



BHARAT HEAVY ELECTRICALS LIMITED
Central Foundry Forge Plant, HARIDWAR
Phone: 01334-281347, 285469

NOTICE INVITING TENDER (NIT)

(Open Tender)

We, Bharat Heavy Electricals Limited, a Govt. of India Undertaking under the administrative control of Ministry of Heavy Industries, invite offer from the contractors through **open tender** in CFFP, BHEL Haridwar, in **Three part** bid in sealed envelope from reputed & experienced bidders for the subject job as per the tender document. Following points relevant to the tender may please be noted and complied with

Name of Work	Establishing Technology for higher yield of Critical Castings.
NIT No	FF:21:PSF:RV:WC:08:060
Date of Issue of NIT	15.03.2022.
Type of bid	<i>Three Part Bid.</i> (Non-Disclosure Agreement , Techno-commercial & Price Bid)
Period of Work	13 Months
Tender Document Cost	NIL
NIT Value (Rs.)	170.98 lakh
GST	GST extra as applicable.
Amount of Earnest Money Required (Rs.)	Rs 3,41,960.00
Security deposit (SD)	10% of the contract value.
Last Date and Time of Receipt of Tender Document (Part-1)	31.03.2022, 01:55 PM
Date & Time for opening of (Part-1)	31.03.2022, 02:00 PM
Last date and time of Receipt of Tender Document (Part- 2 & 3)	21.04.2022, 01:55 PM
Date & Time for opening of Technical Bid (Part-2)	21.04.2022, 02:00 PM
Splitting of Work	NO
Reverse Auction (RA)	NO
Place of opening of Tender & Tender Submission Address	Tender Room, Back Side of Main Administrative Building, CFFP, BHEL, Haridwar-249403 (Uttarakhand)
Contact Detail	Shri- NIRAJ KUMAR GAUTAM, Sr. MANAGER-(WCX, WW & PMG) Contact Address: WCX, PMG OFFICE, CFFP, BHEL Haridwar Email: nirajkumar.gautam@bhel.in , singhr@bhel.in Phone: 01334-28-1347, 01334-28-5469 Fax: 01334-28-1862

Note:

1. Full set of Tender document may be downloaded from websites (<https://hwr.bhel.com>, <https://www.bhel.com>, & <https://eprocure.gov.in>.)
2. **Tender may be cancelled at any stage without assigning any reason thereto.**
3. For electronic fund transfer to BHEL, Bank account is-

BHEL CFFP

SBI A/C No.: 10667995469

IFSC Code: SBIN0000586

Sector 5, BHEL Ranipur Haridwar

The tender shall be in following three parts:

1. **Part 1:** Submission of “**Non-Disclosure Agreement**” within **15 days** of floating of tender. Before sharing any technical details/drawings, the bidder to submit duly signed “Non-Disclosure Agreement NDA” (on a Stamp Paper of Rs. 100/-).

[Non-Disclosure Agreement NDA shall be accepted through email also but hard copy of NDA should be received before the Last date of receipt Tender (Part-1).]

Only those bidders will be considered for further tendering who have submitted NDA (within 15 days) and drawings will be shared subsequent to submission of NDA

2. **Part 2:** Submission of Technical documents and price bid within **next 21 days** from the end date of **Part 1**, followed by Technical evaluation.
3. **Part 3:** Opening of **Price Bid** of Technically Qualified Bidders:

Envelope wise details:

- i **Envelope -A# (Non-Disclosure Agreement)** shall contain the content of ANNEXURE- II (duly filled, signed and stamped on each page) (on a Stamp Paper of Rs. 100/-).
- ii **Envelope -1# (Technical Bid)** shall contain ANNEXURE- I, III, IV, V, VI and VII (duly filled, signed and stamped on each page) along with supporting documents and EMD.
- iii **Envelope-2 (Price Bid)** shall contain duly filled, signed and stamped Price Bid format only (Annexure-VIII). The word “**Price Bid**” must be clearly mentioned on the envelope containing price bid.
- iv **Envelope-3** shall contain Envelope-1 & Envelope-2.

Following shall be subscribed on the Envelopes

For Part-1

- (a) TENDER DOCUMENT NO.: **FF:21:PSF:RV:WC:08:060**, and Tender (**Part -1**) opening Dated:- **31.03.2022**.

For Part-2 & 3

- (b) TENDER DOCUMENT NO.: **FF:21:PSF:RV:WC:08:060**, and Tender (**Part -2 & 3**) opening Dated:- **21.04.2022**.
- (c) “NAME OF THE COMPANY WITH FULL ADDRESS”

CFFP, BHEL will not be responsible and will not accept late tender for any delays on account of postal delays, loss of documents, etc.

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GENERAL TERMS & CONDITIONS OF CONTRACT

01. DEFINITIONS:

In these general conditions of contract, the following terms shall have the meaning hereby assigned to them except where the context otherwise requires: -

- (a) The "CONTRACT" means the documents forming the tender and acceptance thereof and the formal agreement if any, executed between the Bharat Heavy Electricals Ltd., Central Foundry & Forge Plant, Haridwar and the contractor together with all the documents referred to therein including General and Specific terms & conditions of contract, specifications, designs etc. All the documents as applicable taken together shall be deemed to form one contract and shall be complementary to one another.
- (b) The "TENDER DOCUMENT" means the form of tender as applicable vide and / or General and Specific Conditions of contract, and the specifications and/or drawings as given to contractors for the purpose of preparing their tender including "Notice Inviting Tender".
- (c) The "SITE" or "SHOP" means the land and/ or other place on into or through which the work is to be executed under the contract or any adjacent land, part or structure which may be allotted to or used for the purpose of carrying out the contract.
- (d) The "CONTRACTOR" means the individual firm or company whether incorporated or not, undertaking the work and shall include the legal personal representatives of such individuals or the person(s) composing the firm or company and the permitted assigns of such individuals or firm or company.
- (e) The "EXECUTIVE IN-CHARGE" means any Executive deputed by BHEL to supervise the execution of work or part thereof.
- (f) The "TIME OF COMPLETION" is the date or dates for completion of the work or any part of the work as set out in or ascertained in accordance with the individual work or the tender documents or any subsequent amendments thereto.
- (g) "PPE's" Personal Protective Equipment - Specialized clothing or equipment worn by workmen for protection against health and safety hazards.

02. DOCUMENT SUBMISSION: -

- i) All documents / annexures submitted with the offer shall be properly attached with the respective sections and pages serially numbered e.g. 1/24, 2/24 and so on. BHEL shall not be responsible for any missing documents.
- ii) Offer & documents submitted along with offer shall be signed & stamped in each page by contractor's authorized representative. No overwriting / correction in tender documents by bidders shall be allowed. However, if correction is unavoidable, the same may be signed by authorized signatory.
- iii) The representative of the Bidder may choose to witness the Tender opening and have to produce the Authorization Letter in the tender room, before opening of the Tender. The representatives without Authorization Letter will not be allowed to participate in the Tender opening.

03. AUTHORIZED SIGNATORY: -

The selected bidder shall submit at the time of signing the contract, authorization from Proprietor/Competent authority authorizing an official or officials of the company to discuss, sign agreements/ contracts with BHEL.

04. CHANGE IN CHARACTER OF THE BIDDER: -

In the event, wherein there is any change in the character of the contractor's firm by means of change in structure or the transfer of ownership of the firm, the firm has to inform BHEL well in advance with proper documents that the new entity shall be contractually accountable to BHEL for the contract signed by the original firm. BHEL decision in this regard shall be final and binding on the contractor.

05. OWNERSHIP OF MULTIPLE COMPANIES/ FIRMS: -

To maintain the fairness in bidding, two or more firms with same ownership or agent cannot participate in same tender. In such cases the BHEL has right to cancel/reject the offer/order at any stage.

06. WORKS TO BE CARRIED OUT:

The contractor shall arrange all labour, materials, tools, plant, equipment & transport which may be required for execution of work as specified in tender enquiry, and in the entire execution of work as per BHEL terms and instructions.

07. DEVIATIONS:

Deviation with respect to tender clauses and additional clauses / suggestions / in Techno-commercial bid / Price bid may not be considered by BHEL. Bidders are requested to positively comply with the same.

08. Validity of offer shall be for a minimum period of 90 days from the date of Tender Opening.

09. TAXES, CESS AND OTHER DUTIES:

All charges on account of taxes, cess terminal or GST and/or other duties on materials obtained for the work (excluding materials provided by BHEL) shall be to the contractor's account.

