



**BHARAT HEAVY ELECTRICALS
LIMITED ASSCP Gurugram-122003**

RD:DP:MPX:F-04

ENQUIRY

Ref: 99207016

Date: 21.12.2020

To

Enquiry for Exhaust System Revamping

Enquiry No: 99207016 Enquiry Date: 21.12.2020 Due Date: 21.01.2021 indicate work completion: One month

| Sl. No | Item Description | Specification | Unit | Quantity |
|--------|---|----------------------------|------|----------|
| 1. | Exhaust system as detailed in technical specification with fabrication, installation, commissioning and testing | As per enclosed Annexure 1 | | |

Please submit your quotation for the above material in sealed cover superscribed with enquiry no, enquiry date and due date subject to our enclosed terms and conditions. The quotations shall reach us on or before the due date by 12 noon. The tenders can also be dropped in the tender box kept at the security gate, ASSCP. In case you are not in position to submit the offer, please send reply suitably specifying the reasons.

| Sl. No | Description | Document Ref. |
|--------|--|---------------|
| 01 | Enquiry, PQC, General Terms & Conditions, Commercial Terms & Conditions etc. | Volume - 1 |
| 02 | Technical specifications, Scope of Supply etc. | Volume - 2 |

Sl. No Vendor Name and code

1

Ashish Kumar
Sr. Engineer (PME)

**ENQUIRY & QUALIFYING CRITERIA**Volume - 1
Enquiry No.
99207016

Exhaust System Revamping

| | | |
|---|--|--|
| 1 | Tendor inviting officer / Authority, Designation and Address | Sr. DGM BHEL ASSCP Gurugram Faridabad Highway, Gwalpahari Gurugram -122003 |
| 2 | Item Description – Qty. | Exhaust system as detailed in technical specification with fabrication, installation, commissioning and testing -1 nos. |
| 3 | Enquiry Reference no. | 99207016 |
| 4 | Indicative Delivery Date | 1 Month from date of acceptance of WO |
| 5 | Due date, Time and place for submission of tender | 21.01.2021 up to 12 noon. Sealed Quotations shall be addressed to Sr. DGM BHEL ASSCP Gurugram Faridabad Highway, Gwalpahari Gurugram -122003 Quotations can also be deposited in the Tender box located at Security Gate of BHEL ASSCP BHEL shall not be responsible for any postal/courier delay |
| 6 | Place, Date and time of Tech-Bid opening | Tender Opening Cell BHEL ASSCP. 21.01.2021, 2 PM |
| 7 | Mode of Submission of Tender | Please submit your offer in one common sealed cover containing Two parts in separate sealed covers as detailed below. 1) First Cover shall contain: Signed General Terms & Conditions (GTC) Filled and Signed Commercial Terms & Conditions (CTC) Filled and Signed Vendor Specifications against BHEL Spec Signed commercial bid Copy of Price-bid with price(s) cells blank (un-priced price bid) 2) Second cover shall contain Price Bid Containing Price quotes, applicable taxes, installation and/or commissioning charges shall be spelt out clearly taking into account total charges rather than quoting vaguely such as charges per man day or charges per engineer per day etc. If the price bid was found later to be different from the unpriced price bid format in any way, the offer will be rejected summarily. The rates shall be quoted both in figures and in words. The offers can also be submitted through e-mail and have to be sent in PDF format (files with PDF extension only). Files having extensions other than PDF like RAR, EXE, JPEG etc. and with external links will not be considered. They have to be sent to e-mail id: asscptender@bhel.in' only. Copies should not be marked to anyone. If the offers are marked to anyone other than to asscptender@bhel.in, their offer will not be considered. The e-mail offers should have two attachments. 1) One attachment shall contain Signed General Terms & Conditions (GTC) Filled and Signed Commercial Terms & Conditions (CTC) Filled and Signed Vendor Specifications against BHEL Specifications (Item wise) Signed commercial bid Copy of Price-bid with price(s) cells blank (un-priced price bid) The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date. |

