

BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM: HYDERABAD-502032
GT DEPARTMENT
TELEPHONE NO. 040-23184598, 23182278.

TENDER NOTICE

Tender Notice No: HY/AGM/GT/TDP/OT-01/2022-23/01

Dt.27.01.2023

Bharat Heavy Electricals Limited, a Government of India Public Sector undertaking having its Registered Office at Siri Fort, New Delhi. BHEL Ramachandrapuram, one of its manufacturing Units, invites sealed bids from eligible /Contractors, who fulfill qualification criteria as stipulated in NIT, for the work, **“Technical data package creation comprising of Creation dimensional record (in the form of 3D Models/2D manufacturing drawings) of turbo-machinery components, sub-assemblies and main assembly”**.

Sealed quotations in single cover consisting of two separate sealed covers for Techno-Commercial bid as Part A and Price bid as Part B super scribing the tender reference, tender due date, Name of work, Part Number, Item No. and should reach by 11:00 AM on or before **08.02.2023** at vendor complex, besides administrative building, BHEL Ramachandrapuram. Techno-Commercial bid will be opened at 1.30 PM on **09.02.2023**, and if any further information, may be obtained from the office.

Tender documents (non-transferable) can purchase on any working day (Monday to Saturday) between 09:00 hrs. to 11:30 hrs and 13:00 hrs to 15:00 hrs from office of the AGM / GT-Engineering, first floor, GT-Engineering Building, BHEL-HPEP, RC PURAM, HYDERABAD-32 by paying the prescribed Tender fee of Rs.1000/- only (one thousand only) through Demand Draft/ Bankers cheque from any nationalized bank in favor of “BHEL-RC PURAM, HYDERABAD-32”.

The tender documents are also available in the BHEL Web Site www.bhel.com under heading Tender Notifications. The interested vendors can directly download the tender documents from the website. However, while submitting the tender documents, a demand draft/Bankers cheque towards cost of tender document should be enclosed to the Techno-commercial bid (part-A). The tender documents downloaded from the website, the Techno-commercial bid (part-A) without demand draft/Bankers cheque for the specific value will be summarily rejected.

Corrigendum if any including extension of due date, clarification etc., will be published in BHEL web site only.

CONTENTS

SL. No.	Description
1.0	Notice Inviting Tender
1.1	Techno-Commercial bid
2.0	Prequalification requirements
2.1	Taxes & Duties- GST Clauses
2.2	Instructions to Tenderer
3.0	General terms and conditions
3.1	Eligibility Criteria
3.2	Earnest Money Deposit
3.3	Security Deposit
3.4	Statutory Requirement
3.5	Safety
3.6	Period of Contract
3.7	Failure to comply with Contract
3.8	Payment to the Contractor
3.9	Sub-contracting
3.10	Laws governing the Contract
3.11	Legal Jurisdiction
3.12	Arbitration
3.13	Conciliation Clause
3.14	Force Majeure
3.15	Applicable laws and jurisdiction of court
4.0	Special Instructions to the contractor regarding this contract work.
4.1	Introduction of work
4.2	Scope of work
4.3	BHEL Responsibility
4.4	Contractor Responsibility
4.5	Quality Assurance requirements
5.0	Terms and conditions of Contract Agreement
6.0	Special Instructions
6.1	Specific information communicated to vendors
7.0	Reverse Auction
8.0	MSE Supplier
9.0	Declaration by tenderer
10.0	Price Bid

1.0 NOTICE INVITING TENDER

- | | | |
|--|---|--|
| i. Tender Number & date | : | HY/AGM/GT/TDP/OT-01/2022-23/01
Dt.27.01.2023 |
| ii. Name of the Work | : | Technical data package creation comprising of
Creation dimensional record (in the form of 3D
Models/2D manufacturing drawings) of turbo-machinery
components, sub-assemblies and main assembly. |
| iii. EMD | : | Rs. 1.04 lakhs |
| iv. Approximate estimated value of work | : | Rs.51.56 lakhs |
| v. Cost of tender documents | : | Rs.1000/- |
| vi. Last date for sale of tender documents | : | 08.02.2023, 11:00 Hrs |
| vii. Last date for receipt of tender | : | 08.02.2023, 11:00 Hrs |
| viii. Date, time and place of tender opening | : | 09.02.2023, 13:30 Hrs, Vendor complex, BHEL ,
R.C.Puram, Hyderabad. |
| ix. Period of contract | : | 18 months from date of awardal |
| x. Maintenance period | : | Nil |