10. **LAWS GOVERNING THE CONTRACT:** This contract shall be governed by the Indian Laws.

11. COMPLIANCE TO REGULATION AND BYE LAWS:

The contractor shall conform to the provisions of any statute relating to the work, regulations and bye-laws of any local authorities.

12. ADMISSION TO SITE:

The contractor shall not enter on (other than for inspection purpose) or take possession of the site unless permitted to do so by Executive In-charge. The portions of the site to be occupied by the contractor shall be clearly defined and marked on the site plan, and the contractor will not on any account be allowed to extend his operations beyond these areas.

BHEL reserves the right of taking over, at any time any portion of the site which it requires and the contractor shall at his own expense clear such portion within specified time given by Executive in-charge. The photography of the site of work or any part therein, publishing or otherwise circulation will not be allowed without the prior written permission from the Executive in-charge.

13. CONTRACTORS SUPERVISORS:

The contractor shall either himself supervise the execution of the contract or shall appoint competent authorized representative.

14. LABOUR LAWS TO BE COMPLIED WITH BY THE CONTRACTOR:

- The contractor shall employ labour in sufficient number to maintain the required rate of progress and of quality required to ensure workmanship of the degree required as per the specifications.
- Contractor to ensure that the employees deployed in the premises of BHEL are physically and mentally fit and do not have any criminal record. Such employees should possess requisite skill, proficiency, qualification, experience etc. Contractor will be responsible for good conduct of their employees. In case of any misconduct /misbehavior by any employee, the contractor will replace such employee(s) immediately.
- BHEL shall have the privities of the contract with the contractor only and will give instructions to the contractor or his authorized representatives. BHEL will have nothing to do or be concerned with the employment of employees working for the contractor. The relationship between BHEL and the contractor will be that of independent entities and nothing herein contained will amount to joint venture, partnership or an employer employee relationship.
- The contractor shall obtain a valid labour license under the Contract Labour (R&A) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules 1971, before the commencement of the work, and continue to have a valid license until the completion of work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act 1986. The relevant statutory provisions of the State Government of Uttaranchal shall also be applicable in Toto.

- The contractor shall observe provisions of the Factories Act 1948 in respect of working hours, holidays, rest intervals, leaves and overtime etc. Also adhere to the provisions of Employee Provident Fund & Miscellaneous Act 1952, Employee State Insurance Act 1948, Minimum Wages Act 1948, Payment of Bonus Act 1965 and provisions of all other such Acts applicable and issued from time to time.
- Any failure to fulfill this requirement shall attract the penal provisions of the Contract arising out of the resultant non-execution of the work.

15. ACCOMMODATION FOR LABOUR:

The contractors shall arrange accommodation for the work people at his own expenses during the progress of the work. BHEL will not provide any accommodation or place for accommodation to the contractor.

16. MEDICAL EXPENSES:

The contractor shall arrange all the medical expenses of its labour through ESI or at his own.

17. MOBILIZATION PERIOD:

The mobilization period shall be from the date of issue of Work Order or as specified by BHEL.

18. TOOLS AND PLANTS(T&P) AT SITE:

The contractor, shall at his own expense, supply all tools plants and equipment (herein after referred to as T & P) required for the execution of the contract other than those listed in Bill of quantity, which subject to their availability may be given by BHEL on hire basis to the contractor or issued free for use in execution of the work, as specified in the tender documents.

19. SAFETY AND SECURITY:

- a. The contractor shall ensure proper safety of all the workmen, materials, plant and belonging to him or to BHEL or to others, working at or near the site. The contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislation and the Executive in-charge as he may deem necessary for execution of job.
- b. The contractor shall adopt adequate safety measures and use of protective clothing by all the workmen at site whether engaged or not in actual of work or supervision thereof. The contractor shall ensure that the workmen on site, use appropriate PPE's which is necessary for the health & safety of workmen.
- c. The contractor shall be responsible for safety arrangements of all equipment and PPE's to be used in connection with the execution of the work and shall ensure employment of only trained person to operate the equipment. Only tested equipment, tools, wires, ropes etc. shall be used and shall periodically be tested to the satisfaction of the BHEL. All test certificates shall be made available to the BHEL at site as and when required. The PPE's and equipment provided by contractor shall comply with BHEL specifications/standards which may be taken from safety department of BHEL.
- d. The contractor shall ensure provision and maintenance of lights, guards, fencing with gates and watching when and where necessary or required by the BHEL or by any one duly constituted authority for the protection of the work and / or for the safety and convenience of the public or others.
- e. The contractor shall abide by all security regulations at site by the BHEL from time to time. The contractor shall provide identity badges to their personnel and workmen, which must be properly displayed by them at site.
- f. The contractor and his personnel / workmen shall be subject to security check by BHEL's own security personnel or CISF (if engaged by the BHEL) for the overall protection of the project.
- g. In case any accident occurs during the construction/ erection or other associated activities undertaken by the contractor thereby causing any minor or major or fatal injury to his employees due to reason whatsoever, it shall be the responsibility of the contractor to promptly inform the same to BHEL Executive in-charge in prescribed form. The contractor will be responsible for all pecuniary liability if any under such circumstances. Contractor shall take all statutory and regulatory approvals and comply with all formalities before start of work for safety and security.

- h. Medical examination of contract employees to be carried out by contractors as per statutory rules and regulations.
- i. Work permit system shall be complied for work at height/excavation/ confined space and other work as per BHEL requirement.
- j. Contractor shall abide specific health and safety requirement as per statutory norms.
- k. The contractor shall ensure/review aspects of appropriate activity hazard analysis and establish safe work procedure.

20. CANCELLATION/SHORT CLOSURE OF CONTRACT:

In case of non fulfilment of conditions by contractor or otherwise, BHEL reserves the right to cancel the contract at any stage by giving 30 days' notice.

BHEL also reserves the right to short close the contract at any stage giving 30 days' notice to the contractor without assigning any reasons thereof.

21. SUSPENSION OF BUSINESS DEALINGS WITH CONTRACTORS: -

In order to protect the commercial interests of BHEL, it becomes necessary to take action against suppliers / contractors by way of suspension of business dealings, who either fail to perform or are in default without any reasonable cause, loss of business / money / reputation, indulged in malpractices, cheating, bribery, fraud or any other misconducts or formation of cartel so as to influence the bidding process or influence the price etc. Guide- lines for Suspension of Business Dealings with Suppliers / Contractors shall prevail over which is available at BHEL website <http://www.bhel.com>

The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.

22. INSPECTION AND RECORDS:

The contractor shall supervise the work quality through qualified deployed manpower so as to ensure that the Works under this contract are carried out entirely to the quality standards of BHEL.

23. VARIATION OF PRICE: No escalation in cost/price variation will be permitted during the contract period unless the same is specified in the tender.

24. OBLIGATION: -

(A) OBLIGATION OF THE CONTRACTOR

I. CONTRACTUAL

- i. The Contractor shall ensure that adequate no. of workmen is deployed for execution of the work awarded to him for ensuring uninterrupted working.
- ii. The authorized representative of The Contractor shall be available at all time to supervise the work allotted to him.
- iii. The Contractor to ensure that the workmen deployed in the premises of BHEL are physically and mentally fit and The Contractor should ensure that all the workmen who are not regular employee of The Contractor are having Police Verification. Such workmen should possess requisite skill & experience.
- iv. In case of any misconduct/misbehavior by any workman, The Contractor will replace such workmen immediately.
- v. It will be responsibility of The Contractor to provide all necessary resources (man and machineries) as may be required, to perform the scope of work. BHEL shall issue necessary plant passes to The Contractor employees and its Contractor's workmen deployed for carrying out the job.
- vi. The Contractor will be liable for any pilferage/loss to BHEL due to acts of omission and commission by their workmen, if the reasons for such act is attributed to the Contractor
- vii. The Contractor should ensure proper maintenance and safety of all their equipment along with spares and consumables, material and plants belonging to him or to BHEL. The Contractor shall be responsible for enforcing all safety rules and regulations as per applicable statutory requirements at the work place and as notified from time to time.

