भारत हेवी इलेक्ट्रिकल्स लिमिटेड

BHARAT HEAVY ELECTRICALS LIMITED

HEAVY POWER EQUIPMENT PLANT

RAMACHANDRAPURAM

PURCHASE DEPARTMENT-CMM

TENDER DOCUMENT FOR

ENQUIRY No N0A1P10440

1. REQUIREMENT AND PROCUREMENT PROCESS

BHEL, Ramachandrapuram, Hyderabad (A Government of India Undertaking) invites tenders for procurement of **IIOT Project for CNC Machines.**

Signed & Sealed offers with relevant enclosures / supporting documents / catalogue, if any shall be enclosed to the technical offer.

This is the General Conditions of Contract Document.

2. SPECIAL INSTRUCTIONS TO THE BIDDER

1. The offer shall be submitted in full, covering the total scope. Partial offer will not be accepted and will not be considered for evaluation.
2. The bidder shall sign all the pages of the Tender document and all the supporting documents. Signing of the document means that the bidder has fully understood the Tender and complies with all the requirements.

3. AMENDMENT OF BIDDING DOCUMENTS

BHEL may at its sole discretion amend the Bidding Documents at any time prior to the deadline for submission of bids. However in case of such amendment, the bid submission date may be extended at the discretion of BHEL.

4. BID SUBMISSION PROCESS

The Bidder shall submit the offer in **TWO INNER ENVELOPES** as indicated below which shall be sealed in one outer envelope.

Envelope I: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This should also contain EMD in the form of DD/ Pay order for an amount of **INR 6,960** (INR Six Thousand Nine Hundred and Sixty Rupees only). The envelope should be clearly marked "**Part I - Technical and Commercial Bid**", indicating Enquiry Number, Due Date and Address & Reference of the Bidder.

Envelope II: This sealed envelope should contain price details. This envelope should be clearly marked "**Part II - Price Bid**", indicating Enquiry Number, Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, super scribing as Part I & Part II of Enquiry Number, Due Date of opening and the Address and Reference of the Bidder.

The above offer should reach this office on or before the due date by 10.00 hrs. (IST)

Tender should not be addressed to any Individual's name but only by designation to:

Tender Box
Vendor Complex
BHEL, Ramachandrapuram
Hyderabad – 502032

Tenders should be free from CORRECTION AND ERASURES, corrections if any must be attested. All amount shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH. Otherwise, the offers will not be considered.

5. EARNEST MONEY DEPOSIT (EMD)

One time EMD of INR **INR 6,960** (INR Six Thousand Nine Hundred and Sixty Rupees only) is to be submitted by each bidder in the form of Pay order or Demand draft in favour of 'Bharat Heavy Electricals Limited' and be payable in Hyderabad. EMD may be forfeited under following conditions:

1) After opening of bid, the bidder revokes his bid within the validity period or increases his earlier quoted rates.
2) Non-faithful performance, including but not limited to delayed and inadequate response, in the opinion of the Owner in the bidding process until order is placed.
3) The Bidder not abiding to accepting the issued PO within a maximum of 30 Calendar days along with the submission of Security Deposit.

EMD will be converted into Security Deposit and balance security deposit shall be deposited before commencement of work.

EMD shall not carry any interest. In case of any delay in refund due to any reason, BHEL shall not pay any interest on delayed refund.

6. OPENING OF TENDERS

i. The Part I – Technical & Commercial bid would be opened on the Tender opening date.
ii. The Part II – Price bid of Technically & Commercially suitable Bidder alone would be opened. The Technically& Commercially suitable Bidders would be informed about the tender opening date.
iii. Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II – Price bid.

7. DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

Following documents shall be submitted in the bid. The Bidder shall bear all costs associated with the preparation and submission of their bid and BHEL will in no case be responsible or liable for those costs.

The bid, all correspondence and documents related to the bid shall be in English. It is a two part bid system (i) Techno-Commercial bid and (ii) Price bid

i. Documents to be submitted for Technical and Commercial bid

1. Unpriced bid along with terms and conditions, necessary enclosures/supporting documents/EMD's.
2. Price format copy with prices masked or without prices (Pl note that % figures shall be indicated. Only the values shall be masked).
3. Brochures/literature for the equipment offered

ii. Document to be submitted for the Price Bid

1. Price in the Price in both letters and words in the bid document on bidders letter head. Price in case of extension of contract period is also to be indicated separately. (Please note that the price offered for contract period is not used for evaluation purpose in the current tender and will be used only incase BHEL wants to go ahead with extension of contract period after completion of the current contract)

8. LATE BIDS

Any bid received by BHEL after the deadline for submission of bids will be summarily rejected and returned unopened to the bidder.

