from any of them; or               |               |
|    | c. they have the same legal representative/agent for purposes of this bid; or                                       |               |
|    | d. they have relationship with each other, directly or through common third parties, that puts them in a            | Confirmed/Not |
|    | position to have access to information about or influence on the bid of another Bidder; or                          | Confirmed     |
|    | e. Bidder participates in more than one bid in this bidding process.  | Committee     |
|    | Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties |               |
|    | are involved. However, this does not limit the inclusion of the components/ sub-assembly! Assemblies                |               |
|    | from one bidding manufacturer in more than one bid; or  |               |
|    | f. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one             |               |
|    | agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One               |               |
|    | manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:                |               |
|    | manarascarer can also authorise only one agency acares. There can be only one bia from the following.               |               |
|    | <ol> <li>The principal manufacturer directly or through one Indian agent on his behalf; and</li> </ol>              |               |
|    | Indian/foreign agent on behalf of only one principal;   |               |
|    | 2. Indiany foreign agent on behalf of only one principal,   |               |
|    | OI  |               |
|    | g. A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical     |               |
|    | specifications of the contract that is the subject of the Bid; or   |               |
|    |   |               |
|    | h. In case of a holding company having more than one independently manufacturing units, or more than                |               |
|    | one unit having common business ownership/management, only one unit should quote. Similar                           |               |
|    | restrictions would apply to closely related sister companies. Bidders must proactively declare such                 |               |
|    | sister/ common business/ management units in same/ similar line of business.  |               |
| 22 |   |               |
| 33 | Evaluation method   | Confirmed/Not |
|    | The tender will be evaluated on <b>package wise</b> basis.  | Confirmed     |
|    | Each package consists of various projects   | 35            |
|    |   |               |
|    |   |               |

|    | Evaluation shall be on total landed cost to BHEL on FOR destination basis.  |  |               |                                  |                            |
|----|---|--|---------------|----------------------------------|----------------------------|
|    |   | cy of evaluation shall be INR.                                 |               |                                  |                            |
|    | Vendor  | Vendors to quote on FOR destination (BHEL Trichy Store) basis. |               |                                  |                            |
|    |   |  | T             |                                  |                            |
|    | Descrip   | tion of Item   | Qty           | Fill in Quoted/Not Quoted        |                            |
|    | Package   | e 1- Main Drive with Gear Ratio 128:1                          | 188           |                                  |                            |
|    | Package   | e 2- Main Drive with Gear Ratio 200:1                          | 30            |                                  |                            |
| 34 | Firm Price: The quoted / finalized rates shall be Firm till execution of the supplies. Offer with PVC clause will not be considered. Bonus Clause , ORC Clause not acceptable                                     |  |               | with                             | Confirmed/Not<br>Confirmed |
| 35 | Rate Co   | entract Clauses  |               |                                  |                            |
|    | 1   | The consent to decide the first of few extents                 | skins s Data  | Contract (DC) for the contract   |                            |
|    | 1.  | The present tender is proposed to be floated for establis      | _             |                                  |                            |
|    |   | Main Drive (128:1 & 200:1). The Rate Contract shall be v       | alid for a pe | eriod of 12 months from the      |                            |
|    |   | date of RC issuance.   |               |                                  |                            |
|    | 2. The quantities mentioned in the tender are tentative only and do not guarantee placement of the  |  |               | Confirmed/Not                    |                            |
|    | entire quantity. Supplies shall be made against specific BHEL SAP Purchase Orders (POs) released  |  |               | Confirmed                        |                            |
|    | from time to time during the RC period in staggered manner.   |  |               |                                  |                            |
|    | 3. Orders will be placed as separate POs referencing the Rate Contract. Delivery timeline for each PO will be 120 days from the date of PO, unless stated otherwise. No separate agreement is needed for each PO. |  |               |                                  |                            |
|    | 4. The rates finalized through this tender shall be firm and fixed for the entire period of the Rate Contract including extensions, if any.   |  |               |                                  |                            |
|    | 5. Vendor performance shall be reviewed periodically. In case of poor delivery performance, refusal to accept orders, or repeated quality issues, BHEL shall take action as per the extant BHEL guidelines.       |  |               |                                  |                            |
|    | 6. Evaluation shall be carried out on total landed cost basis, and the contract shall be awarded to the L1 vendor. The RC is proposed to be entered into with a single vendor for each package. Quantity is       |  |               |                                  |                            |
|    | non-splittable.   |  |               |                                  |                            |
|    | 7.  | All standard Purchase Policy clauses including MSE policy      | y, Make in I  | India policy, PBG, LD, Integrity |                            |
|    |   | Pact, and SQP are applicable as per the main tender terr       | ns.           |                                  |                            |
|    |   |  |               |                                  |                            |
|    |   |  |               |                                  | I                          |

Signature and seal

# **CHECK LIST**

NOTE: - Suppliers are required to fill in the following details in their Letterhead and no column should be left blank

| А     | Name and Address of the Supplier  |  |   |                          |
|-------|---|--|---|--------------------------|
| В     | GSTN No. the Supplier (Place of Execution of Contract / Purchase Order) |  |   |                          |
| С     | Tender  | Name: Mr./ Ms.<br>Designation:<br>Telephone No:<br>Mobile No:<br>Email ID: |   |                          |
| D     | EMD DETAILS   |  |   |                          |
| E     | DESCRIPTIO  | DN   | APPLICABILITY<br>(BY BHEL)                | ENCLOSED<br>BY<br>BIDDER |
| i.    | Whether Pre - Qualification Criteria proper supporting documents        | is understood and provided   | <b>Applicable</b> / Not<br>Applicable     | YES / NO                 |
| ii.   | Whether all pages of the Tender do appendices etc are read and unders   |  | Applicable/ <del>Not</del><br>Applicable  | YES / NO                 |
|       | Audited Balance Sheet and profit & I three years                        | Loss Account for the last  | <b>Applicable</b> / Not<br>Applicable     | YES / NO                 |
| iv.   | Copy of PAN Card & GST registration                                     |  | Applicable/ Not<br>Applicable             | YES / NO                 |
| V.    | Submission of MSE certificate as specified in Tender                    |  | Applicable/ Not<br>Applicable             | YES / NO                 |
|       | Offer forwarding letter / tender subr<br>Annexure 2                     | <del>mission letter as per</del>   | Applicable/ Not<br>Applicable             | YES / NO                 |
| vii.  | Submission of Certificate of No Deviation as per Annexure 3             |  | Applicable/ Not<br>Applicable             | YES / NO                 |
| viii. | Declaration regarding Insolvency/ Li<br>Proceedings as per Annexure 4   | quidation/ Bankruptcy  | Applicable/ Not<br>Applicable             | YES / NO                 |
| ix.   | Declaration by Authorized Signatory                                     | ras per Annexure 5   | Applicable/ Not<br>Applicable             | YES / NO                 |
| X.    | Declaration by Authorized Signator<br>Authenticity of submitted Documen |  | Applicable <del>/ Not</del><br>Applicable | YES / NO                 |