**GENERAL TERMS & CONDITIONS (GTC)**Volume - 1
Enquiry No
99207016

Exhaust System Revamping

| SL. No. | Clause | BHEL REQUIREMENT |
|---------|-----------------------------|--|
| 1 | Preferences to MSEs | <p>Preferences as mentioned in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 shall be given to Micro and Small enterprises.</p> <p>Main points which are mentioned in the above Policy are as follows:</p> <p>1) In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 percent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply at least 20 percent of total tendered value provided that the tendered quantity is divisible into two or more orders and adequate for the purpose; all qualifying bidders have agreed for acceptance of part-order quantity and participating MSE matches the L1 rate.</p> <p>2) In case that two or more MSEs are within the L1 +15% band, all such MSEs will be offered the opportunity to match the L1 rate and 20% of the order will be shared equally by them.</p> <p>3) Where the MSE is SC/ST owned, they shall be exclusively awarded a share of 4% of the above 20% in addition to equally sharing the balance 16% with other non-SC/ST MSEs.</p> <p>4) In case of more than one SC/ST MSE matching the L1 price, they shall equally share 4% of the order, and additionally share the balance 16% with other non-SC/ST MSE bidders.</p> <p>5) Up to 4% of the tendered quantity shall be procured from MSE's owned by SC/ST's at L1 price. Failure to participate by any MSE owned by SC/ST's this quantity shall be procured from other MSEs.</p> <p>6) Above preferences are for procurement of only goods produced and services rendered by MSEs and not for any trading activities by them. An MSE Unit will not get any purchase preference over another MSE Unit.</p> <p>7) MSE bidders must submit registration certificates from bodies specified by the Ministry of MSME.</p> <p>8) SC/ST owned enterprises (i.e. SC/ST proprietorship, or holding minimum 51% shares in case of Partnership/Private Limited Companies) shall additionally submit relevant SC/ST certificates issued by any of the following: District/Additional District Magistrate /Collector/Deputy Commissioner/ Additional Deputy Commissioner/Deputy Collector/1st Class Stipendiary Magistrate/Sub-divisional Magistrate / Taluka Magistrate / Executive Magistrate/ Extra Assistant Commissioner Chief Presidency magistrate /Additional Chief Presidency magistrate /Presidency magistrate Revenue Officer not below the rank of Tehsildar Sub-divisional Officer of the area where the individual and/or his family normally resides</p> <p>a. The registration shall be valid as on date of placement of order. A self- attested photocopy of the relevant certificate shall be submitted as a support document.</p> <p>b. The registration must be for the items/category of items /services relevant to the tendered items/category of items/services</p> <p>All these benefits are subject to production of all statutory documents as per General Terms & Conditions (GTC) of enquiry along with Udyog Aadhaar Number</p> |
| 2 | Preference to Make in India | <p>For this procurement, Public Procurements (Preference to make in India), order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract / PO/ WO against this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable. Default margin of purchase preference shall be 20% to local suppliers with default minimum local content of 50%.</p> |
| 3 | General | <p>a. All offers must include name of the contact person, phone no/mobile no, Fax no, email-id. Unsigned offers are liable for rejection.</p> <p>b. Where ever vendor registration form and EFT details have been submitted earlier, the same need not be submitted again unless there is a change.</p> <p>c. L1 status shall be decided on Cost to BHEL Basis.</p> |
| 4 | Late Tenders | <p>Tenders received after due date/time(12:00hrs) will not be considered</p> |

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| 5 | Discrepancy in words and figures | <p>(a) If, in the price structure quoted for the required goods/ Services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of 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.</p> <p>(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>(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 subject of (a) and (b) above.</p> <p>(d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.</p> |
| 6 | Two Part bid clarifications | In the case of Two-part bid, the vendor should furnish technical and commercial clarifications, if any, within stipulated time mentioned, failing which, it will be construed that the vendor is not interested in the tender and BHEL shall not consider the offer for further evaluation. |
| 7 | Price Impacts | In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise their original bid, they have to submit the Price-Impact only. The Original price bid along with Price-Impact bid shall be opened during price bid opening. Unsolicited price impacts will not be considered. |
| 8 | Price bid evaluation | All offers in price bid opening shall be evaluated in Indian currency based on unit price, packing & forwarding, taxes/duties, freight charges if any, exchange rate. Loading due to non-acceptance of our standard commercial terms will be evaluated as per the LOADING FACTORS form as enclosed along with the enquiry. |
| 9 | Packing | The supplier shall be responsible for the goods being properly and adequately packed so as to prevent any loss, damage or deterioration during transit. |
| 10 | Withdrawal | In case the supplier withdraws their offer before placement of order, BHEL reserves the right not to send next enquiry(ies). In case the supplier withdraws the quotation after its acceptance by BHEL or fails to supply the goods as per the terms and conditions of contract, or at any time repudiated the contract wholly or in part, BHEL shall be at liberty to cancel the Purchase Order and to recover from the supplier the extra cost and other loss, incidentals due to the breach of contract on the part of the supplier through risk purchase. |
| 11 | Risk Purchase | In case of default/late delivery, BHEL reserves the right to make alternate arrangement for procurement at suppliers risk and cost. |
| 12 | Banned List | The offers of the bidders who are in the banned list and the offers of the bidders who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com. Guidelines for suspension of business dealings with suppliers/contractors are available on www.bhel.com under supplier registration page |
| 13 | Over All L1 | Order will be placed on overall L1 basis. Vendors should quote for all items, otherwise the offer will be rejected. |
| 14 | Additional Information | Suppliers are requested to visit our web site regularly for any updates and additional information, "All corrigenda, addenda, amendments, time extensions clarifications, etc. to the tender will be hosted on BHEL website only". The corrigendum will not be published in newspaper. |
| 15 | Arbitration | Subject to the jurisdiction of Gurugram, Haryana, India in respect of any suit or other legal proceedings relating this contract. |
| 16 | Micro Small Enterprises (MSEs) | <p>MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II certificate having deemed validity (Two years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM II certificate along with CA certificate (Format as below) applicable for the year, certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) Where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.</p> <p>Certificate by chartered Accountant on letter head</p> <p>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) dated....., Category..... (Micro/Small). (Copy enclosed).</p> <p>Further verified from the Books of Accounts that the investment of the company as on date..... as per MSMED Act 2006 is as follows:</p> <ol style="list-style-type: none"> 1. For manufacturing Enterprises: Investment in plant and machinery (i.e. Original cost excluding land and building and the items specified by the ministry of small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006. 2. For Service Enterprises : Investment in equipment (Original cost excluding land and building and |