1.1 TECHNO-COMMERCIAL BID

To,
 Bharat Heavy Electricals Limited
 H.P.E.P., RC PURAM,
 HYDERABAD-32

Dear Sir,

I / We hereby offer to carry out the work '-----' against Tender Enquiry No. -----
 -

I /We have carefully perused the following documents connected with the above mentioned work and agree to abide with the same.

- | | | | |
|-----|---|---|---------------------------------|
| 2.0 | Prequalification requirements | } | (Part – A) Technical Bid |
| 3.0 | General terms and conditions | | |
| 4.0 | Special Instructions to the contractor regarding this contract work | | |
| 5.0 | Terms and conditions of Contract Agreement | | |
| 6.0 | Special Instructions | | |
| 7.0 | Reverse Auction | | |
| 8.0 | MSE Supplier | | |
| 9.0 | Declaration by Tenderer | | |

**Note: EMD & Tender document cost which is in the form of DD/
 Bankers cheque shall be enclosed in Part –A only**

10.0 Price Bid (Part – B)

I/ We further agree to execute all the works referred to in the said documents as per the General terms and conditions.

I am / We are in possession of independent PF/ESI Code.

I/We undertake to obtain applicable the PF/ESI coverage of all our workmen to be deployed for the above work and also agree for recovery of appropriate PF/ESI contribution from wages/bills

Strike out which is not applicable

Signature of Tenderer

PART - A**TECHNICAL BID**

Tender Enquiry No. :

Date:

Details of the Contractor:

a) Name and address of the Firm:

Contact person

Vendor code (if already allotted by BHEL)

Phone/Mobile No.

E-mail ID

b) Name and address of the proprietor/Director/partners:

c) Is any contract being operated under the control of the tenderer in BHEL . Yes / No
(If yes furnish the details):

	<u>Location/ Address</u>	<u>Value</u>	<u>Date of Completion</u>
1.			
2.			
3.			
4.			

d) Is any relative of tenderer employed in BHEL Yes / No
(If yes Furnish the detail)

Name	Staff no	Location / Area

Signature of the Tenderer
Date:

II. The contractor shall confirm the enclosure of all the below documents without which tenderer may not be eligible to participate in the tender:

01	ESI Code No. (If applicable) (enclose copy of ESI code allotment letter of ESI authority) Or Workmen Compensation Policy should be produced at the time of Work, applicable at workplace/site.	
02	PAN No.	
03	PF Code No. (If applicable) (enclose copy of PF code allotment letter of EPF authority)	
04	GST REGISTRATION NUMBER	
4.1	State in which registered	
4.2	Type of GST Registration : Composite or Regular (Indicate Composite or Regular)	
4.3	Whether Casual Taxable person or non-resident taxable person or regular taxable person	
4.4	Place from where the services are rendered	
05	Banker's Name & Address	
06	Bank A/C No. & Branch	
07	Have you quoted rates for all the activities, as indicated in the price bid (Part – B)	YES / NO
08	Financial Turnover for preceeding three years duly certified by qualified Chartered Accountant: i.e. FY2019-20, FY2020-21 & FY2021-22	Assessment Years AY 2022-23 AY 2021-22 AY 2020-21
09	Details of EMD (RTGS/NEFT/DD/Bankers cheque has to be enclosed along with Technical bid).	Amount : Details : Bank : Branch :
10	Details of tender document cost (RTGS/NEFT/DD/ Bankers cheque has to be enclosed along with Technical bid).	Amount : Details : Bank : Branch :
11	Particulars of Experience/Credentials As per pre-qualification requirements. (Work completion certificates to be enclosed) (a) If vendor submits Pvt. Company experience, the following documents should be submitted along with technical bid: 1. Awardal Copy 2. Agreement Copy 3. TDS Otherwise bid will be liable for rejection.	