| xi.    | Submission of Non-Disclosure Certificate as per<br>Annexure 7                                       | Applicable/ Not<br>Applicable | YES / NO            |
|--------|---|-------------------------------|---------------------|
| xii.   | Submission of Integrity Pact as specified in Tender as per Annexure 8                               | Applicable/ Not<br>Applicable | YES / NO            |
| xiii.  | Declaration confirming knowledge about Site Conditions as per<br>Annexure 9                         | Applicable/ Not Applicable    | YES / NO            |
| xiv.   | Declaration reg. Related Firms & their areas of Activities as per Annexure 10                       | Applicable/ Not<br>Applicable | YES / NO            |
| XV.    | Declaration for relation in BHEL as per Annexure 11   | Applicable/ Not<br>Applicable | YES / NO            |
| xvi.   | Declaration reg. minimum local content in line with revised public procurement as per Annexure 12   | Applicable/ Not<br>Applicable | <del>YES / NO</del> |
| xvii.  | Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017 as per Annexure 13 | Applicable/ Not<br>Applicable | YES / NO            |
| xviii. | Bank Account Details for E-Payment as per Annexure 14   | Applicable/ Not Applicable    | YES / NO            |
| xix.   | Power of Attorney for submission of tender as per Annexure15  | Applicable/ Not Applicable    | YES / NO            |
| XX.    | Proforma of Bank Guarantee for Earnest Money as per Annexure 16                                     | Applicable/ Not Applicable    | YES / NO            |

 ${\underline{\sf NOTE:}}$  Strike off 'YES' or 'NO', as applicable. Tender not accompanied by the prescribed above applicable documents are liable to be summarily rejected.

DATE:

Sign. of the AUTHORISED SIGNATORY (With Name, Designation and Company seal)

#### **ANNEXURE-3**

#### CERTIFICATE OF NO DEVIATION

| (To be Typed & submitt | ed in the Letter Head | of the Company/Firm of I | 3idder) |
|------------------------|-----------------------|--------------------------|---------|
| <br>                   |                       |                          |         |

|     | <br> |  |
|-----|------|--|
| To, |      |  |

## Prateek Kumar Jain, Dy Manager / MM / BOI, BHEL, Trichy-620014

Dear Sir.

Subject: **No Deviation Certificate** Ref: 1) Enquiry No: 1802500225

2) All other pertinent issues till date

| DESCRIPTION              | Main Drive with Gear Ratio 128:1 & Main Drive with Gear Ratio 200:1 |                          |  |
|--------------------------|---|--------------------------|--|
| SPECIFICATION            | GF-351 Rev. 06  |                          |  |
| DRAWING NO               |   |                          |  |
| QUALITY PLAN             | QA:CI:STD:QP:21/REV06   |                          |  |
| PACKING PROCEDURE        |   |                          |  |
| DOCUMENT REFERENCE       | BHEL CALLED FOR   | FIRM'S ALTERNATIVE OFFER |  |
|                          |   |                          |  |
| 1. GF-351 Rev. 06        |   |                          |  |
| 2. QA:CI:STD:QP:21/REV06 |   |                          |  |

We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred NIC Bid

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to Tender Conditions.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully (Signature, date & seal of authorized representative of the bidder)

| Date:  |  |
|--------|--|
| Place: |  |

#### UNDERTAKING

| (To be sound and and animal in the Lawer Head of the Common (Firm of Didden)   |
|--|
| (To be typed and submitted in the Letter Head of the Company/Firm of Bidder)   |
| То,  |
| Prateek Kumar Jain, Dy Manager / MM / BOI, BHEL, Trichy-620014   |
| ear Sir/Madam,   |
| Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS   |
| ef: Enquiry No: 1802500225   |
|  |
| We, declare  |
| that,  |
| We am/are not admitted under insolvency resolution process or liquidation under Insolvency and Bankruptcy Code, 2016, as |
| amended from time to time or under any other law as on date, by NCLT or any adjudicating authority/authorities.          |
|  |
|  |
| Sign. of the AUTHORISED SIGNATORY  |
| (With Name, Designation and Company seal)  |
| lace:  |
| rate:  |

# DECLARATION BY AUTHORISED SIGNATORY OF BIDDER (To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

| To,  |   |
|--|---|
| ·  | umar Jain,<br>ger / MM / BOI,<br>richy-620014   |
| Dear Sir,  |   |
| Sub: Declaration by Au   | thorised Signatory regarding Authenticity of submitted documents.   |
| Ref : 1) Enquiry No: 180250  | 00225   |
| 2) All other pertinent   | ssues till date   |
| Requirements" are true   | It all the documents submitted by us in support of possession of "Qualifying copies of the original and are fully compliant required for qualifying / applying the original of same as and when required by Bharat Heavy Electricals Limited.   |
| We understand that at an false / forged bid qualify our bid / termination of | In that no tampering is done with documents submitted in support of our qualification as bidder. I / my stage (during bidding process or while executing the awarded contract) if it is found that fake / ming / supporting documents / certificates were submitted, it would lead to summarily rejection of contract. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the Bid / t policies of Bharat Heavy Electricals Limited. |
|  | Yours faithfully,   |
|  | (Signature, Date & Seal of Authorized Signatory of the Bidder)  |
| Date:  |   |
|  |   |
|  |   |