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| | | <p>furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: Rs..... Lacs The above investment of Rs..... Lacs is within permissible limit of Rs..... Lacs for.....Micro/Small (Strike off which is not applicable) Category under MSMED Act 2006.</p> <p>Date:</p> <p>(Signature) Name- Membership number -- Seal of Chartered Accountant</p> |
| 17 | Destination | Destination shall be ASSCP, BHEL, Gurugram Haryana - 122003. |
| 18 | Fraud Prevention Policy | The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice. |
| 19 | Signing & Stamping | Documents of BHEL's all Terms and conditions submitted with the offer shall be signed and stamped in each page of authorized representative of the bidder |
| 20 | EMD | Rs. 9,239/- |
| 21 | Security Deposit | Rs. 23,097/- |

Documents submitted with the offer shall be signed and stamped in each page of authorized representative of the bidder

Read and agreed for all the above general terms and conditions

Signature of the bidder with Seal & Date

**COMMERCIAL TERMS & CONDITIONS (CTC)**Volume - 1
Enquiry No
99207016

Exhaust System Revamping

| SL. No. | Clause | BHEL REQUIREMENT | SUPPLIERS ACCEPTANCE / REMARKS |
|---------|---------------------------------|---|--------------------------------|
| 1 | Late Delivery Penalty Clause | Failure to supply the goods and/or Failure to carry out the services within the stipulated delivery date will attract a penalty of 0.5% per week to a maximum of 10% of the total order value. The Penalty amount determined based on the delay in supply/services along with applicable GST thereon shall be recovered. In case of non-acceptance to this LD Clause, 10% of basic cost will be loaded on the quoted prices while cost comparison.(Please refer the enclosed 'Loading Factors' sheet). | |
| 2 | Payment terms for Indian Offers | Vendor to indicate appropriate applicable HSN code for Goods as well as SAC for services based on Inter/Intra state. In case the bidder has opted for composite GST scheme, the same may be stated explicitly in both and Techno-Commercial & Price bids. BHEL will pay only basic price to the vendor and release the GST payment only when the proof of remittance is given. | |
| 3 | Two part | <p>Please submit your offer in one common sealed cover containing two parts in separate sealed covers as detailed below.</p> <p>1) First Cover shall contain:</p> <ul style="list-style-type: none">a. Signed General Terms & Conditions (GTC)b. Filled and Signed Commercial Terms & Conditions (CTC)c. Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)d. Signed commercial bide. Copy of Price-bid with price(s) cells blank (un-priced price bid) as per annexure <p>2) Second cover shall contain Price Bid Containing Price quotes, applicable taxes, installation and/or commissioning charges shall be spelt out clearly taking into account total charges rather than quoting vaguely such as charges per man-day or charges per engineer per day etc. as per annexure.</p> <p>If the price bid was found later to be different from the unpriced price bid format in any way, the offer will be rejected summarily. The rates shall be quoted both in figures and in words.</p> <p>The offers can also be submitted through e-mail and have to be sent in PDF format (files with PDF extension only). Files having extensions other than PDF like RAR, EXE, JPEG etc. and with external links will not be considered. They have to be sent to e-mail id: asscptender@bhel.in only. Copies should not be marked to anyone. If the offers are marked to anyone other than to asscptender@bhel.in their offer will not be considered.</p> <p>The e-mail offers should have two attachments.</p> <p>1) One attachment shall contain</p> <ul style="list-style-type: none">a. Signed General Terms & Conditions (GTC)b. Filled and Signed Commercial Terms & Conditions (CTC)c. Filled and Signed Vendor Specifications against BHEL Specifications (Item wise)d. Signed commercial bide. Copy of Price-bid with price(s) cells blank (un-priced price bid), as per annexure <p>2) Second attachment shall contain Price Bid Containing Price quotes, applicable taxes, installation and/or commissioning charges shall be spelt out clearly taking into account total charges rather than quoting vaguely such as charges per man-day or charges per engineer per day etc. as per annexure.</p> <p>The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date.</p> | |
| 4 | Validity of Offer | 90 days from date of techno-commercial bid opening. | |
| 5 | Price basis | The prices shall be firm for entire period of contract. The suppliers shall indicate packing and forwarding charges, if any, separately. All suppliers shall quote the lowest prices on 'free delivery at BHE ASSCP Stores or F.O.R destination' basis only. | |