- viii.** The Contractor shall ensure that all their workmen wear the required PPE (personnel protective equipment) while working on the jobs. The Contractor shall ensure all safety precautions for prevention of accidents of their workmen.
- ix.** The contractor shall ensure payment of minimum wages (as notified) to the contract labour deployed by him.
- x.** The contractor shall ensure payment of wages to their labours latest by 7th date of the following month.
- xi.** In case of any accident, it will be the sole responsibility of The Contractor to provide necessary medical aid to their injured workman and liaison with the concerned authorities i.e. ESI etc.
- xii.** The Contractor will be responsible for up keeping and maintenance of all tools & tackles issued to them. Any loss or damage of the same will be recovered from The Contractor.
- xiii.** In the event of termination of contract for any reason whatsoever The Contractor shall withdraw all their workmen from the premise of BHEL within the specified period. In case The Contractor decides to terminate services of their workmen, The Contractor should settle all terminal dues and shall indemnify BHEL against all such claims.

II. TOWARDS STATUTORY LIABILITY

- i.** The Contractor shall comply with all statutory requirements, rules regulations, and notifications in relation to employment of their workmen issued from time to time by the concerned authorities.
- ii.** The Contractor shall keep BHEL indemnified against all claims and losses under various Labour Laws, statutes or any civil or criminal law in connection with workmen deployed by him.
- iii.** The liability for any compensation on account of injury sustained by any workman of The Contractor will be exclusively that of The Contractor.

(B) OBLIGATION OF M/s BHEL

I. FACILITIES TO BE PROVIDED BY CFFP, BHEL, (free of cost unless otherwise specified):

- i.** Space inside CFFP's premises for execution of work.
- ii.** Power supply for execution of work as per work requirement.
- iii.** In case any facility used by contractor, the same will be charged in running bills.

25. SPLITTING THE WORK: -

Splitting of work shall be done as mentioned in the tender enquiry (NIT). Splitting shall be done only if there are three or more qualified bidders (N), the distribution shall be limited to (N-1) qualified responses. Rates of L-1 bidder, as finalized, shall be counter offered to the other bidders in case of splitting of order. In case any bidder(s) do not accept the L-1 rates, the counter-offer may be extended to other bidders.

26. EARNEST MONEY DEPOSIT

(a) Vendor is required to deposit the EMD as specified in NIT.

(b) EMD shall not carry any interest.

(c) Modes of deposit:

The EMD may be accepted only in the following forms:

- (i) Cash deposit as permissible under the extant Income Tax Act (before tender opening) or any other Act/ Regulation.
- (ii) Electronic Fund Transfer credited in BHEL account (before tender opening)
- (iii) Banker's cheque/ Pay order/ Demand draft, in favor of BHEL (along with offer).

In addition to above, the EMD amount in excess of Rs. Two Lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The Bank Guarantee in such cases shall be valid for at least six months.

(d) Forfeiture of EMD

EMD by the Tenderer will be forfeited as per NIT conditions, if:

- i) After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.

- ii) The Contractor fails to deposit the required Security deposit or commence the work within the period as per LOI/ Contract.
- (e) EMD by the tenderer 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 forfeited/ released based on the action as determined under these guidelines.
- (f) EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of award of work.
- (g) EMD of successful tenderer will be retained as part of Security Deposit.
- (h) EMD deposited in any modes other than specified at (c) above shall lead to cancellation of the offer.

27. SECURITY DEPOSIT(SD): **(SD is applicable as per Specific Term & Conditions of Clause II, Point no-06, Page-36)**

The contractor shall furnish the security deposit immediately on issue of the Letter of intent/ work order and before the commencement of work.

The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

Security deposit may be furnished in any one of the following forms:

- i. Cash (as permissible under Income Tax Act) or any other Act/ Regulation.
- ii. Pay order, Demand Draft in favor of BHEL.
- iii. Local cheques of scheduled banks, subject to realization
- iv. Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL
- v. Securities available from Post Offices such as National Saving Certificates, Kisan Vikas Patras, etc. (certificates should be held in the name of Contractor furnishing the security and duly pledged in favor of BHEL and discharged on the bank).
- vi. Fixed Deposit Receipts issued by scheduled Banks/ Public Financial Institution as defined in the Companies Act. The FDR should be in the name of contractor, A/c BHEL, duly discharged on the back.
- vii. Security deposit can also be recovered at the rate of 10% of Security amount from the running bills. However, in such cases at least 50% of the security deposit must be deposited before start of work and balance 50% may be recovered from the running bills.
- viii. EMD of the successful Tenderer shall be converted and adjusted against security deposit.
- ix. The security deposit shall not carry any interest.

28. BANK GUARANTEE:

In case the bank guarantees are required to be deposited towards security deposit/performance guarantee or for any other purpose as per the terms of the tender enquiry, such bank guarantees of the requisite value in the denominated currency of the purchase order should be from one of the Indian branch of BHEL consortium banks and the bank guarantee should be in the ` as prescribed by BHEL. The proforma of bank guarantee and the list of consortium banks are displayed at BHEL website www.bhelhwr.co.in. However, in case the bank guarantee is not from BHEL consortium banks, then the bidder has to get the bank guarantee confirmed from one of the Indian branch of BHEL consortium banks and the bank charges for such confirmation will be borne by the bidder.

29. REFUND OF SECURITY DEPOSIT:

Security Deposit shall be released to the Contractor upon fulfilment of contractual obligations as per terms of the contract.

30. GOODS & SERVICE TAX: -Bidder has to specify the following in their techno-commercial bid (part I bid in case of two part bid):

- I. a) Legal Name of the bidder as in GST registration, GST registration No., State, Place of business, category of registration under GST i.e. Registered dealer / Unregistered dealer/ dealer opted for Composition Scheme,
- b) HSN (Harmonized System Nomenclature)/ SAC (Service Accounting Code), description of Goods/Services and applicable IGST/ CGST/ SGST rate and any other statutory levy, if any, for each item of Goods or Services.

- II. a) Unregistered Dealer - In case of unregistered dealer, if GST will have to be paid by BHEL under reverse charge mechanism, the same shall be added to the quoted price for evaluation bid.
- b) Dealer opting for Composition Scheme - In case of registered dealer, who opt for composition scheme at the time of submission of bid, no GST will be payable to the bidder and also same will not be considered for evaluation of bid. Dealer has to declare in technical bid that no GST is shown separately in price bid. However, in case at the time of actual supply, the bidder charges GST at normal rate, the same shall be reimbursed subject to the availability of GST credit to BHEL. In case GST credit is not available to BHEL, no GST will be payable to the bidder.
- III. Reimbursement of GST shall be made by BHEL-Haridwar on matching of Contractor inputs as mentioned below at GST portal and after ensuring of availability of input credit to BHEL, Haridwar. Hence, Contractor has to ensure compliance as follows: -
- a) Timely raising & submission of GST compliant Invoices
- b) Timely receipt of GST
- c) Timely and correct payment of applicable GST by supplier/contractor
- d) Timely filing of return
- e) Compliance of other applicable provisions on supplier/contractor has to also give consent to accept payment of tax after such matching in all cases where bills are submitted directly to BHEL.
- IV. In the event of any disallowance of input credit (including reversal of credit) or applicability of interest or arising of any other financial liability on BHEL-Haridwar due to any default of supplier/contractor under GST such as non/delayed receipt of Good/Services, delayed raising & submission of invoices, delayed payment of tax, non/wrong declaration of sale by Contractor in return etc. or any other reason not attributable to BHEL, such implication shall be to supplier's/contractor's account and will be deducted from bills.
- V. In case of Liquidated damage (LD) recovery, the applicable GST shall also be recoverable from the suppliers. TDS or any other tax on GST shall also be deductible as per prevailing Acts/regulations.
31. PAYMENT TERMS AND PAYMENT PROCEDURE: **Terms of Payment is applicable as per Specific Term & Conditions of Clause (E) Terms of Payments (Page-35), (Point-I) Stages of Payment (P-35) and (Point-II) Conditions of Payment (Page-35).**
- Payments will be made to the contractor on successful completion of work on production of bills/ Invoice. The contractor has to submit Monthly Bill, Measurement Book with all necessary documents duly signed by the authorized persons to the concerned department.
- Payment shall normally be released every month within 15 days from the date of submission of clear bills along with all supporting documents.
- Payments will be made through e-payment system after deduction of Income tax at source as per Income Tax Act. Irrespective of the running payments made by BHEL at different stages, the Contractor shall be entitled to the payment upon successful completion of the works as per the contract only.
- BHEL shall have no payment obligation for the period of Force Majeure/ Reasons beyond the control of any party.
32. PENALTY CLAUSE: **LD / Penalty Clause is applicable as per Specific Term & Conditions of Clause (E) Terms of Payments (Page-35) (Point-III) LD Clause (Page-36 and (Point-IV) Penalty Clause (Page-36).**
- Because of delay attributed to contractor, the contractor fails to complete work on or before the scheduled date of completion, a penalty amount equal to 0.50 percentage of the contract value/ unexecuted portion (as applicable) for every week of extension sought beyond the scheduled date of completion up to max. 10 % of the contract value shall be imposed on contractor. Such amount may be adjusted or setoff against any sum payable to the contractor under this or any other contract.
- No penalty shall be imposed on contractor for the period of Force Majeure/ Reasons beyond the control of any party.
33. RECOVERY FROM THE CONTRACTOR:

Whenever under the contract any amount becomes recoverable from the contractor, the same may be deducted from any sum then due or which at any time thereafter may become due to the contractor

under the contract or under any other contract with BHEL or from his security deposit, or he shall pay the claim on demand.