9. EVALUATION OF BIDS

BHEL will evaluate the bids as follows;

Stage-I: Evaluation of Technical and Commercial Bid

The tender would be opened on the tender opening date.

Eligibility criteria are mandatory requirements to be met by the Bidder. BHEL's Technical Committee will evaluate the Technical bid submitted by the Bidders. During the Technical Evaluation of the bid, BHEL may ask for additional information / resources to validate the bid. These may include technical documents / supporting papers from third party, references, demonstration of a proof of concept or solution, visit to labs or their clients reference site, etc.

Failure to furnish all information as required or to submit a bid not substantially responsive to the bidding documents may result in rejection of the bid. If there are any deviations in the technical solution offered, without affecting the functional requirement/ commercial conditions they shall be filled-in the Deviation format (Deviations to the NIT document) as per **Annexure B** issued with the tender document and submitted along with the bid. In case of no deviations, "No Deviation Certificate" as per **Annexure C** shall be submitted.

Commercial conditions sought in the tender also will be evaluated by the BHEL's committee.

BHEL reserves the right to accept or reject any deviation.

Bids meeting BHEL's technical and commercial requirements only will be considered for Stage-II price evaluation.

Stage –II: Evaluation of the Price Bid

Bidders clearing the Technical and Commercial evaluation will have their Price Bids opened.

a. BHEL'S RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS

BHEL reserves the full right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.

Offers with following conditions are liable for rejection.

a) Demanding advance payment
b) Demanding exemption of EMD
c) With offer validity less than 4 months

10. DELIVERY PERIOD: Requirement is immediate. Bidder to complete the Installation and implementation within 5 weeks from the date of Purchase Order.

11. PERIOD OF THE CONTRACT:
The contract period shall be 1 year from the date of installation/commissioning and acceptance by BHEL.

12. EXTENSION OF CONTRACT PERIOD:
BHEL reserves the right to extend the contract for another two years after initial completion of ONE-year period. The Service provider may be called for negotiation for price reduction.

13. Termination: Provided the offered solution is not working properly, BHEL reserves the right to cancel/terminate the order for delay or non-performance, without any monetary or legal obligations.

14. ITEM DESCRIPTION , SPECIFICATION, PRE QUALIFICATION CRITERIA

1. IIOT PROJECT- CNC Machines

Sensor based solution for Preventive Maintenance of CNC Machine:

Scope:

To monitor a CNC machine for the following three parameters. Provide different analytical dashboard reports for different levels of users and to have provision for mail & sms alert based on the rules framed.

1. ***Viscosity of Hydraulic Oil.***
2. ***Power Consumption of machine.***
3. ***Vibrations of Gear Box.***

High Level deliverables -

- ***IOT framework to capture the above given parameters and store it into database (Public IOT Framework to be used).***
- ***Analytic Engine for Predictive analysis of the machine based on the captured parameters.***
- ***Dashboards for different levels of users (different types of charts and graphs to be included).***
- ***Provision for Historical Data Reports.***
- ***Provision for Mail and SMS alerts to users based on the rules given by operators.***
- ***Security and integrity of the Data and Network to be ensured.***

Others:

- ***BHEL's scope includes Network Connectivity (Wi-Fi and Connectivity to Cloud), server space required to host the application, power if required by any devices.***
- ***All other devices /boards/sensors etc required for the project should be provided by Vendor.***
- ***The software required for the project will be in vendor's scope.***
- ***License required for the software used in the project is in vendor's scope.***
- ***One year AMC for the project to be included in the above POC , after GO-Live. During this one year all the components of the project along with the devices will be under guarantee (any defective device / software to be replaced free of cost by vendor)***
- ***Vendor should provide Post Go-Live remote support for One year.***
- ***Vendor should visit the project site for least 2 times in one year , free of cost , for resolving issues at the site.***
- ***Solution to continue to work after completion of Support period.***
- ***Project to be executed within 4 weeks from the Date of placement of Order.***

Pre-Qualification Criteria:
Similar project to have been executed. Documentary evidence to be enclosed.

15. GENERAL INSTRUCTIONS

a. PAYMENT TERMS:

The payment shall be made after 45 days from the date of Invoice accepted by BHEL.

Vendor shall submit following documents for processing the bills:

a) Original Invoice in triplicate.
b) Service tax payment proof
c) Swachh Bharat Cess and Krishi Kalyan Cess Payment proof etc.

b. NOTIFICATION OF AWARD

BHEL will notify the successful Bidder in writing by e-mail/ Letter/ Fax.

c. SIGNING OF CONTRACT/ LEASE AGREEMENT

After the notification of award, BHEL will issue Purchase Order / Service Order (PO). Within 15 (fifteen) Days from the date of issuance of PO, the Bidder shall submit:

a) Bidder Signed copy of BHEL Order as an acceptance of the PO.
b) Security Deposit (SD).