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| 6 | Delivery Period | <p>Suppliers are requested to quote within the delivery date mentioned in the enquiry. They shall also mention one of the following delivery periods compulsorily.</p> <p>1) Delivery Period from date of Word order =====</p> <p>2) Delivery Period from receipt of material / input data / drawings etc. from BHEL===== (if applicable)</p> <p>3) Delivery Period from receipt of approval of design documents / drawings etc. by BHEL===== (if applicable)</p> <p>However, BHEL shall inform the vendor about rejection of the offer before price bid opening in case of not meeting the delivery requirements of BHEL.</p> | |
| 7 | Taxes Duties: | <ol style="list-style-type: none"> 1. To enable BHEL to avail GST Input tax credit, Contractor shall submit GST compliant Tax invoice containing all the particulars as stipulated under Invoice Rules of GST Law. Payment shall be made to the Contractor only after submission of GST complaint Tax invoice. The Contractor shall raise GST compliant invoice affixing GSTIN of BHEL's unit availing the services. 2. BHEL reserves the right to protect its interest against any loss on account of availability of GST credit. 3. GSTIN of BHEL will be provided to the Contractor along with the work order. 4. Any new/change in statutory levy as and when made applicable by the Government shall become applicable against documentary evidence. 5. Payment to the Contractor will be subjected to TDS as per rules in force from time to time. The Tax Deduction at Source (TDS) shall be done as per the provisions of Income Tax Act GST, as amended from time to time and a certificate to this effect shall be provided to the Contractor by BHEL. 6. Applicable GST shall also be recoverable from the Contractor in case of LD recovery/ penalty on account of breach of terms of contract. 7. Invoice submitted should be in the format as specified under GST Laws viz. all details as mentioned in Invoice Rules like GSTIN registration number, invoice number, quantity, rate, value, taxes with nomenclature - CGST, SGST, IGST mentioned separately, HSN (Harmonized System of Nomenclature) Code / SAC (Services Accounting Code) Code etc. 8. The Contractor has to give an undertaking that GST as mentioned in the invoice has been/will be paid and also file returns as per respective extant rule. | |
| 8 | Nature of Vendor submitting the Offer | OEM / Agent / Representative / Dealer / Distributor / Stockiest / Trader / Reseller / Channel Partner/ System Integrator / Any Other (Pl. Specify) | |

Me: All the clauses of the above format should be filled and submitted with the Techno Commercial Bid (Part-1). The filled in BHEL Commercial terms & Conditions format submitted with technical bid, responding to all the clauses duly signed with seal **only shall be considered**. Any other Commercial terms & conditions of bidders entered elsewhere in their offer shall not be considered and are liable for rejection.

Read and understood the above commercial terms and conditions

Signature of the bidder with Seal & Date

**OTHER TERMS & CONDITIONS**Volume - 1
Enquiry No
99207016

Exhaust System Revamping

| SL. No. | Clause | BHEL REQUIREMENT | SUPPLIERS ACCEPTANCE / REMARKS |
|---------|---------------------|---|--------------------------------|
| 1 | Technical queries | Contact Mr. Nitish Kumar ; Sr. Engineer (Ph:9971040833), Email id nitishkumar@bhel.in for any technical queries. | |
| 2 | Payment Term | 100% Payment will be made within 30 days by electronic fund transfer / RTGS with bank charges, if any, to supplier's account (submit EFT format as enclosed, if not submitted) from the date of receipt and/or completion of services, subject to acceptance of the goods and/or services at destination.& payment of GST against submission of proof and reflection of the same in GSTR-1. | |
| 3 | Details required | IT Permanent Account No. (PAN); GSTIN Registration Status: Tax type: CGST/SGST/IGST/UGST GSTIN No: GSTIN No. Issuance Date : Provisional/ Final Registration : Name of the Contact Person : Contact Phone / Mobile : Email id for correspondence : Address with PIN code and State: HSN code, service account code. | |
| 4 | TDS/Withholding tax | TDS/Withholding tax shall be deducted as per statutory norm | |

Signature of the bidder with Seal & Date

1. Scope of Work:

This specification covers the requirements for the supply, installation, testing and commissioning of exhaust system for Process & operation area of PERC Silicon Solar Cell Manufacturing i.e. Diffusion Furnace & PECVD. Along with the system, supplier must provide a three phase, 415V supply at the terminal of the control panels as per location wherefrom the power is to be taken through starter to the fans. The control panel onwards the work is in the scope of the supplier. The exhaust system installation, commissioning & testing is being procured as one lot.