2.0 PREQUALIFICATION REQUIREMENTS:

The following conditions have to be satisfied by the tenderer, with documentary proof to be enclosed with tender bid (Technical):

i) Average annual financial turnover during the last 3 years, ending 31st March of the previous financial year (should submit balance sheet & P&L account for last 3 years – certified by Chartered Accountant), should be at least **Rs. 15.47 lakhs**. Further, the tenderer fail to submit the figure (s) for 3 years, non-submitted year will be considered as “0” (Zero) for averaging the turnover. In the 3 years turnover, previous year turnover is compulsory.

ii) Particulars of experience / credentials for the works executed of similar nature during not older than 7 years (Completion and experience certificate of the works to be enclosed) ending last day of month previous to the one in which applications are invited should be either of the following:

a) Three *similar completed/executed works (see experience criteria given below) each costing not less than the amount equal to **Rs. 20.63 Lakhs** during last 7 years ending 31st December 2022.

OR

b) Two * similar completed/executed works (see experience criteria given below) each costing not less than the amount equal to **Rs. 25.78 Lakhs** during last 7 years ending 31st December 2022.

OR

c) One * similar completed/executed work (see experience criteria given below) costing not less than the amount equal to **Rs. 41.25 Lakhs** during last 7 years ending 31st December 2022.

***Similar works means as given below at (d):**

d) The Contractor should have completed/executed works related to “**Scanning of large / intricate components including aero foils / Gears and gear trains/ bearings/ turbo machine casings/ Blade and wheel mounting arrangements of turbo machines**”.

iii) Experience certificate issued by BHEL, RC Puram in case any work executed in BHEL, RC Puram for past three years. Any adverse remarks in the experience certificate will be a disqualification factor.

iv) “The firms/vendors/contractors who are in the BHEL banned list are not eligible to participate in this tender. The offers received from such firms/vendors/contractors will be rejected. The list of banned firms is available on BHEL website www.bhel.com”.

iii) Valid ESI Code Number (Optional) and P.F. Code Number.

iv) PAN No. (In case not available, proof of having applied with acknowledgement from concerned authority).

v) GST Registration number (Copy of GST registration to be enclosed).

vi) Prospective bidders are required to submit their declaration in their letter head at the time of submitting the offer to maintain the privacy of data obtained during the execution of works mentioned in this tender (format attached as annexure-A).

Annexure-A**NON-DISCLOSURE AGREEMENT (NDA)**

I, _____, of _____
(Name of Company), acknowledge that the information received or generated, directly or indirectly, while working with BHEL on contract is confidential and that the nature of the business of the BHEL is such that the following conditions are reasonable, and therefore:

I warrant and agree as follows:

I, or any other personnel employed or engaged by our company, agree not to disclose, directly or indirectly, any information related to the BHEL. Without restricting the generality of the foregoing, it is agreed that we will not disclose such information consisting but not necessarily limited to:

- Technical information: Methods, drawings, processes, Formulae, compositions, systems, techniques, inventions, computer programs/data/configuration and research projects.
- Business information: Customer lists, project schedules, pricing data, estimates, financial or marketing data,

On conclusion of contract, I, or any other personnel employed or engaged by our company shall return to BHEL all documents and Property of BHEL, including but not necessarily limited to: drawings, blueprints, reports, manuals, computer programs / data / configuration and all other materials and all copies thereof relating in any way to BHEL's business, or in any way obtained by me during the course of contract: I further agree that I, or any others employed or engaged by our company shall not retain copies, notes or abstracts of the foregoing.

This obligation of confidence shall continue after the conclusion of the contract also.

At no point during the execution of contract or there after, this activity will be used for advertisement while approaching to any customer or associate.

I acknowledge that the aforesaid restrictions are necessary and fundamental to the business of the BHEL, and are reasonable given the nature of the business carried on by the BHEL. I agree that this agreement shall be governed by and construed in accordance with the laws of country.

I enter into this agreement totally voluntarily, with full knowledge of its meaning, and without duress.

Dated at _____ this day of 20__.