Thereafter, BHEL shall issue the draft contract/ lease agreement within 15 days of acceptance of Order along with submission of SD by the Bidder. The Contract/ Lease agreement (agreement will be shared) between BHEL & Bidder shall be signed in the next 15 days from the date of issue of the Contract. Bidder shall furnish the details regarding Address, Tax details, Bank details etc. for placement of Order.

Bill to party is BHEL Hyderabad. Bidder billing from within the State can quote with VAT (TIN) and those billing from outside the State can quote with CST.

Input credit is available for VAT.

d. SECURITY DEPOSIT (SD)

Security deposit 10% of order value shall be submitted by the successful bidder before start of the work. Non-submission in time of SD for value stated herein shall lead to forfeiture of EMD and cancellation of Order.

Security deposit shall be furnished in any of the following forms:

i. Pay order in favour of BHEL.
ii. Demand draft in favour of BHEL.
iii. Local cheques of scheduled banks, subject to its realization.
iv. Bank Guarantee shall be from Nationalised Banks / Scheduled Bank / Public Financial Institutions as per the BHEL's Bank Guarantee Format.
v. Original Fixed deposit receipt (FDR) issued by scheduled banks / public financial institutions as defined in the Companies Act. The FDR should be in the name of successful bidder, A/c BHEL, duly discharged on the back

Acceptance of security deposit against point ***iv*** and ***v*** above, will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, 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 there with. Security deposit shall not be refunded to the Successful bidder except in accordance with the terms of the Contract i.e. upon successful completion of the Contract.

EMD of the successful bidder may be converted and adjusted against the Security Deposit.

The Security Deposit shall not carry any interest.

The bidder shall forfeit the Security Deposit In the event bidder fails to execute the work as per terms and conditions of the contract.

e. Help desk: REMOTE SUPPORT FROM OEM SHOULD BE AVAILABLE THROUGH TOLL FREE NUMBER AND EMAIL (SHOULD BE 24X7). AN ESCALATION MATRIX IN THIS REGARD WITH VARIOUS LEVELS FOR SUPPORT ALONG WITH THEIR DETAILS OF CONTACT ETC SHOULD BE SUBMITTED.

f. FORCE MAJEURE

Bidder shall not be responsible for delay in delivery resulting from acts/events beyond his control, provided notice of the happening of any such act/event is given by the Bidder to the Purchaser/Lessee within 15 days from the date of its occurrence. Such acts/events shall include but not be limited to acts of God, war, floods, earthquakes, strikes, lockouts, epidemics, riots, fire or Governmental regulations superimposed after the date of order/contract.

g. RISK PURCHASE

Purchaser shall reserve the right to terminate the order/contract and purchase from elsewhere at the risk and cost of the Bidder, either the whole or part of the Systems/goods, which the Bidder has failed to deliver within the stipulated delivery period or if the same were not available, the best and the nearest available substitute(s) thereof which is not technically inferior to the undelivered System/Goods . The Bidder would be liable to compensate the Purchaser for any loss, which the Purchaser/Lessee may sustain by reason of such purchase. This clause will be operated only after completion of delivery period including extended period with penalty, if any.

h. LIMITATION OF LIABILITY

The Bidder's liability will be limited to the value of this contract only.

i. ARBITRATION

In all cases of disputes emanating from and in reference to this contract, the matter shall be referred to the arbitration. All disputes or differences between the parties will be resolved through arbitration governed by "The Arbitration and Conciliation Act, 1996" as amended from time to time. The venue of arbitration shall be in Hyderabad.

Confirm compliance for all clauses of - "**Commercial Terms and Conditions**"

Date:_____ **Bidder's Signature with Seal**

ANNEXURE B

DEVIATIONS TO THE NIT DOCUMENT

Table No.	Sl. No	Item or Parameter	Requirement as per BHEL	Deviation	Alternate solution/Bidder's quote (offer)

Date:_____

Bidder's Signature with Seal

ANNEXURE C

NO DEVIATION CERTIFICATE

(To be given in bidder's letter head)

Ref: BHEL's Enquiry No._____ Dated _____

It is Certified that the offered solution vide Enquiry No._____ Dated_____ in response to BHEL's enquiry mentioned under reference has no deviation from the requirement of BHEL, Ramachandrapuram given vide the RFP document.

Date:_____ **Bidder's Signature with Seal**