2. Supply

The supply of the items and works, mentioned below shall be considered as one set.

| S.no | Item | Size/Material/Rating | Qty |
|------|--|---|----------|
| 1 | Pipe | 10" MS pipe made from 22 Gauge Sheet .Complete with red oxide and enamel. | 20 meter |
| 2 | Duct | 400mmX300mm /GI 22 Gaze Sheet for 5000 CFM blower | 150 ft. |
| 3 | Exhaust Blower | Blower 5000CFM/5HP Motor (Siemens/ABB Make/Equivalent) / 3 Phase / 4 Pole / IE2 / 415 Volts / 1480 RPM / Static Pressure 70mm of WC. Direct Drive Exhaust Blower with Industrial Fan RL5000 | 4 Nos |
| 4 | Electrical Control Panel | Starter (8 Nos) with relay (8 Nos) <ul style="list-style-type: none"> • L&T / Schneider Make. • With emergency stop switch • With volt meter and Ampere meter display • Complete with all LED indicators • Complete with ELCB and MCB • Size of the Control Panel 800mmx800mmx200mm, Powder coated • Automatic on during power failure | 1 Nos |
| 5 | Dampers | Damper for 10" pipe | 6 Nos |
| 6 | Support Structures | MS angle Support structure to hold duct of 400mm X 300mm. Size of Angle 1.5" X 1.5" X 0.15". Complete with all holding accessories, complete painting of the structure with red oxide and enamel paint | 200 ft. |
| 7 | Installation , Commissioning & Testing | Installation of Blower , Control Panel , testing of system as per acceptance criteria | 1 Nos |

- The civil work of foundation; item like anti-vibration pads etc. shall be in the scope of bidder.
- Suction ducting for Exhaust gases /air from the process hall shall be in the scope of bidder. Supplier shall also submit the drawing of piping, ducting etc. for approval before starting their work.
- Control Panels: Suppler shall also submit the control panels logic diagram for approval before starting manufacturing panel.

3. Installation

After placement of the purchase order, the supplier's representative shall visit the site within a week. The supplier's representative shall submit final recommendation for the installation of exhaust fans, duct & control panel to be placed in various locations and supply layout drawing indicating the details.

4. Testing & Commissioning

The supplier shall prepare a commissioning procedure to be approved by the purchaser. Testing and commissioning of the system shall be carried out as per this approved procedure only. The cost of installation, commissioning & testing shall be quoted separately and lack of the same shall be deemed as incomplete quotation and shall be liable for rejection. The entire scope of the works shall be executed by ensuring BHEL compliance.

5. Documentation and Handing Over

Documentation for the handing over shall be as follows:

- a. All documentation shall be written in good, simple and concise English and shall be bound with hard covers.
- b. The document shall be updated regularly as the installation progresses.
- c. No change should be allowed after approval of BHEL for installation layout, wiring, cabling and design.
- d. The final edition of the hand-over documents (3 copies) shall include installation, commissioning, operation and maintenance aspects, technical details of components, as built drawings & device charts of the system and tests carried out during commissioning.

6. Pre-qualification Criteria/Requirements (PQC/PQR):

- a. Average annual financial turnover during the last three years ending 31st March of the previous year should be at least 30% of the present estimated tender cost.
- b. The bidder shall be regularly engaged in air ventilation works/ Exhaust Works and must have experience of having successfully completed similar works during last seven years ending last day of month previous to the one in which applications are invited should be either of the following: -
 - i. Three similar completed works costing not less than the amount equal to 40% of the estimated cost.
or
 - ii. Two similar completed works costing not less than the amount equal to 50% of the estimated cost.
or
 - iii. One similar completed work costing not less than the amount equal to 80% of the estimated cost
- c. The bidders shall furnish copies of the Purchase Order/Work order and completion certificate along with contact address including e-mail and phone etc. Purchaser may visit the completed work site/sites of the bidder, if required.

7. Tender submission requirement

The tender submission shall show compliance to the specification and shall include a full set of descriptive and technical literature on the equipment and system proposed. Necessary catalogues shall be enclosed. In case photo copy of catalogue is submitted, the supplier shall be required to submit original copy whenever asked by the purchaser. For all standard bought out items, the supplier shall submit the information of make, model with documentary support before making any supply. The approval of the purchaser shall be required for the same.

8. Warranty

Warranty shall be for a period 12 calendar months after the successful completion and testing of Exhaust system. Warranty certificate shall be provided on a non-judicial stamp paper of rupees 100/-

9. System Description

The exhaust system consists of exhaust fans, Blower, control panels and ducting as given in clause 2.0. The tentative exhaust system sketch is placed at Annexure-1. The entire exhaust system shall be of sturdy construction with anti-vibration pads and suitable supports to ensure freedom from vibration while running. The entire fan housing shall be mounted on MS channel framework and duly powder coated to prevent formation of rust. The vibration of the Smoke exhaust fans shall not exceed a peak-to-peak displacement of 100 µm. For all Fans, serrated rubber pads shall be provided for vibration isolation. The ducting also shall be painted with anti-corrosion paint.