#### NON-DISCLOSURE CERTIFICATE

Date:

#### **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  |     |      |     |         |      |
|------|-----|------|-----|---------|------|
| (PLE | ASE | FILL | UP) | (PLEASE | FILL |
| UP)  |     |      |     |         |      |
|      |     |      |     |         |      |

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

# MAIN DRIVES WITH GEAR RATIO 128:1 & 200: 1

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 subcontractors.
- 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 organization.
  - 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.

| PRATEEK KUMAR JAIN Dy. Manager / Purchase / BOI  Materials Management  |   |
|--|---|
| Bharat Heavy Electricals Limited Tiruchiranpalli, Tamil Nadu-620 014, For & On behalf of the Principal   | For & On behalf of the Bidder/ Contractor |
| (Office Seal)  | (Office Seal)                             |
| Place  |   |
| Date   |   |
| Witness: L. Va. K.   | Witness:                                  |
| (Name & Address) — G. VARUN KIRUBAKARAN  G. VARUN KIRUBAKARAN  Asst. Engineer-II / Purchase / BOI  Materials Management  Bharat Heavy Electricals Limited  Tiruchirappalli, Tamil Nadu - 620 014 | (Name & Address) —————                    |

# **DECLARATION**

|          | _ To,   |                                 | Date:                               |
|----------|---|---------------------------------|-------------------------------------|
|          | Prateek Kumar Jain, Dy Manager / M<br>Dear Sir/ Madam,  | M / BOI, BHEL, Trich            | y-620014                            |
| etails o | f related firms and their area of activities  |                                 |                                     |
| find be  | low details of firms owned by our family member(NA, if not applicable)                          | s that are doing business/ regi | stered for same item with BHE       |
|          | Material Category/ Work Description   |                                 |                                     |
|          | Name of Firm  |                                 |                                     |
|          | Address of Firm   |                                 |                                     |
|          | Nature of Business  |                                 |                                     |
|          | Name of Family Member   |                                 |                                     |
|          | Relationship  |                                 |                                     |
|          | Material Category/ Work Description   |                                 |                                     |
|          | Name of Firm  |                                 |                                     |
|          | Address of Firm   |                                 |                                     |
|          | Nature of Business  |                                 |                                     |
|          | Name of Family Member   |                                 |                                     |
|          | Relationship  |                                 |                                     |
|          |   |                                 |                                     |
|          | Note: I certify that the above information is true above information furnished is found to be f |                                 | om BHEL in case any of the<br>Regar |
|          |   |                                 | (                                   |
|          |   |                                 |                                     |
|          |   | From:                           | M/s                                 |
|          |   | Supplier Code:                  |                                     |
| ddress:  |   |                                 |                                     |
|          |   |                                 |                                     |

#### **ANNEXURE 11**

#### **DECLARATION FOR RELATION IN BHEL**

| (To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected) |  |  |  |  |
|---|--|--|--|--|
| То,   |  |  |  |  |
| Prateek Kumar Jain, Dy Manager / MM / BOI, BHEL, Trichy-620014  |  |  |  |  |

Dear Sir,

Sub: Declaration for relation in BHEL

Ref: 1) Enquiry No: 1802500225

I/We hereby submit the following information pertaining to relation/relatives of Proprieter/Partner(s)/ Director(s) employed in BHEL

## Tick $(\sqrt{})$ any one as applicable:

1. The Proprieter, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

OR

- 2. The Proprieter, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:
- i.

ii.

(Signature, Date & Seal of Authorized Signatory of the Bidder)

Note:

- 1. Attach separate sheet, if necessary.
  - If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor

#### **ANNEXURE 12**

# DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 04<sup>TH</sup> JUNE, 2020 AND SUBSEQUENT ORDER(S)

|  |  | d of the Entity/Firm providing certificate as applicable)  |
|--|--|--|
| <br>То,  |  |  |
| Prateek Kumar Jain, Dy                           | Manager / MM / BOI,                                  | BHEL, Trichy-620014  |
| Dear Sir,  |  |  |
| •  |  | line with Public Procurement (Preference to Make in 020 and subsequent order(s).   |
| Ref: 1) Enquiry No: 1802                         | 2500225  |  |
| 2) All other pertine                             | nt issues till date                                  |  |
| the name of the organizarequirement for 'Class-I | ation here) has a local o<br>local supplier' / 'Clas | es offered by(specify content of% and this meets the local content s II local supplier' ** as defined in Public Procurement sion dated 04.06.2020 issued by DPIIT and subsequent |
|  | ` '  | value addition is made are as follows:   |
| 1  | 2  | <del></del>  |
| 3  | 4  |  |
|  |  |  |
| Thanking you,<br>Yours faithfully,               |  |  |
|  |  | (Signature, Date & Seal o<br>Authorized Signatory of the<br>Bidder   |

\*\* - Strike out whichever is not applicable.

### Note:

- 1. Bidders to note that above format, duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
- 2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
- 3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

## **ANNEXURE 13**

# DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017

| (To be typed and submitted in the Letter Head of the Entity/ Firm providing certificate as applicable)   |
|--|
| To,  |
| Prateek Kumar Jain, Dy Manager / MM / BOI, BHEL, Trichy-620014   |
| Dear Sir,  |
| Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017  |
| <b>Ref:</b> 1) Enquiry No: 1802500225  |
| 2) All other pertinent issues till date  |
| I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that (SPECIFY THE NAME OF THE ORGANIZATION HERE), is not from such a country/ has been registered with the Competent Authority (attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT). |
| I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.  |
| Thanking you,  |
| Yours faithfully,  |
| (Signature, Date & Seal of<br>Authorized Signatory of the Bidder)  |

**Note:** Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.

# **ANNEXURE-C**

## **Financial Soundness:**

| 1. | Indigenous suppliers shall submit Audited copies of annual reports (Balance Sheets), Profit & Loss statement for |
|----|--|
|    | the last three years (or from date of incorporation whichever is less) and GST certificate.                      |