34. RISK PURCHASE CLAUSE: -

In case of delays in supplies / defective supplies/ incomplete work or non-fulfilment of any other terms and conditions given in Work Order, BHEL may cancel the work Order in full or part thereof and may also make the procurement of such material/service from elsewhere / alternative source at the risk and cost of the supplier/contractor. BHEL will take all reasonable steps to get the material/service from alternate source at optimum cost. If bidder does not agree to the above Risk Purchase Clause, BHEL reserves the right to reject the offer. In the eventuality of Risk Purchase, appropriate action will be taken as per BHEL extant rules. This will be without prejudice to any other right of BHEL under the contract.

35. BENEFITS TO MSE BIDDERS: -

MSEs shall be exempted from payment of Earnest money & tender cost at the time of tender deposit. However, there is no exemption of security deposit submission.

Benefits to MSE bidders as applicable shall be given as per rule upon submission of Udyam Certificate along with certificate from Chartered Accountant or any other applicable document.

No benefits shall be applicable for that particular enquiry if the required documents are not submitted before price bid opening.

36. BENEFITS UNDER MAKE IN INDIA: -

Benefits under make in India order 2017 and subsequent shall be extended as per rules if applicable.

37. SETTLEMENT OF DISPUTES/ ARBITRATION

In all cases of dispute, the matter shall be referred for ARBITRATION by sole arbitrator to be appointed with mutual consent of the parties. BHEL shall suggest 3 names out of which the contractor will have to select the arbitrator. The award of the Arbitrator shall be final and binding on both the parties. The place of Arbitration shall be Haridwar.

JURIDICTION: The courts of Haridwar, India, shall have exclusive jurisdiction

38. FORCE MAJEURE CLAUSE

Notwithstanding any other thing contained anywhere else in the contract in case the discharge of obligation under the contract by either party is impeded, neither party shall be considered in breach of the contract to the extent that performance of their respective obligation is prevented by an event of Force Majeure that arises after the effective contract date.

In the above clause, Force Majeure means an event beyond the control of the parties to the contract which prevents a party from complying with any obligation of the contract including but not limited to:

- a) Act of God (Such as but not limited to earthquake, drought, tidal waves, floods etc.).
 - b) War (whether war be declared or not), Hostilities Invasion, Act of foreign enemy etc.
 - c) Rebellion, revolution, insurrection, civil war etc.
 - d) Contamination of Radio Activity from any nuclear fuel or from any other nuclear waste or any other hazardous materials.
 - e) Riots, commotions, strike unless restricted to the employees of supplier.
 - f) Acts of terrorism.
 - g) Change in law/ Regulation making the performance impossible.
- The party claiming to be affected by force majeure shall notify the other party in writing immediately without delay on the intervention and on the cessation of such circumstances.

39. FRAUD PREVENTION POLICY: -

The Bidder along with its associate / collaborators / 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 fraud or suspected fraud as soon as it comes to their notice”. Fraud Prevention policy and List of Nodal Officers shall be hosted on BHEL website, vendor portals of Units / Regions intranet

40. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER: -

In the course of tender evaluation, If more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders. In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/ draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding to the bidders.

41. QUOTED RATES: -

Rates should be quoted as per the Price Bid. Rates quoted in any other form will not be accepted and is liable to be rejected.

- a) If, in the price structure quoted for the required goods / services / works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail as above.

42. Tender Special / Specific Term and Conditions will supersede the General Term and Conditions.

Non-Disclosure Agreement

This Non-Disclosure Agreement (herein after also referred to as “NDA”) is made and entered into on (date) _____ between

BHARAT HEAVY ELECTRICAL LIMITED, RANIPUR, HARIDWAR (herein after also referred to as “BHEL”, which expression shall mean and include its successors and permitted assigns) represented by Executive Director/its duly authorised representative (as applicable), of the FIRST PART.

M/s: _____, having its registered office at _____ (herein after also referred to as “_____”, which expression shall mean and include its successors and permitted assigns”) represented by its Director or duly authorised representative, of the SECOND PART.

BHEL and _____ are referred to as the “Party” individually or “Parties” collectively, as the context may demand.

AND WHERE AS _____ has agreed to complete the activities as specified under the project purpose mentioned in **Annexure -A**” within stipulated period.

THE PARTIES AGREE AS FOLLOWS:

Where in order to pursue the mutual collaborative work as specified in **Annexure -A**

(herein after referred to as a “Project Purpose”), the said Project purpose (to delete whatever is not applicable), the Parties recognize that there is a need to disclose to one another certain information, as defined in para 1 below, of each Party to be used only for the Project Purpose and to protect such confidential information from unauthorized use and disclosure.

In consideration of the other Party’s disclosure of such information, each Party agrees as follows:

1. The parties acknowledge and agree that information (Methods, Drawings, Processes, Formulae, Compositions, Systems, Techniques, Inventions, Computer Program/Data/Configuration and Research Projects etc.) subject to this Agreement may be in any form or medium, tangible or intangible and may be communicated /disclosed in writing, orally, or through visual observation or by any other means to one Party (herein after referred to the receiving Party) by the other Party (herein after referred to the Disclosing Party).

Provided, however, that; (a) if the information or data is disclosed in tangible form, it shall be clearly marked as being confidential; and (b) if the information or data is disclosed orally or visually, it shall be identified as being confidential upon disclosure and shall be reduced to writing clearly being marked as confidential within 30(thirty) days after such oral or visual disclosure.

2. This Agreement will apply to all information and or inputs (including samples) which is disclosed by one Party to the other Party during preliminary discussion for the Proposed Project Purpose if entered into between the Parties, including information listed in Annexure-A attached here to and other information which the Disclosing Party identifies in writing or otherwise as confidential before or within thirty days after disclosure to the Receiving Party (all such information shall herein after be referred to as “confidential Information”).

3. The receiving Party shall use Information only for the Project Purpose, shall hold Confidential Information in confidence using the same degree of care as it normally exercises to protect its own proprietary information, but not less than reasonable care, taking into account the nature of the Confidential Information, and shall grant access to Confidential Information only to its employee who have a need to know, and only to the extent necessary to evaluate the Project purpose. The receiving Party shall cause its employees to comply with the provisions of this Agreement as applicable to the receiving Party. The receiving Party shall reproduce Confidential Information only to the extent essential to fulfil the Project Purpose and shall prevent disclosure of Confidential Information to third parties. The receiving Party may, however, disclose the Confidential Information to its consultants and contractors with a need to know; provided that by doing so, the receiving Party agrees to bind those consultants and contractors to terms at least as restrictive as those stated herein, advise them of their obligations, and identify the disclosure Party for any breach of those obligations. **However, in all such cases of disclosure to consultants and contractors, prior intimation and consent of BHEL is a mandate.**
- 3.2. Upon the disclosing Party's request, the receiving Party shall either return to the disclosing Party all Confidential information (including samples any other inputs) or shall certify to the disclosing Party that all media Confidential Information have been destroyed.
4. The foregoing restrictions on each Party's use or disclosure of Information shall not apply to Information that the receiving Party can demonstrate:
 - 4.1 Was independently developed by or for the receiving Party without reference to the Information, or was received without restrictions: or
 - 4.2 Has become generally available to the public without breach of confidentiality obligation of the receiving Party: or
 - 4.3 was in the receiving Party's possession without restriction or was known by the receiving Party without restriction at the time of disclosure: or
 - 4.4 Is required to be disclosed by law or by any judicial, administrative or applicable regulatory authority to whose jurisdiction the receiving Party (or, as the case may be, its employees or professional advisers) is subject; provided, however, that the receiving Party has given the disclosure Party prompt notice of such demand for disclosure and the receiving Party reasonably cooperates with the disclosing Party's efforts to secure an appropriate protective order; or
 - 4.5 Is disclosed with the prior consent of disclosing Party; or was in its possession or known to it by being in its use or being recorded in its files or computers or other recording media prior to receipt from the disclosing Party and was not previously acquired by the receiving Party from the disclosing Party under an obligation of confidence; or
 - 4.6 The receiving Party obtains or has available from a source other than the disclosing Party without breach by the receiving Party or such source of any obligation of confidentiality or non-use towards the disclosing Party.
5. Each Party agrees not to remove any of the other Party's Confidential Information from the premises of the disclosing party without the disclosing Party's prior written approval. Each Party agrees to exercise extreme care in protecting the confidentiality of any Confidential