10. Details of required exhaust fans/blower:

- a. Each sector of exhaust must contain two ducts opening and connected. Three such type sectors connected to exhaust fan with control panel. The location of control panel is fixed and new control panel should replace the existing panel. The fan shall meet AMCA standard and the fan shall be of following specification:

- i. Flow required: ≥ 5000 CFM of air at room temperature
 - ii. Temperature rating: 200 deg C
 - iii. Suction pressure: ≥ 150 mm of water column
 - iv. Discharge pressure: Free air delivery to the exhaust with louver
 - v. Type of fan: Centrifugal direct driven fan
 - vi. Type of blade: Backward curve
 - vii. Efficiency of fan: $\geq 75\%$.
 - viii. Vibration: Anti vibration pad to achieve $\leq 100 \mu m$
 - ix. Noise: 85 dB at 3 m distance
- b. The body of the fans has to be rust proof. The fan & fan motor shall be assembled on a frame, which shall be mounted on the floor of the casing with serrated rubber based vibration pads.
 - c. The fan outlet shall be connected to the casing with fire retardant fabric acting as a flexible connection to avoid any vibration from the unit on to the ducts.
 - d. Fan motor shall be totally enclosed fan-cooled type and shall be suitable for 415V /3 Phase / 50 Hz.
 - e. Fan motors shall be provided suitable for 415 V, 50 Hz, 3-phase. There shall be a squirrel - cage, totally enclosed motor with integral fan and provided with IP-55 protection. Fan shall be driven by the motor directly. Minimum rating of motor shall be 5HP, 4 pole at 50 Hz, 415V, 3 phase. Insulation of the motor shall be F-grade or above.
 - f. Motor shall be rated for continuous running at rated load. Make: Crompton Greaves / ABB/ Siemens or equivalent.
 - g. The ducting shall fit into the frame of dimension as specified in clause 2.0 to draw suction from the process room. This shall fit into 400 diameter ducting with SWG10 thickness which shall be connected to exhaust. The material of the ducting shall be GI with minimum thickness of SWG 10. SWG10 sheet shall be taken and it shall be rolled to pipe. The support shall be designed by the supplier. The approximate length of the ducting is specified in clause 2.0. The pipe sizes for the air flow passages of the system shall be decided by the bidder in line with the NATIONAL BUILDING CODE OF INDIA with due consideration of flow velocities, pressure differential, internal surface finish and the strength of the piping.

11.0 Safety features

Exhaust System shall have safety features as described below:

- i. Fan and motor shall be mounted on a vibration pad.
- ii. Base shall have proper earthing provision. The earthing shall be connected to equipment earthing provided nearby.
- iii. All screws used for panel fixing, projecting inside the unit shall be covered with PVC caps to avoid human injury.
- iv. Emergency key switch shall be provided at each fan unit to cut off power while working at BHEL ASSCP Gurugram.