Vendor signature and seal with Date



# Specification for

Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

**GF-351 Rev. 06** 

# **BHARAT HEAVY ELECTRICALS LIMITED**

# **TIRUCHIRAPPALLI-620 014**

# Fuel Systems/PE (FB)

| 06          | 26/08/2016   | Updated for indicating reference to annexure-1 for project specific Energy Efficiency Class requirements                                     | Arul<br>Prabhu.R |
|-------------|--------------|--|------------------|
| 05          | 31/12/2014   | Updated for standard IS-<br>12615/ IEC 60034-30,motor<br>efficiency & Vibration clauses,<br>location of earthing points,<br>TTR requirements | Arul<br>Prabhu.R |
| 04          | 02/04/2011   | In page No.04/15<br>CI.No.5.4.0 Reduction ratio<br>80:1(Style-04) added.   | J.V.V.A.K        |
| 03          | 05/10/2010   | In page No.04/15<br>CI.No.5.4.0 Reduction ratio<br>100:1 added.  | J.V.V.A.K        |
| 02          | 24/08/2007   | In page No.04/15<br>CI.No.5.4.0 Reduction ratio<br>203:1 added   | S.Selva          |
| 01          | 23/10/2006   | In page 15/15, note 1 altered.   | J.V.V.A.K.       |
| Rev.<br>No. | Rev.<br>Date | Description  | Chd. &<br>Appd.  |

|          | Name             | Signature |  | Date |
|----------|------------------|-----------|--|------|
| Prepared | JVVA / DVK / DMB |           |  |      |
| Checked  | JVVA / DVK / DMB |           |  |      |
| Approved | SDB / KAK        |           |  |      |



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Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### **CONTENTS**:

| Section | Description                | Remarks |
|---------|----------------------------|---------|
| 1.0     | Scope of work              |         |
| 2.0     | Application                |         |
| 3.0     | VFD Motor                  |         |
| 4.0     | Tacho generator            |         |
| 5.0     | Gear reducer               |         |
| 6.0     | Testing                    |         |
| 7.0     | Documents                  |         |
| 8.0     | Other information required |         |
| 9.0     | Packing                    |         |
| 10.0    | Annexures                  |         |



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### 1.0 SCOPE OF WORK

- 1.1 This specification covers the requirements for the design, supply, manufacture, testing, marking and identification, packing for shipment and delivery of the items listed below.
  - Feeder main drive AC motor with tacho generators.
  - Gear box
- 1.2. The extent of supply stated herein is not necessarily exhaustive and shall not relieve the vendor from his responsibility to provide goods and services necessary to satisfy the performance criteria and guarantees specified.
- 2.0 APPLICATION
- 2.1 Feeder main drive AC motor and gear box used for driving the conveyor belt (loaded with coal) of 36" Gravimetric feeders at varied speeds.
- 3.0 <u>AC INDUCTION MOTOR (Suitable for variable frequency control application)</u>

3.1 Motor rating : 7.5 KW

3.2 Applicable standard : IS-12615/ IEC 60034-30 (All routine & type test as

per relevant standards shall be performed)

3.3 Type of mounting : Vertical flange mounting

3.4 Type of motor : Squirrel cage induction motor – Inverter duty

3.5 Enclosure protection : IP-55

3.6 Power supply : Refer to Annexure-A

3.7 Speed range required : 0-1400 RPM corresponding to demand

signal of 4-20 mA.

3.8 Allowable variation in speed: ± 5 RPM

3.9 Duty cycle : Continuous (S1)

3.10 Type of enclosure : Totally enclosed fan cooled

3.11 Method of starting : Direct on line

3.12 Class of insulation : Class-F, Temperature rise limited to Class-B

3.13 Full load torque : 3.8 Kg-m ( minimum)

Sheet 02/15



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

3.14 Starting torque : 200% full load torque (minimum)

3.15 Efficiency Clause : Motor shall be Energy Efficient motors, For

applicable Efficiency class refer Anneuxure-1 for

project specific requirements.

3.16 Vibration shall be limited within the limits prescribed in IS:12075 / IEC 60034-14.

3.17 Motor body shall have two earthing points on opposite sides.

3.18 Motor winding shall be VPI (vacuum pressure impregnation) treated.

3.19 Motors shall be suitable for variable frequency control and shall match with the drive in respect of over voltage / spikes generated by the controller.

3.20 The windings shall be VPI treated and two coat enamelled. These motors shall be sized to operate satisfactorily under lowest speed conditions.

### 4.0 TACHOGENERATOR:

4.1 Two numbers of Tacho generator shall be in-built at the drive end of AC motor to give redundant isolated output as given below:

4.2 Output into 10K Ohm load : 45 V AC  $\pm$  5% at 1000 RPM

4.3 Number of poles : 24

4.4 Output waveform : Sinusoidal

### 5.0 GEAR REDUCER:

5.1.0 Type : Large speed reduction, flange mounted compact gear

reducer with one or two stages of spur or helical gears and last stage of worm gear reduction. The approximate

centre distance of worm gearing is 184 mm (7 1/4").

5.2.0 Duty class : Continuous

5.3.0 Direction of rotation: Should be able to rotate in both directions

5.4.0 Reduction ratio

5.4.1 Style 01 : 128:1 Refer Annexure A for Project specific

5.4.2 Style 02 : 203:1 main drive gear ratio

5.4.3 Style 03 : 100:1 5.4.4 Style 04 : 80:1

5.5.0 Arrangement & Dims: Refer Sketch nos. 1, 2, 3 & 4.

5.6.0 Function : The gear reducer is used to drive the conveyor belt of

gravimetric feeders.

Sheet 03/15



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

Since gravimetric feeder is a variable slow speed equipment, VFD motor will be connected to the input side of gear reducer and the output shaft of the gear reducer will be coupled to the drive pulley of the feeder conveyor belt. The gravimetric feeder is a constant torque equipment.