information which is removed, only with the disclosing Party's prior written approval, from the disclosing Party's premises. Each Party agrees to comply with any and all terms and conditions the disclosing Party may impose upon any such approved removal, such as conditions that the removed Confidential Information and all copies must be returned by a certain date, and that no copies are to be retained by the receiving Party.

6. Upon the disclosing party's request, the receiving Party will promptly return to the disclosing Party all tangible items containing or consisting of the disclosing Party's Confidential Information all copies thereof.
7. Each Party recognizes and agrees that all of the disclosing Party's Confidential Information is owned solely by the disclosing Party (or its licensors) and that the unauthorized disclosing or use of such Confidential Information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain. Accordingly, each party agrees that the disclosing Party will have the right to pursue any and all other rights and remedies available at law or in equity for such a breach.
8. Access to Confidential information hereunder shall not preclude an individual who has seen such Confidential information for the purpose of this Agreement from working on future projects for the receiving Party which relate to similar subject matters, provided that such individual does not make reference to the Confidential information and does not copy the substance to the Confidential information during the Confidentiality Period. Furthermore, nothing contained herein shall be construed as imposing any restriction on the receiving Party's disclosure or use of any general learning, skill or know-how developed by the receiving Party's personnel under the Agreement, if such disclosure and use would be regarded by a person of ordinary skill in the relevant area as not constituting a disclosure or use of the Confidential Information.
9. As between the parties, all Confidential Information shall remain the property of the disclosing Party. By disclosing confidential Information or executing this Agreement, the disclosing Party does not grant any license, explicitly or implicitly, under any trademark, patent, copyright, mask work protection right, trade secret or any other intellectual property right. The disclosing Party disclaims all warranties regarding the information, to the accuracy or utility of such information. Execution of this Agreement and the disclosure of Information pursuant to this Agreement does not constitute or imply any commitment, promise, or inducement by either Party to make any purchase or sale, or to enter into any/MOU/MOA/NDA agreement of any kind.
10. Either Party's failure to enforce any provision, right or remedy under this agreement shall not constitute a waiver of such provision, right of remedy.

11. Settlement of Disputes

In the event of dispute arising from this Agreement or in connection with its execution, the Parties undertake to endeavour to settle these amicably. However, if the Parties fail to resolve the disputes amicably, all disputes arising out of or in connection with this NDA shall be finally settled under the Arbitration and Conciliation Act, 1996 or amendments thereof by a sole arbitrator appointed by Unit head of BHEL. The arbitrator shall be fluent and well conversant

The seat of Arbitration shall be Haridwar.

- Signed on this (date) by the Parties to this NDA at Haridwar.

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Annexure – A

- 1. **Project Purpose:** Establishing technology for higher yield of critical castings
- 2. **Scope of M/s _____:**
As per attached “Detailed Scope of work and payment conditions”
- 3. **Confidential Information of BHEL.**
 - i. All details related to the project such as drawings & 3D Models, design documents, process details, test results/data, mail information, reports of BHEL etc.
 - ii. All file which is generated containing data.
 - iii. All information shared in oral or in written form by BHEL with_____.
 - iv. Information downloaded or taken in physical form shall be return/destroyed after use and not copied.

BHEL	_____
..... Name: Designation: Address as applicable Name: Designation: Address as applicable

Pre-Qualification Requirement (PQR)