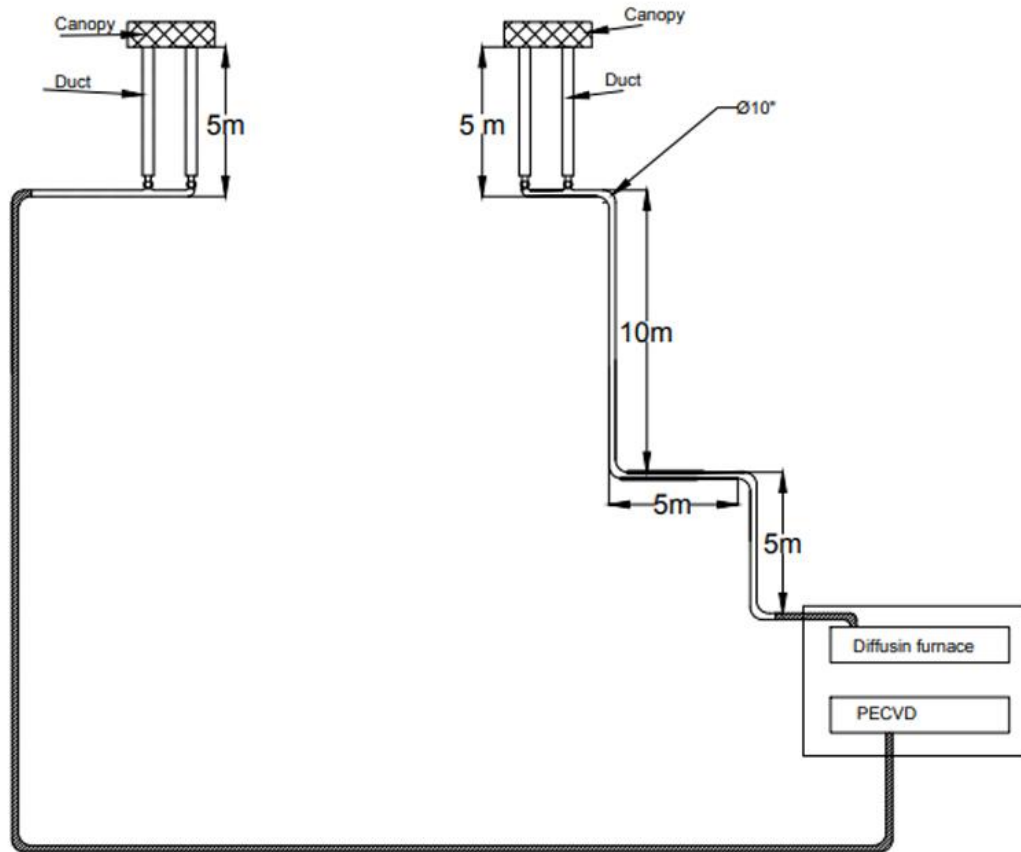
12.0 Acceptance criteria

- i. Procurement, fabrication with installation commissioning and testing of exhaust system shall be completed within 45 days after placement of work order.
- ii. Performance test certificate of the fans shall be provided by the supplier.
- iii. The following tests shall be performed successfully:
 - a. In situ Pressure Vs Flow test to verify performance at BHEL ASSCP Gurugram.
 - b. Vibration measurement of ducting and fans.
 - c. Fan vibration shall not be transmitted to the ducting and the ducting shall not vibrate due to flow induced vibration.
 - d. Noise from the fans shall be ≤ 85 dB at 3 m distance.
 - e. Duct fittings and gland fittings on the motor coupling shall be leak proof.
 - f. The purchaser will verify and check that the work is executed as per the specification.

FIRST ANGLE PROJECTION

| | | | | | | | | | |
|------|------|---------|------|------|---------|------------------------|------|--------------------|------|
| REV | DATE | ALTERED | REV | DATE | ALTERED | GMS No./ C.B.O.M.- NO. | | STATUS OF DRG U | |
| | | CHECKED | | | CHECKED | | | | |
| ZONE | | | ZONE | | | AGREED DEPT | NAME | SIGN | DATE |
| | | | | | | | | | |

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Note:-

1. All dimensions are in meter
2. Pipe dia.= 10"
3. Duct cross-section=(400x300) mm
4. Already built pipe

| | | | | | | | | | |
|--------------------------|--|--------------|---------------|------------------------|------------------|----------|--------------|------------|------------|
| Ref. Drawing No. | BHARAT HEAVY ELECTRICALS LTD. ASSCP, GURUGRAM | | | | DRN | Priyanka | -SD- | 15/12/2020 | NO. OF VAR |
| | Sign & Date | CHD | Devdutt Singh | -SD- | 15/12/2020 | | | | |
| APPD | | Dr. B.K.Pant | -SD- | 15/12/2020 | | | | | |
| Inventory No. | DEPT | SCALE | WEIGHT (KG) | REF. TO ASSY. DRG. | | ITEM No. | NO. OF ITEMS | | |
| | CODE | | | PERC PROJECT | | | | | |
| TITLE : | | | CARD CODE | DRAWING NO./SKETCH NO. | | | | | |
| EXHAUST FOR DF AND PECVD | | | | ASSCP/TL/2020-21/50 | | | | | |
| | | | | SHEET No. 01 | No. OF SHEETS 01 | | 22 23 24 | | |

A4 SIZE

UNPRICE BID FORMAT

| | | | Estimate |
|-----|--|----------|---------------------------------------|
| SL. | Item Description | Quantity | Total (Rs) |
| 1 | Exhaust system as detailed in technical specification with fabrication, installation, commissioning and testing. | 1 nos. | 4,61,931 |
| 2 | Total | | 4,61,931/- (Excluding GST) |

- i. The bidders are required to quote their offer on percentage (%) basis at excess or less or on par (0%) with total estimate value (to be treated as 100%) in figure and words in one of the rows given below.
- ii. Only one of rows are to be filled else offer will be rejected.
- iii. Price bid evaluation will be made on the basis of % quoted by bidder.
- iv. In case more than one agency becomes L1 by quoting same value, further sealed quotations will be called for, from those L1 agencies only to decide final agency with further lowest rates. No agency shall quote more than his original tender value, while re-quoting. Further, in the event of two or more tenderers becoming L1, the selection of the tenderer for the purpose of awarding contract will be on the basis of LOTTERY to be held in presence of representatives of L1 tenderers”.

| Tender % | In figure | In words |
|--|-----------|----------|
| Excess | | |
| Less | | |
| Estimated | | |
| Quote taxes (GST) _____ (%) extra as applicable (may be quoted separately for each item if required) | | |

Q to be mentioned instead of amount.