### .TECHNICAL REQUIREMENTS:

- 5.7.1 Output shaft and mating flange dimensions are strictly to be maintained as shown in the sketches 1, 2, 3 & 4 (page 11, 12, 13 & 14 of this specn.).
- 5.7.2 Dimensions with asterisk marks (\*) should be strictly maintained. Other dimensions may be altered to suit the gear box design with the approval of BHEL.
- 5.7.3 In addition to dipstick arrangement, glass type oil level indicator must also be provided.
- 5.7.4 All gears, pinion, shafts are to be subjected to ultrasonic testing and MPI after machining.
- 5.7.5 Backlash of gear wheels and pinion and teeth contact before functional testing (no load run test) shall be checked.
- 5.7.6 Materials used shall be of tested quality and shall be correlated with test certificates for the mechanical and chemical properties.
- 5.7.7 Gear box shall be run tested till the bearing temperatures are stabilised and for a minimum of 4 hours and checks for smooth running, temperature rise, noise level etc. shall be carried out.

### 6.0 TESTING:

- 6.1.0 The total drive assembly with gear box should be trial run for minimum 8 hours continuously and observed for its smooth, noiseless and vibration-free running.
- 6.2.0 Test certificate for no load test for each assembly shall be furnished
- 6.3.0 Applicable QP for feeder drive Assy. QA:CI:STD:QP:21 (Latest revision)

### 7.0 DOCUMENTS:

- 7.1.0 The following documents shall be submitted in triplicate along with the offer.
- 7.1.1 Compliance for each clause of this specification & applicable Quality Plan.



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

- 7.1.2 Compliance for flange dimensions in the enclosed Sketch no.-05.
- 7.1.3 Catalogues for the offered drives.
- 7.1.4 Dimensional general arrangement drawing with bill of materials and total weight.
- 7.1.5 Exploded view of the gear box showing all the internals and spare parts with overall dimensions and bill of materials. The bill of materials shall also contain details of bought-out items like bearings, oil seals, circlips etc.
- 7.1.6 A list of spare parts for 3 years operation with details for ordering like part number, quantity and price.
- 7.2.0 The following documents shall be submitted in triplicate by the Successful Bidder, within 15 days from PO, for BHEL's review / approval.
- 7.2.1 Motor data sheet and characteristic curves in Annexure A.
- 7.2.2 Tachogenerator data sheet and characteristic curves in Annexure C.
- 7.2.3 Dimensional drawing for motor & Tachogenerator.
- 7.2.4 Type test certificate for applicable motor frame size. Type test certificates not earlier than 5 years from date of enquiry.
- 7.2.5 Dimensional general arrangement of total assembly drawing and cross sectional drawing with detailed bill of material as called for in clauses 7.1.4 and 7.1.5 and submitted by the bidder shall be modified inline with BHEL's comments and BHEL's approval shall be obtained before manufacture.
- 7.2.6 Twenty numbers of Operation and maintenance manuals covering all aspects of storage, preservation, installation, operation and maintenance shall form part of the supply.

### 8.0 OTHER INFORMATION REQUIRED:

- 8.1.0 Weight of motor.
- 8.2.0 Weight of gear box.
- 8.3.0 Lubrication details.
- 8.4.0 Painting details.
- 8.5.0 Mounting arrangement of tachogenerator on the output shaft of AC motor.



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

8.6.0 Recommended storage and preservation procedure prior to assembly and after assembly but prior to regular running.

### 9.0 PACKING:

The total drive assembly should be packed in such a way that it should not get damaged during transport. The total assembly should be properly covered with thick tear-proof polythene sheet and despatched in suitable moisture-proof and tamper proof wooden crates.



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### 10.0 DATA SHEETS

PURCHASE ORDER No. & DATE:

### **10.1 ANNEXURE - A**

### 10.1.0 Technical Data Sheet for AC motor suitable for VFD application

10.1.1 Application : Gravimetric Feeder main drive motor

10.1.2 Manufacturer :

10.1.3 Type, Frame size, Duty cycle

10.1.4 Type of mounting : Vertical Flange Mounting

10.1.5 Degree of protection and : IP-55 TEFC

method of cooling

10.1.6 Rated output in KW and

speed in RPM

10.1.7 Ambient Temperature : 50°C

10.1.8 Rated Voltage & Frequency: 415V, 3 Phase, 50HZ

10.1.9 Allowed variation in

Voltage :  $\pm$  10% Frequency & :  $\pm$  5%

Combined variation : 10% Absolute sum

10.1.10 Full load current :

10.1.11 Rated torque :

10.1.12 Starting torque in % of FLT:

(FLT - Full Load Torque)

10.1.13 Pull-up torque in % of FLT:

10.1.14 Pull-out torque in % of FLT:

10.1.15 No Load starting time :

10.1.16 Minimum permissible starting : 80% of Rated Voltage

voltage



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

| PURCHASE ORDER No. & DATE:  |                             |                |
|---|-----------------------------|----------------|
| I0.1.17 Power Factor at rated a) 100% Load b) 75% Load c) 50% Load d) No Load             | frequency & voltage : : : : |                |
| 0.1.18 Efficiency at rated voltage &  | k frequency                 |                |
| <ul><li>a) 100% Load</li><li>b) 75% Load</li><li>c) 50% Load</li><li>d) No Load</li></ul> | :<br>:<br>:                 |                |
| 0.1.19 Starting current at<br>100% Rated voltage<br>80% Rated voltage                     | :<br>:                      |                |
| 10.1.20 Starting time  a) with driven eqpt.coupled b) without driven eqpt.                | 80% Voltage                 | 100% Voltage   |
| a) at 80% rated voltage b) at 100% rated voltage c) at 110% rated voltage                 | Hot condition : :           | Cold condition |
| 10.1.22 Limiting rotor temperature to determine safe stall time                           | :                           |                |
| 0.1.23 Stator winding resistance per phase  | :                           |                |
| 0.1.24 Moment of Inertia  | :                           |                |
| 0.1.25 Method of starting   | :                           |                |
| 0.1.26 Thermal time constant  | :                           |                |
| 10.1.27 Number of starts/hour<br>Equally spread<br>Successive hot<br>Successive cold      | :<br>:<br>:                 |                |
| 0.1.28 Permissible running time at  | •                           |                |



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

full load at 75% R.V. 10.1.29 Permissible vibration limits : 10.1.30 Class of insulation 10.1.31 Material and treatment of : insulation 10.1.32 Temperature rise by resist-: ance method 10.1.33 Stator winding connection : 10.1.34 No.of terminals brought out: 10.1.35 Terminal box location and : angle of rotation 10.1.36 Fault withstanding capability: Drive end Non-drive end 10.1.37 Bearings a) Type of bearing b) Manufacturer c) Model number d) Life in hours e) Recommended lubricant : 10.1.38 Method of coupling with driven equipment 10.1.39 Weight of motor 10.1.40 Documents enclosed (After P.O) a) Speed - Torque curve at 110%, 100%, 90% & 80% Rated Voltage b) Starting time Vs Speed curve c) Current Vs Time curve

- d) Speed Vs Current curve
- e) Thermal withstand curve for hot and cold condition
- f) Efficiency, power factor Vs Load curve
- g) Dimensional drawing and terminal wiring drawing.