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
<p>Vendor must confirm/specify details as demanded against each clause of this specification.</p> <p>Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.</p> <p>In case of response is "NO" against any clause the justification of that may be provided separately mentioning the clause number with its detail however non acceptance generally will be considered as noncompliance and hence offer may be rejected.</p>			
1.0	<u>OBJECTIVE:</u>		
1.1	In order to establish technology for manufacture of heavy steel castings to match to international standards, it is envisaged to have consultancy with leading domain expert group for heavy steel castings of Turbine and/ or other industrial products to enhance "Yield of Critical Castings" along with complete know how and know why of manufacturing. The consultancy is required for any 4 numbers of castings from the list provided along with relevant drawings & material specifications.	Vendor to confirm	
2.0	<u>PRE-QUALIFICATION CRITERIA:</u>		
2.1	Vendor must have experience in successfully providing consultancy for making steel castings with material grades (P91/P92/P91-1 or equivalent grade) for a minimum weight of 10 Tons per piece. Vendor has to submit complete company profile along with related manpower qualification and their experience. If consultant firm is hiring any other agency for specific consultancy work, information of that agency in terms of qualification of manpower and experience is to be shared.	Vendor to provide detailed Company profile along with manpower qualification and experience	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
2.2	Financial Position- Vendor to submit Copy of Audited Balance Sheet for last 3 financial years. Average Annual Financial Turnover during the last 3 years, ending 31 st March of the previous financial year, should be at least Rs.51.30 lacs.	Vendor to submit Copy of Audited Balance Sheet for last 3 financial years	
2.2 (a)	<p>Vendor to have experience of having successfully completed similar works (Definition of 'similar works' - as per clause 2.1) during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:</p> <p>a) Three similar completed works valuing not less than the amount equal to Rs.68.40 Lacs. OR</p> <p>b) Two similar completed works valuing not less than the amount equal to Rs.85.49 Lacs OR</p> <p>c) One similar completed works valuing not less than the amount equal to Rs.136.79 Lacs</p>	Vendor to submit required work order copies of the work, along with performance certificate from the customer to whom consultancy was provided. The work order copies should clearly indicate the customer details, scope of work (similar in nature) and total value of work.	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
2.2 (b)	MSE's (Micro & Small Enterprise) & Start-ups as defined in MSMED Act and/or Govt. Policy are exempted from clause 2.2 & 2.2 (a) of above mentioned qualification criteria as per clause no 3 and 4 of Circular No 1(2)(1)/2016-MA dated 10th March, 2016 of Ministry of MSME, GOI.	For such exemptions, vendor must submit documents undisputedly establishing them as a MSE or Start-Up entity, in the area as detailed in clause 2.1, valid as on the date of Tender Opening. Such documents shall include certificate of in-corporation, registration certificate, UAM/UDYAM certificate. For verification of UAM/UDYAM Certificate from CA, ITR & Balance Sheet to be submitted	
2.3	Vendor must have provided complete technical knowhow and know why for manufacture of steel castings weighing ≥ 10 ton in material grade P91/P92/P91-1 or equivalent grade to customers other than vendor's own or subsidiary organization, during last 7 years ending last day of month previous to the one in which applications are invited.	Vendor to submit the following document: Order copies of consultancy along with performance certificate of the customer indicating the detailed scope of work including material grade, weight of casting etc. up to dispatch.	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
2.4	Vendor must have proven records of achieving minimum yield of 65% Yield [i.e. <i>Rough weight of the casting (final casting+machining allowance+padding material) / Liquid metal weight X 100</i>] or prove out of minimum 55% Yield [i.e. <i>Casting production weight as per drawing / Liquid metal production weight X 100</i>], for manufacture of steel castings weighing ≥ 10 ton in material grade P91/P92/P91-1 or equivalent grade.	Performance certificate from customer clearly indicating the yield achieved as mentioned.	
2.5	Since this being a R&D project which necessitates compliance to all the essential technical eligibility criteria, hence no exemptions to MSME/startups as per MSME Ministry circular no. 1(2)(1)/2016-MA dt. 10.03.2016 can be given on technical ground . Hence exemption to 2.2 (a) as mentioned in 2.2 (b) is limited to financial portion only.	Vendor to take note and confirm	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
3.0	<p>SCOPE OF SUPPLY: Scope of supply includes Central Foundry Forge Plant (CFFP), a unit of Bharat Heavy Electricals Limited situated at Haridwar, is engaged mainly in manufacture of steel castings and forgings of various material grade and intricacies for power plant equipments. In order to upgrade the technology to match to international standards, it is envisaged to have consultancy with leading domain expert group for steel castings of Turbine and other industrial products to enhance "Yield of Critical Castings" along with complete know how and know why of manufacturing.</p> <p>It is intended to seek consultancy services for the following castings (any two sets).</p> <ol style="list-style-type: none"> 1. HP Outer Casing Inlet End (800MW), Drg. No: 0-105-26-30901, GX12CrMoWVNbN10-1-1 or equivalent) 2. IP Inner Casing (Upper Half & Lower Half, 660MW), Drg. No: 0-106-02-56901 GX12CrMoVNbN9-1 or equivalent) 3. HP Valve Casing (800MW), Drg. No: 0-112-22-30901, GX12CrMoWVNbN10-1-1 or equivalent) 4. IP Inner Casing (Upper Half & Lower Half, 800MW), Drg. No: 0-106-02-58901/30901 GX12CrMoWVNbN10-1-1/, GX12CrMoVNbN9-1 or equivalent) 5. IP Valve casing (Upper half & Lower Half, 660MW/800MW), Drg. No. 0-113-21-31902/31901/56901/56902, GX12CrMoVNbN9-1 or equivalent) 		
3.1	Submission of new methoding along with simulation study results as done by consultant.	Vendor to take note and confirm	
3.2	Running of BHEL simulation software (Procast) using new methoding files submitted by consultant.	Vendor to take note and confirm	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
3.3	Subsequent to successful submission of methoding process, calculations, methoding drawing and simulation files followed by simulation study at BHEL works, consultant has to review the existing methoding and simulation practice done by BHEL to provide knowhow for methoding calculation along with key features or parameters to be considered for simulation study.	Vendor to take note and confirm	
3.4	Suggestion and implementation of improvement points at various stages of operation/ process such as Pattern making, Moulding, Melting, Pouring, Heat Treatment, NDT, Upgradation, Welding etc.	Vendor to take note and confirm	
3.5	Advice on means to reduce liquid metal requirement or improvement in casting yield	Vendor to take note and confirm	
3.6	Melting and pouring technology for manufacturing of liquid metal in above mentioned grades using EAF, VAD and VOD.	Vendor to take note and confirm	
3.8	Solution for cracks at parting plane, transition zones or inside surface etc. observed after knockout or after heat treatment of casting.	Vendor to take note and confirm	
3.9	Revisit of defect repair procedure and advice suitably for effective methodology.	Vendor to take note and confirm	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
3.10	Solutions for no sand fusion/metallization in casting, facilitating easier and faster preparation for MP test.	Vendor to take note and confirm	
3.11	Providing complete know how for the type and technical specification/ data sheet of different moulding materials (e.g. Mould wash/ coat such as water based zircon paint etc., Isotherm tiles/ alternate material, Exo / Iso Thermic Powder etc.). Also to provide the testing procedures for all the Moulding materials suggested.	Vendor to take note and confirm	
3.12	Technical assistance and support at every stage of casting manufacturing process (right from methoding to final inspection and dispatch of the casting).	Vendor to take note and confirm	
3.13	Technical assistance for achieving clean steel along with know how about the best melting practices.	Vendor to take note and confirm	
3.14	<p>Prove out of minimum 65% Yield [i.e. <i>Rough weight of the casting (final casting+machining allowance+padding material) / Liquid metal production weight X 100</i>].</p> <p>Which is further defined as per the following condition:</p> <p>Prove out of minimum 55% Yield as per the calculation given below:</p> <p>[Casting weight as per drawing / Liquid metal production weight X 100]</p>	Vendor to take note and confirm	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
3.15	Maximum upgradation in terms of repair (defects after first UT testing) welding shall not be more than 2% of casting drawing weight.	Vendor to take note and confirm	
3.16	Technology know how of Induction Heating of Risers.	Vendor to take note and confirm	
3.17	Anything other than mentioned above which can bring in substantial improvement in overall quality as well as yield of the casting.	Vendor to take note and confirm	
3.18	Successful manufacturing and prove out of the agreed parameters for two sets of castings (4 Nos.) as finalized by BHEL from the list of castings mentioned above.	Vendor to take note and confirm	
3.19	Submission of detailed project report including complete know how and know why of manufacturing critical steel castings with improved yield (efficiency).	Vendor to take note and confirm	
4.0	Clarifications:		
4.1	Two sets of castings, as mentioned in point 3.18, is defined as below: If a casting has upper half and lower half, then both put together will form one set. If any casting is singular, then two pieces of the same or two different castings from the above mentioned list will get defined as a set. Similarly, two sets shall mean four castings to be manufactured which can be, multiple pieces of same drawing or four different drawings or combination thereof. However, all the castings shall be from the list mentioned above.	Vendor to take note and confirm	

Sl. No.	Details	Requirement from Vendor	Vendor's Response Yes (OK) /No
4.2	Selection of castings is BHEL's prerogative.	Vendor to take note and confirm	
4.3	All the materials (direct & indirect, including consumables), tools, man power and facilities required for manufacturing of these castings shall be in BHEL's scope.	Vendor to take note and confirm	

EVALUATION CRITERIA

Tender No.: FF:21: PSF:RV: WC: 08

Tender Name: Establishing technology for higher yield of critical castings

This section details evaluation criteria for PQC qualified bidders for determination of L1 Bidder for the works contracts for "Establishing technology for higher yield of critical castings" tender no. FF:21: PSF:RV: WC: 08 in Steel Foundry.

A. In line with the guidelines of QCBS based procurement of consultancy services vide SS&P circular no.30 of 2019-20 dated 09.09.2019- Amendment no.04 to Works policy -2016, "Guidelines for QCBS based procurement of Consultancy services", the subject contract comes under "specialized" category under cl.4.1 of the above mentioned circular. Since the subject consultancy necessitates high level of technical competency to meet the minimum deliverables, **the quality weightage shall be 70% and cost weightage shall be 30%**, as per cl.4.3.

B. Quality parameters are defined under the following heads:

Quality Parameters	% Marks
Consultancy Firm's specific experience	10%
Methodology	50%
Qualification and relevant experience of key staff	30%
Transfer of Knowledge	10%
Total	100%

C. Minimum Qualification marks for Quality Parameters.

The sub-parameters under each head of Quality parameter are as follows:

Quality Parameters	Sub Parameters	% Marks	Criteria	Requirement from Bidder	Basis of Marking scheme	Marks Awarded	Minimum Qualifying marks		
1.Consultancy Firm's specific experience	Past Experience of consultancy of similar nature	10	Bidder must have experience in successfully providing consultancy for making steel castings with material grades (P91/P92/P91-1 or equivalent grade)	Order copy of consultancy along with performance certificate of the customer indicating the detailed scope of work including material grade, weight of casting etc. up to dispatch.(As per CI 2.3 of Specification)	More than 30MT	10	7		
					25-30 MT	9			
					20-25MT	8			
					10-20 MT	7			
2. Methodology	Understanding of TOR* based on write-up	20	Understanding of complete scope of work, specification and requirement of BHEL	Submit a write up explaining the scope ,requirement and methodology of consultancy.	Evaluation of Write-up by Apex Committee of BHEL upto maximum marks of 20	14	21		
	Methodology	30	Yield [i.e. Casting dispatch weight as per drawing /Liquid metal production X 100], for manufacture of steel castings (casting grade and type as per CI 3.0 of specification)	Submission of write up of methodology for achieving the yield (round off to next higher integer) in subject castings as per cl 3.0 of Specification	Yield >= 67% Yield = 55%	30 21			
	1. Educational qualifications	20	Required educational qualification- Graduation or higher qualification in the field of Engineering with specialization in Metallurgy/Foundry Technology. Only manpower having experience of more than 10 years shall be considered for evaluation.	Bidder to provide detailed Company profile along with manpower qualification and experience (Valid documents showing the qualification of individual) (As per CI 2.1 of Specification)	Number of manpower having Graduation or higher qualification in the field of Engineering with specialization in Metallurgy/Foundry Technology	more than 5		20	
						5		18	
3.Qualification and relevant experience of key staff		20				14			
								4	16
								3	15
								2	14
4. Transfer of Knowledge	2. Professional experience in the required area of assignment	10	Years of Experience of providing consultancy in related field	Bidder to submit details of company profile (As per CI 2.1 of Specification)	more than 14	10	7		
					<11-14	9			
					<8-11	8			
					5-8	7			
4. Transfer of Knowledge	Key Skills to be transferred	10	Bidder to self-certify complete transfer of knowledge regarding this consultancy	Written Self certification by the bidder	Bidder's confirmation Yes/No	10	10		
					No	0			
Total		100					73		

Note: Quality Parameter- 4. Transfer of Knowledge-The Bidder has to self-certify through a written and signed declaration for complete transfer of knowledge regarding this consultancy. In case of negative response on the part of bidder, the offer shall not be considered for further processing.