Signature of the bidder with seal & date

LOADING FACTORS



NOTE: IN CASE OF DEVIATION TO BHEL TENDER SPECIFIED TERMS, LOADING FACTOR INDICATED IN FOLLOWING TABLE WILL BE APPLIED TO QUOTED PRICE WHILE EVALUATING THE LOWEST QUOTE

| A. FOR INDIGENOUS PURCHASES | | | | | |
|-----------------------------|---------------------------|------------------|---|---|--|
| SLNO | SCOPE | COMMERCIAL TERMS | BHEL STANDARD TERM | AS OFFERED | LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS |
| | | | | SAME | NIL |
| A.1 | SUPPLY/COMPLETION OF WORK | PAYMENT TERMS | 100% PAYMENT, WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AT BHEL ASSCP | PAYMENT AGAINST PROFORMA INVOICE / DESPATCH DOCUMENTS | LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6%) ON THE TOTAL PO VALUE FOR ONE MONTH |
| | | | | FULL ADVANCE PAYMENT WITH BANK GUARANTEE | LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6%) ON THE TOTAL PO VALUE FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH |
| | | | | PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL | LOADING @ ((SBI BASE RATE ON TENDER OPENING DATE+ 6%) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH |
| | | | | PART ADVANCE (X%)PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT ON RECEIPT AND ACCEPTANCE OF MATERIAL | LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6%) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6%) ON BALANCE AMOUNT FOR ONE MONTH |

C. PENALTY FOR DELAYED DELIVERY (COMMON FOR INDIGENOUS AND IMPORTS)

| SLNO | COMMERCIAL TERMS | BHEL STANDARD TERM | AS OFFERED | LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS |
|------|------------------|---|------------------|--|
| C | LD CLAUSE | IN THE EVENT OF DELAY IN AGREED CONTRACTUAL DELIVERY, PENALTY OF 0.5% (HALF PERCENT) PER WEEK BUT LIMITED TO A MAX OF 10% OF TOTAL ORDER VALUE WILL BE APPLICABLE | AGREED | NIL |
| | | | IF NOT AGREED | LOADING @ 10% OF THE BASIC MATERIAL COST |
| | | | IF AGREED FOR X% | LOADING @ (10-X)% OF THE BASIC MATERIAL COST |

D. GUARANTEE/WARRANTY PERIOD (COMMON FOR INDIGENOUS AND IMPORTS)

| SLNO | COMMERCIAL TERMS | BHEL STANDARD TERM | AS OFFERED | LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS |
|------|---------------------------|--|--|--|
| D | GUARANTEE/WARRANTY PERIOD | STIPULATED OR REQUIRED GUARANTEE/WARRANTY PERIOD(X) MINIMUM ACCEPTABLE GUARANTEE / WARRANTY PERIOD(Y) | AGREED | NIL |
| | | | NOT AGREED FOR STIPULATED BUT AGREED FOR MINIMUM GUARANTEE/WARRANTY(Y) | LOADING @ 10 % OF THE ORDER VALUE PER ANNUM FOR THE REDUCED GUARANTEE PERIOD (X-Y) |

AUTHORISATION LETTER FOR E-PAYMENT/ NEFT / RTGS
(PLEASE FILL UP THE FORM COMPLETELY IN CAPITAL LETTERS ON YOUR COMPANY LETTERHEAD ONLY)

Vendor Code (to be filled by BHEL) _____

| Type of Request (Tick one) | NEW | CHANGE |
|----------------------------|-----|--------|
| 1 Company Name | | |
| 2 Address | | |
| 3 City with PIN Code | | |
| 4 State | | |
| 5 PAN Number | | |
| 6 TIN/ VAT No. | | |
| 7 CST No. | | |
| 8 Service Tax No. | | |
| 9 Name of Contact Person | | |
| 10 Mobile number | | |
| 11 Ph. no. with STD Code | | |
| 12 Fax No. with STD Code | | |
| 13 Email ID | | |
| 14 Website (URL) | | |

BANK DETAILS FOR EFT / RTGS

| | | |
|---|--|--|
| 1 | Bank Name | |
| 2 | Branch | |
| 3 | Branch Code | |
| 4 | Branch Address | |
| 5 | Branch Phone No | |
| 6 | Account No. | |
| 7 | Account Type: SB/ Current/ other (Specify) | |
| 8 | MICR Code | |
| 9 | IFSC Code | |

I, as an authorized representative / owner of the above named company, hereby state as under:

1. Enclosed here with a cancelled cheque in support of our company's bank details.
2. Authorize BHEL ASSCP, to electronically make payments to the designated bank account with bank charges, if any, to our account.
3. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL / transferring Bank responsible.
4. I hereby certify that the particulars given above are true, complete and correct.
5. This authority remains in full force until BHEL receives and acknowledge written notification requesting change or cancellation.

Date:
Company
Seal

Authorised Signatory
Designation:

PRICE BID FORMAT

| | | | Estimate |
|------------|--|-----------------|---------------------------------------|
| SL. | Item Description | Quantity | Total (Rs.) |
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| 2 | Total | | 4,61,931/- (Excluding GST) |

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| Tender % | In figure | In words |
|---|------------------|-----------------|
| Excess | | |
| Less | | |
| Estimated | | |
| Quote taxes (GST)_____ (%) extra as applicable (may be quoted separately for each item if required) | | |

Signature of the bidder with seal & date