Signature of Vendor Representative



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

PURCHASE ORDER No. & DATE:

### 10.2 ANNEXURE - B

### 9.3.0 Technical Data Sheet for Tachogenerators

| 9.3.1  | Make & type of Tachogenerato                    | or: |
|--------|---|-----|
| 9.3.2  | Model number                                    | :   |
| 9.3.3  | Class of insulation                             | :   |
| 9.3.4  | Output voltage with variation in output voltage | :   |
| 9.3.5  | Output voltage waveform                         | :   |
| 9.3.6  | Frequency of output voltage                     | :   |
| 9.3.7  | Max. load resistance at output                  | :   |
| 9.3.8  | Stator resistance                               | :   |
| 9.3.9  | Linearity                                       | :   |
| 9.3.10 | Documents (After P.O)                           |     |

a) Dimensional drawing for the tachogeneratorb) Output voltage & frequency Vs Speed.

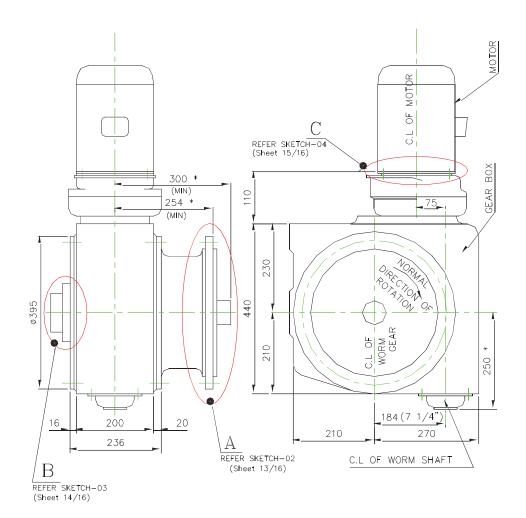
Signature of Vendor Representative with seal



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Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### SKETCH NO: -01

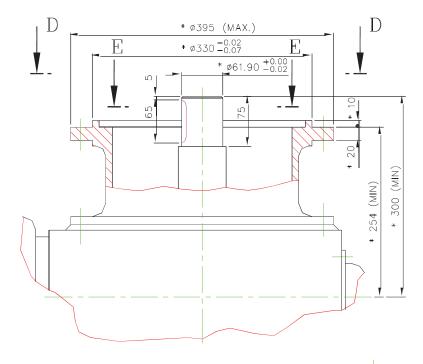




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Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### SKETCH NO: -02





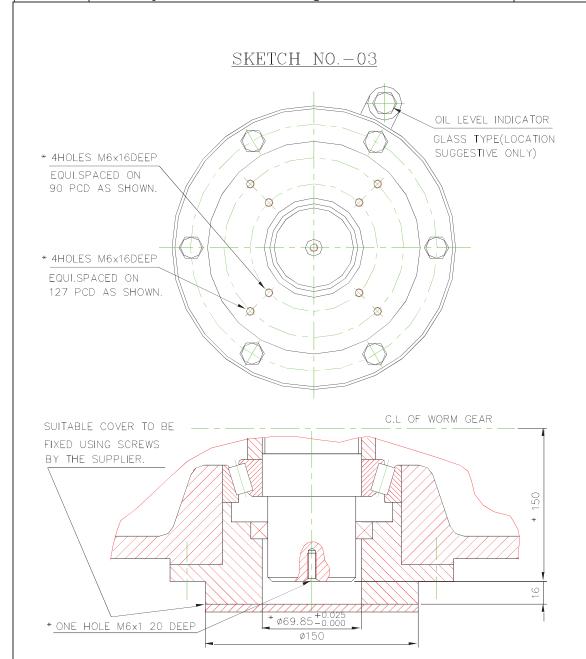
ALL DIMENSIONS ARE IN MM

ø395



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor



DETAIL-B

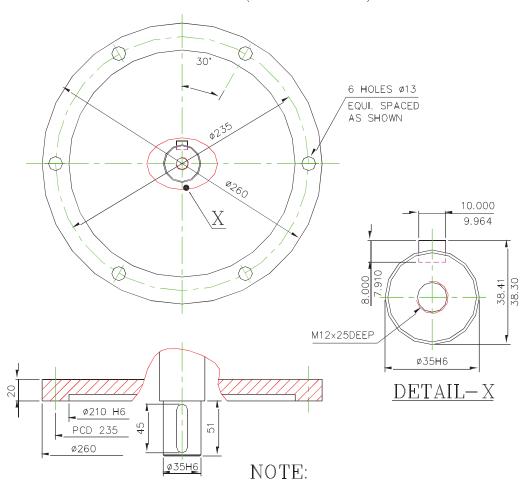


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Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor

### SKETCH NO.-04

MATING FLANGE AND SHAFT DETAIL (GEAR BOX INPUT SIDE)



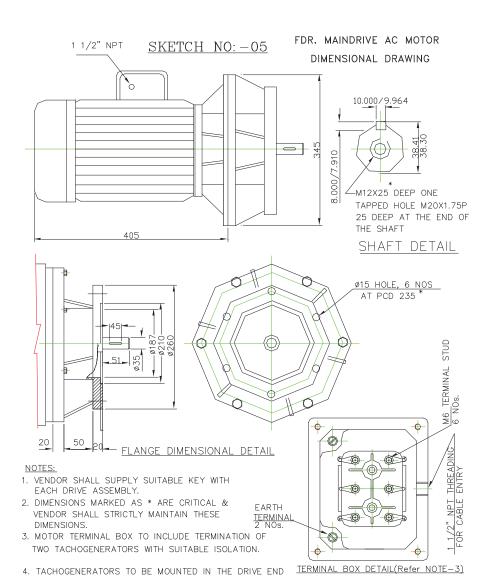
DETAIL-C

THE DIMENSIONS OF THE INPUT SIDE FLANGE AND PINION OF THE GEAR BOX SHALL MATCH WITH THE MATING DIMENSIONS OF VFD MOTOR AS SHOWN ABOVE.