*Terms of reference (TOR) include:

1. Detailed Scope of work and payment conditions
2. Specification for technology for higher yield of critical castings (Specification no.- SF/2021-22/SPEC/01 REV 00)
3. Pre-qualification criteria

D. Marking for Final Evaluation

1. Only those bids that have achieved minimum specified quality marks (for each parameters and overall), shall be considered further.
2. The bidder with highest quality marks (H-1 marks) shall be given maximum total quality score of 100 and other bids shall be computed as:

Total quality score = $(100 \times \text{bidder's quality marks}) / (\text{H-1 marks})$

3. The price bids will be opened and maximum score (100) shall be given to the lowest bidder (L-1). The cost score of other bids shall be computed as:

Cost Score = $(100 \times \text{L-1 price}) / \text{bidder's price}$

4. A combined score shall be arrived at, based on weighted total quality score and the cost score as:

$$\text{Combined Score} = (\text{Total quality score} \times 0.7) + (\text{cost score} \times 0.3)$$

5. For example, for 70:30 weightage assigned to quality and cost respectively, if the score against quality and cost is 90 and 80 respectively, then the combined score of a bidder shall be

$$90 \times 0.7 + 80 \times 0.3 = 87$$

6. Ranking shall be done in decreasing order of the combined score, calculated upto two decimal points (without rounding off). In the event of two or more bids having the same score in the final ranking, the bid with the higher total quality score shall be ranked higher.

7. The bid with the highest combined score shall be selected for further processing.

SPECIFIC TERM & CONDITIONS

SCOPE OF WORK & PAYMENT CONDITIONS

PROJECT: ESTABLISHING TECHNOLOGY FOR HIGHER YIELD OF CRITICAL CASTINGS

A. PREAMBLE

Central Foundry Forge Plant (CFFP), a unit of Bharat Heavy Electricals Limited situated at Haridwar, is engaged mainly in manufacture of steel castings and forgings of various material grade and intricacies for power plant equipments. In order to upgrade the technology to match to international standards, it is envisaged to have consultancy with leading domain expert group for steel castings of Turbine and other industrial products to enhance “Yield of Critical Castings” along with complete know how and know why of manufacturing.

It is intended to seek consultancy services for the following castings (any two sets).

1. HP Outer Casing Inlet End (800MW), Drg. No: 0-105-26-30901, (Mat. Grade -GX12CrMoWVNbN10-1-1 or equivalent)
2. IP Inner Casing (Upper Half & Lower Half, 660MW), Drg. No: 0-106-02-56901 (Mat. Grade - GX12CrMoVNB9-1 or equivalent)
3. HP Valve Casing (800MW), Drg. No: 0-112-22-30901, (Mat. Grade -GX12CrMoWVNbN10-1-1 or equivalent)
4. IP Inner Casing (Upper Half & Lower Half, 800MW), Drg. No: 0-106-02-58901/30901 (Mat. Grade - GX12CrMoWVNbN10-1-1/, GX12CrMoVNB9-1 or equivalent)
5. IP Valve casing (Upper half & Lower Half, 660MW/800MW), Drg. No. 0-113-21-31902/31901/56901/56902, (Mat. Grade - GX12CrMoVNB9-1 or equivalent)

Note: All the aforesaid drawings (latest version) along with material specification and casting technical qualifying requirements are provided.

In view of the above, offer has to be submitted considering the following:

B. SCOPE OF WORK

1. Submission of new methoding along with simulation study results as done by consultant.
2. Running of BHEL simulation software (Procast) using new methoding files submitted by consultant.

3. Subsequent to successful submission of methoding process, calculations, methoding drawing and simulation files followed by simulation study at BHEL works, consultant has to review the existing methoding and simulation practice done by BHEL to provide knowhow for methoding calculation along with key features or parameters to be considered for simulation study.
4. Suggestion and implementation of improvement points at various stages of operation/ process such as Pattern making, Moulding, Melting, Pouring, Heat Treatment, NDT, Upgradation, Welding etc.
5. Advice on means to reduce liquid metal requirement or improvement in casting yield.
6. Technological measures to improve feeder efficiency.
7. Melting and pouring technology for manufacturing of liquid metal in above mentioned grades using EAF, VAD and VOD.
8. Solution for cracks at parting plane, transition zones or inside surface etc. observed after knockout or after heat treatment of casting.
9. Revisit of defect repair procedure and advice suitably for effective methodology.
10. Solutions for no sand fusion/metallization in casting, facilitating easier and faster preparation for MP test.
11. Providing complete know how for the type and technical specification/ data sheet of different moulding materials (e.g. mould wash/ coat such as water based zircon paint etc., Isotherm tiles/ alternate material, Exo / Iso Thermic Powder etc.). Also to provide the testing procedures for all the moulding materials suggested.
12. Technical assistance and support at every stage of casting manufacturing process (right from methoding to final inspection and dispatch of the casting).
13. Technical assistance for achieving clean steel along with know how about the best melting practices.
14. Prove out of minimum **65% Yield** [i.e. *Rough weight of the casting (final casting+machining allowance+padding material) / Liquid metal production weight X 100*].

Which is further defined as per the following condition:

Prove out of minimum **55% Yield** as per the calculation given below:

[Casting weight as per drawing / Liquid metal production weight X 100]

15. Maximum upgradation in terms of repair (defects after first UT testing) welding should not be more than 2% of casting drawing weight.
16. Technology know how of Induction Heating of Risers.
17. Anything other than mentioned above which can bring in substantial improvement in overall quality as well as yield of the casting.

18. Successful manufacturing and prove out of the agreed parameters for **two sets** of castings as finalized by BHEL from the list of castings mentioned above (Point A).
19. Submission of detailed project report including complete know how and know why of manufacturing critical steel castings with improved yield (efficiency).
20. Technological measures for resource conservation and establishment of Eco-friendly manufacturing process plan.

Clarifications:

- I. Two sets of castings, as mentioned in point 18, is defined as below:
 - i. If a casting has upper half and lower half, then both put together will form one set. If any casting is singular, then two pieces of the same or two different castings from the above mentioned list will get defined as a set. Similarly, two sets shall mean four castings to be manufactured which can be, multiple pieces of same drawing or four different drawings or combination thereof. However, all the castings shall be from the list mentioned above.
 - ii. Selection of castings is BHEL's prerogative.
- II. All the materials (direct & indirect, including consumables), tools, man power and facilities required for manufacture of these castings shall be in BHEL's scope.

C. MILESTONE ACTIVITIES:

The critical broad milestone activities include:

1. Signing of Integrity Pact / NDA.
2. Making 3D Model of the casting followed by Methoding
3. Study of solidification pattern using Simulation Software and finalization of the Process drawing.
4. Review of Pattern Making Methodology in line with Process Drawing/ Method Drawing.
5. Documentation and finalization of manufacturing process plan including all the process parameters to be adhered to at every stage of activity such as Pattern making, Moulding, Melting, Pouring, Sand Cooling, Fettling, Heat Treatment, Marking, Upgradation (welding) and Final inspection (including all applicable tests) etc.

The document should also include all the technical details for type and specification of materials to be used for Pattern, Moulding Sand, Binders, Catalyst, Gating System, Venting, ISO/EXO material, Mould Coat, Isotherm Tiles, materials used for achieving clean melt etc.