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### Main Drive with Gear Reducer for 36" Gravimetric Feeder MPC System with Two Tacho generators and VFD motor



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# BHARAT HEAVY ELECTRICALS LIMITED / TIRUCHIRAPPALLI CONTROLS AND INSTRUMENTATION/QA/FB

### STANDARD QUALITY PLAN FOR FEEDER DRIVE ASSEMBLY AND

# CLEANOUT CONVEYOR ASSEMBLY

| REVISION HISTORY | Initial release | Standards include | General Included | CHP included | Formet Revised | Department name changed, CTQ requirements added & General revision. | Revised to include the comments /Feedback of internal discussion. |
|------------------|-----------------|-------------------|------------------|--------------|----------------|---|---|
| APPROVED         | ps              | PS                | PS               | ps           | ps             | ps  | S.SOMASUNDARAM  |
| REVIEWED         | ps              | Sd                | Sd               | ps           | - <b>8</b> -   | 98<br>  | N.SRIDHAR   |
| PREPARED         | ps              | - ps              | Sd               | ps           | - ps           | - ps  | RM.VAIRAVAN   |
| DATE             |                 |                   | -                | 01.06.96     | 16.06.97       | 21.03.02  | 08.01.04  |
| REV              | 8               | 5                 | 8                | ខ            | g              | 8   | 8   |

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| REMARKS                              |                             |                                      |  |                                  |  |                                      |                 |                                 |
|--------------------------------------|-----------------------------|--------------------------------------|--|----------------------------------|--|--------------------------------------|-----------------|---------------------------------|
| AGENCY                               |                             | MQCD                                 | - op -   | - op -                           |  | - op -                               | - op -          | - do -                          |
| FORMAT<br>OF<br>RECORD               |                             | O.                                   | - op -   | - op -                           |  | - op -                               | - op -          | - do -                          |
| REF.DOC. &<br>ACCEPTANCE<br>STANDARD |                             | PO,<br>Specification &<br>IS 325     | Specification PO<br>& Data Sheet   | 1.5 KV for 1<br>sec. No failure. | Specification , & Data Sheet Minimum, 50 mega ohm with 500V megger | +/- 5% of rated value.               | - op -          | Specification & data sheet      |
| QUANTUM<br>OF<br>CHECK               |                             | 100%                                 | - op -   | - op -                           |  | - op -                               | - op -          | - op -                          |
| TYPE<br>OF<br>CHECK                  |                             | ELEC                                 | VISU   | ELEC                             | ELEC   | ELEC                                 | ELEC            | VISU                            |
| CHARACTERISTICS                      | INSPECTION                  | Routine & type test as<br>per IS 325 | a) Verification for provision of accessories like louver wire mesh, lifting eye bolt, PVC sheathed flex, conduit connector, etc. | b) High Voltage test             | c) Insulation resistance<br>measurement                            | d) Measurement of coil<br>resistance | e) No load test | a) Number of tacho<br>generator |
| COMPONENT & OPERATION                | FINISHED PRODUCT INSPECTION | Motor                                | Clutch * routine test  | Î                                | î  |                                      |                 | Tacho generator<br>Routine test |
| SL.<br>NO.                           | 넴                           | <del></del>                          | તાં  |                                  |  |                                      |                 | က်                              |

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| REMARKS                              |                                      |  |                                |                                   |  |   | G<br>H<br>O  | СНР   |
|--------------------------------------|--------------------------------------|--|--------------------------------|-----------------------------------|--|---|--|---|
| AGENCY                               | MQCD                                 | - op -   | - op -                         | - op -                            | -<br>op<br>-                             | - op -  | - op -   | - op -  |
| FORMAT<br>OF<br>RECORD               | T.C.                                 | - op -   | - op -                         | -<br>op<br>-                      | ,<br>00<br>,                             | - op -  | - op -   | - op -  |
| REF.DOC. &<br>ACCEPTANCE<br>STANDARD | Specification & data sheet           | - op -   | - op -                         | 1KV DC for<br>1sec. No<br>Failure | - op -                                   | wave shall be<br>sinusoidal<br>linearity within<br>+/- 1%                       | Specification &<br>Data sheet  | - do -  |
| QUANTUM<br>OF<br>CHECK               | 100%                                 | - op -   | - op -                         | - op -                            | - op -                                   | - op -  | - op -   | - op -  |
| TYPE<br>OF<br>CHECK                  | VISU                                 | ELEC.  | MEAS                           | ELEC.                             | ELEC.                                    | ELEC.   | VISU.  | VISU.   |
| CHARACTERISTICS                      | b) Verification for number of poles. | c) Measurement of<br>stator winding / coil<br>resistance | d) Dimensional<br>verification | e) High Voltage test              | f) Measurement of insulation resistance. | g) Speed Vs output<br>voltage chart &<br>output waveform (<br>Performance test) | a) Verification of name plate rating for motor clutch & tacho Generator. | b) Verification for<br>provision of<br>accessories like<br>louver, wire mesh,<br>lifting eyebolt etc. |
| COMPONENT & OPERATION                |                                      |  |                                |                                   |  | Ĥ   | Motor-clutch tacho<br>assembly testing *<br>1) Routine tests             |   |
| SL.<br>NO.                           |                                      |  |                                |                                   |  |   | <del>4</del> .   |   |

| REMARKS                              | G<br>H<br>D   | G<br>H<br>O   | G<br>H<br>O  | CHP                  | G<br>H<br>O                                    | CHP –<br>Verification of<br>TC  |
|--------------------------------------|---|---|--|----------------------|--|---|
| AGENCY                               | MQCD  | - op -  | -<br>Op<br>-   | - op -               | - op -   | MQCD/<br>LAB  |
| FORMAT<br>OF<br>RECORD               | Ö.  | - op -  | - op -   | - op -               | - op -   | - op -  |
| REF.DOC. &<br>ACCEPTANCE<br>STANDARD | Specification & Data sheet  | - op -  | - OD -   | - op -               | - op -   | - op -  |
| QUANTUM<br>OF<br>CHECK               | 100%  | - op -  | - op<br>-  | - op -               | - op -   | One of<br>design  |
| TYPE<br>OF<br>CHECK                  | MEAS.   | VISU.   | ELEC.  | ELEC                 | ELEC   | ELEC.   |
| CHARACTERISTICS                      | c) Dimensional check<br>for fixing hole<br>dimensions & for<br>output shaft<br>diameter | d) Verification for wiring & provision of conduits with connectors for external connection. | e) Functional Check: Measurement of input voltage, current, power, output torque, rpm, efficiency, P.F at no load, 25%, 50%, 75%, 100% load and at | f) Locked rotor test | g) Measurement of starting torque and current. | a) Temperature rise by resistance method at full load & at minimum speed. |
| COMPONENT & OPERATION                | $\uparrow$  |   | $\uparrow$   |                      |  | 2. Type Tests   |
| SI.                                  |   |   |  |                      |  |   |

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| REMARKS                        |                               | СНР  | СНР   | CHP  |
|--------------------------------|-------------------------------|--|---|--|
| AGENCY                         | MQCD                          | - op -   | - op -  | - op -   |
| FORMAT<br>OF<br>RECORD         | Ö.                            | - op -   | - op -  | - op -   |
| REF.DOC. & ACCEPTANCE STANDARD | Specification &<br>Data sheet | P.O<br>Specification<br>& Data sheet                       | - op -  | - op -   |
| QUANTUM<br>OF<br>CHECK         | One of<br>design              | 100 %  | 100 %   | - op -   |
| TYPE<br>OF<br>CHECK            | ENNI                          | VISU &<br>ELEC   | ELEC  | ELEC   |
| CHARACTERISTICS                | b) Enclosure protection test  | a) Functional check  | b) Verification of<br>documents for all<br>CTQ characters | c) All tests detailed<br>under Sl.no: A.<br>04.1 |
| COMPONENT & OPERATION          | $\uparrow$                    | Motor-clutch - Tacho<br>gear box testing *<br>Routine test |   |  |
| SL.<br>NO.                     |                               | 5.   |   |  |

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### B. NOTES

**ENVIRONMENTAL**; MEASUREMENT; ENVI ELECTRICAL; VISUAL: ELEC VISU

TEST CERTIFICATE; PO : PURCHASE ORDER; MANUFACTURER'S QUALITY CONTROL DEPARTMENT; MEAS PO TEST CERTIFICATE;

MQCD 2

CRITICAL TO QUALITY POINTS;

**CUSTOMER HOLD POINT - INSPECTION BY BHEL** Govt. Approved / NABL Accredited. CHP Lab

All testing facilities shall be arranged by the vendor at their works. recognized national test houses like ETDC / CIL / NPL / ERTL / NABL tests for which facilities are not available & those tests marked as test lab in agency column above are to be carried out at તાં

Through log books/any other documents available at the vendor's works, it shall be possible to correlate the finished product with accredited laboratories etc at vendor's cost.

က

All measuring & testing instruments shall be periodically calibrated from recognized test houses & certificates made available during nspection for verification. 4.

aw material & in process stage check / inspection carried out.

Test certificates for routine & type tests are to be furnished by the vendor. Type test certificate shall not be earlier than 5 years from the date of Purchase enquiry. 5

Vendor to give tentative inspection program in advance confirm exact date two weeks in advance for arranging BHEL's inspection. .

purpose of 'Safe transit' shall be clearly indicated in the packing slip. indicated in the Specification. Any loose supply items for the Packing shall be as per the 'PACKING PROCEDURE' 7

Item marked \* are applicable only for feeder drive assembly and not for clean out conveyer. ω.

C. REFERENCE STANDARDS ( For The Indicated Standards Refer The Latest Version )

Specification for 3 phase induction motor **IS 325** 

### STDQP21R.DOC

### Pre-Qualification Requirement (PQR) for GEAR REDUCER DRIVE with VFD

- 1. The vendor shall be an established **gear reducer manufacturer** having adequate engineering, manufacturing and testing facilities and shall furnish technical backup documents and proof of above requirement.
- 2. The supplier shall have experience of having **supplied drive with gear reducer** of VFD enabled for dusty environment like power plant or application similar severity.
- 3. The **gear reducer** offered shall be from the existing regular manufacturing range of the supplier.
- 4. Proven track record is required. Minimum One end user certificate for the satisfactory operational performance of their product supplied meeting requirements specified in enquiry specification or greater.

(or)

Successfully executed two POs for same item meeting requirements specified in enquiry specification or greater.

- 5. In case of ordering, the Vendor shall have the responsibility for the following and same to be confirmed point wise.
  - i) Vendor should have the component replacement responsibility in case of defect / failure.
  - ii) Experts from Vendor's side shall associate in commissioning activities at site, if required.
  - iii) Vendor should ensure the product performance during erection & commissioning and ensure performance guarantee.
- 6. Backup document checklist to meet PQR to the fullest satisfaction of BHEL:

| Clause | Documents acceptable  | Check list |
|--------|---|------------|
| 1      | i) ISO or Other third Party certification about the engineering,      |            |
|        | manufacturing, testing and servicing facilities in the name of        |            |
|        | vendor. The certificate shall be specific for the product quoted by   |            |
|        | the vendor.   |            |
|        | ii) List of manufacturing, testing and servicing facilities available |            |
|        | (like machinery/equipment) in the letterhead of vendor                |            |
| 2      | Supply reference list with details of PO, PO date, customer name,     |            |
|        | application severity/type in the form of a table                      |            |
| 3      | Product Catalogue in the name of vendor                               |            |
| 4      | Min. one end user certificate (or) Two POs in the name of vendor      |            |
| 5      | Signed copy of this technical PQR document                            |            |

**OEM** signature and seal with Date

Vendor signature and seal with Date

(If applicable)