6. Technical assistance/ support during Moulding.
7. Technical assistance during Melting and Pouring.
8. Technical assistance during heat treatment and fettling.
9. Technical assistance during upgradation.
10. Technical assistance during inspection till prove of the desired parameters as per the customer specification and the yield as well as upgradation targets as mentioned above.

D. PROJECT OUTCOMES

Following are the expected benefits of the proposed project:

1. Better Quality.
2. Yield of the steel castings should get enhanced to the minimum level as mentioned in point 14 of clause B.
3. Reduction in repair welding during upgradation as mentioned in point 15 of clause B.

E. TERMS OF PAYMENT

I. Stages of Payment

1. 15% after finishing the casting technology and submission of relevant documents (including CDs/ reports/ drawings, if any) for the mutually agreed items for manufacture of the castings.
2. 20% after finishing the Moulding and Pouring of 1st and 2nd set of items.
3. 20% after 1st NDT of 1st and 2nd set of items.
4. 15% after 1st and 2nd welding of both the set of items.
5. 20% after final inspection and prove out of all the parameters.
6. 10% after submission of detailed project execution report (considering complete know how, know why etc.)
7. Stage payments shall be released only after recommendation/confirmation by monitoring/reviewing committee.

II. Conditions of Payment

1. Two Part Bid System
2. No Advance Payment
3. All payments shall be released within 45 days after completion of the relevant stages
4. Travel & accommodation shall be borne by the consultant in case of domestic open tender.
5. In case of global tendering, if travel and accommodation is included in the scope of BHEL, then proper loading shall be done accordingly. Also the following conditions shall apply:

- Payment of travelling and accommodation shall be on actual cost basis subject to applicable maximum limits of BHEL upon submission of original documents.

(e.g. Travel Entitlement is Economy Class, Accommodation Entitlement shall be as per prevailing BHEL limits at the time of order placement etc.).

Moreover, the following eligibility criteria will be applicable for the staff of the consultant:

- **Project Manager:** Equivalent to **General Manager of BHEL**

Moulder / Melter / Grinder / Burner (Arc Air) / Heat Treater / NDT Tester / Welder: Equivalent to Senior Manager of BHEL

6. Contract Execution Bank Guarantee. 10% of Order Value and validity shall be beyond 30 days of completion of all the stages.
- Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
 - EMD given by successful tenderer shall be refunded after submission of bank guarantee.
 - The security deposit shall not carry any interest.

III. LD Clause

In case of any delay on the part of vendor, the LD shall be applicable. Because of delay attributed to vendor, the vendor fails to complete work on or before the scheduled date of completion as stated below, a LD amount equal to 0.50 percentage of the contract value for every week of extension sought beyond the scheduled date of completion up to max 10% of the contract value shall be imposed on vendor. Such amount may be adjusted or setoff against any sum payable to the vendor under this contract. No LD shall be imposed on vendor for the period of Force Majeure/ Reasons beyond the control of any party. The LD shall be applied for the stages as given below:

Vendor to adhere to on time completion of activities as given below.		
SI No.	ACTIVITY	LD
1.1	Finishing the casting technology and submission of relevant documents (including CDs/ reports/ drawings, if any) for the mutually agreed items for manufacture of the castings. For 2 sets of castings.	Within two months of issue of work order, delay beyond two months will result in LD.
1.2(a)	Finishing the Moulding of a casting.	Date of start of moulding shall be intimated at least 15 days in advance, the vendor to confirm his availability, delay of more than 1 day will result in LD .
1.2(b)	Finishing the Pouring of a casting	Date of pouring shall be intimated at least 15 days in advance, the vendor to confirm his availability, delay of more than 1 day will result in LD .
1.3	1st NDT of a casting	Date of start of NDT shall be intimated at least 15 days in advance, the vendor to confirm his availability, delay of more than 1 day will result in LD .
1.4	1st welding of a casting	Date of start of welding shall be intimated at least 15 days in advance, the vendor to confirm his availability, delay of more than 1 day will result in LD .
1.5	Final inspection and prove out of all the parameters of a casting .	Date of start of final inspection shall be intimated at least 15 days in advance, the vendor to confirm his availability, delay of more than 1 day will result in LD .
1.6	Submission of detailed project execution report (considering complete know how, know why etc.) of a casting	Detailed project execution report to be submitted within two weeks of completion of final inspection, , delay of more than 1 day will result in LD .

- IV. Penalty Clause-** Additionally, penalty of 2.5% of the contract value shall be applicable for every 1% decrease in the yield from the claimed value of the said castings during prove-out of the parameters as per cl C.2 of the Evaluation criteria.

Subject: Submission of Latest Detail by bidder.**Sir,**

Our Latest detail may please be updated in your records; details are as below-

Parameter	Yes/No/NA	Detail
Name of Company/ Business Firm		
Type of Company/ Business Firm (Pvt. Ltd/ Ltd/ Partnership)		
Company/ Business Firm Email ID		
Company/ Business Firm Postal Address		
Name of Owner		
Owner Mobile No.		
Owner Landline No.		
Contact Person		
Mobile No.		
Contact Person Email ID		
GST No. (Copy Attach)		
PAN No. (Copy Attach)		
PF No. (Copy Attach)		
ESI No. (Copy Attach)		
MSME Status (Yes/No)		
Udyam Certificate for MSME to be submitted (in case of exemption of EMD)		
CA certificate for MSME in support of Udyam Certificate to be submitted (in case of exemption of EMD)		
Acceptance of Reverse Auction (RA) as per requirement of NIT (Yes/No)		
PQC/ General and Special Terms & Conditions		
Completion certificate (Copy Attach)		
Remarks, if any		
Contractor's Sign & Stamp on each submitted page		

Supporting documents, if any, to be submitted with tender.

Sign & seal of Contractor

Certificate by Chartered Accountant on letter head

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

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

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.0.1722(E) dated October 5, 2006:

Rs.....Lacs.

Turnover Rs.....Lacs.

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:

Rs.....Lacs.

Turnover Rs.....Lacs.

(Strike off whichever is not applicable)

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

Or

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

Date:

(Signature)

Name-

Membership number-

Seal of Chartered Accountant-

UDIN-

SELF-CERTIFICATION

As per Government Public procurement order no. P-45021/2/2017-BE-II dt.15.06.2017 & P45021/2/2017-PP (BE-II) dated 28.05.2018, 29.5.2019, 04.6.2020 and amendment dated 16.09.2020, it is hereby certifying that we

.....
.....
(supplier/Vendor name) are (Class-I/Class-II) local supplier and will meet the requirement of minimum local content of (50%/20%) as defined in public procurement order dated 04.6.2020 for Tender

NIT No:.....

Details of location at which local value addition will be made is as follows: -

Tender Item Sr. No.	Local Content Calculated (%)	Imported Content including all Custom Duties (%)	Location of Value Addition

We also understand, false declarations will be in breach of the code of integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the general financial rules along with such other actions as may be permissible under law.

Note:

As per office order P-45021/102/2019-BE-II-Part (1) (E-50310) Dated 04/03/2021, Bidders can't claim itself as "Class-I local supplier/Class-II local suppliers" by claiming the service such as transportation, insurance, installation, commissioning, training & after sales service support like AMC/CMC etc. as local value addition. Bidder offering imported product will fall under the category of Non-Local supplier.

Seal & Signature of Supplier/Vendor

PRICE BID FORMAT

Name of Contractor:

Tender No. : FF:21:PSF:RV:WC:08:060.

Tender Name : Establishing Technology for higher yield of Critical Castings.

Work/Item	Unit	Qty.	Rate in Rs. Per Unit (In digit)	Rate in Rs. Per Unit (in words)	Total Value in Rs. (In digit)
Establishing technology for higher yield of critical castings, finishing of casting technology, Technical assistance for pattern making, moulding, melting and pouring, Technical assistance during heat treatment and fettling, Technical assistance for welding, Final inspection and proving out of parameters, Submission of detailed project report.	No. of Castings	4			
Total Value in Rs. (In Digits)					
Total Value in Rs. (In words)					

Important note:

1	GST payable shall be extra as applicable.
2	Contractor has to fill his quoted rates in columns given above (in digits & words both). In case of any difference between rates filled/quoted in <i>digits</i> & <i>words</i> by the contractor, only rates filled/quoted in <i>words</i> shall be acceptable. Incomplete/wrong/over-written forms shall be Countersign by the contractor.

(Signature and Seal of the Contractor)