Name:

Company:

Signature:

2.1 Taxes & Duties- GST Clauses

- **Taxes & Duties- GST Clauses**

- Only valid GST registered bidders will be considered for the tender. The GSTIN of the bidder should be clearly mentioned in the offer.
- If bidder is exempted from GST registration under any provision of the GST Law, a declaration with due supporting documents should be furnished for considering the offer.
- Bidder to quote the applicable taxes in the following manner:
 - Harmonized System of Nomenclature (HSN) of Goods
 - Services Accounting Code (SAC) of Services.
 - IGST/CGST/SGST/UTGST: Rate of Tax to be quoted as extra in % against the space provided
- Bidders to ensure correct applicability of IGST/CGST/SGST/UTGST based on the Inter / Intra state movement of goods/services.
- In case Bidder has opted for GST Composition Scheme, the same may be stated explicitly both in their technical and price bids. An undertaking to the effect that any change in the status of the bidder will be intimated.
- Any other taxes & duties not covered anywhere above may be indicated separately.

- **Taxes deducted at source:**

- TDS as per the extant statutes shall be deducted.
- In case bidder does not provide PAN details, higher rate of tax shall be deducted as per the Act.
- Concessional certificates, if any, should be provided well in time for lower deduction of tax.

- **Terms & Conditions to be complied in GST**

- All invoices (incl. Credit Notes, Debit Notes) to contain BHEL HPEP GSTIN ie 36AAACB4146P1ZG. Invoices submitted should be in the format as specified under GST Law. All details as mentioned in Invoice Rules including Dealer GST registration number (GSTIN), invoice number with date of issue, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST, IGST mentioned separately, HSN Code / SAC Code etc.
- Reimbursement of GST amount will be made only upon completion of the following:
 - Bidder declaring such invoice in their GSTR-1 Return/ IFF
 - Receipt of Goods or Services and Submission of Tax invoice by BHEL
 - The tax invoice is reflected in the GSTR2B of BHEL, HPEP (buyer). Payment of GST will be made only if it is matching with data uploaded by the Bidder in GST portal.
- In case of discrepancy in the data uploaded by the bidder in the GSTN portal vis-a-vis the tax invoice or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit. The same would be available in PRADAN Portal for the bidder's information. Bidder has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims for processing of such invoices.
- In cases where invoice details have been uploaded by the bidder but failed to remit the GST amount to GST Department within stipulated time, then GST on the invoices in default will be recovered from the bidder along with the applicable interest.
- In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, such GST amount will be recoverable from bidder along with interest levied/leviable on BHEL.
- Under GST regime, BHEL has to discharge GST liability on LD recovered from bidders. Hence applicable GST shall also be recoverable from bidders on LD amount. For this Tax Invoice digitally signed will be issued by BHEL indicating the respective supply invoice number. The same can be downloaded from PRADAN Portal.
- GST TDS deducted as per GST Act, is uploaded in GSTN portal along GSTR7. Bidders can directly download the GST TDS Certificate from the GSTN Portal.
- Bidders to note that Rules & Regulations pertaining to E-way bill & E-Invoicing system are to be strictly adhered to, as and when notified by Govt. authorities.

2.2 INSTRUCTIONS TO TENDERER

- 2.2.1 Tender is a two part bid system. The tender documents consist of Part – A and Part - B as detailed below:
 Part 'A': Techno-commercial Bid along with NEFT/RTGS/DD/ Bankers cheque for EMD and Tender document cost (To be submitted in sealed cover enabling us to open on **09.02.2023** at 13:30Hrs.)
 Part 'B': Price Bid to be submitted in sealed cover as per Tender conditions.
- 2.2.2 Part 'A' must be duly completed and super-scribed "Tender Enquiry No. HY/AGM/GT/TDP/OT-01/2022-23/01 Dt.27.01.2023, Technical data package creation comprising of Creation dimensional record (in the form of 3D Models/2D manufacturing drawings) of turbo-machinery components, sub-assemblies and main assembly, Part 'A' Techno-commercial Bid, Item No., name of work, Contractor name & address".
 The tenderer shall not indicate the price or rate in the PART-A: Techno-commercial bid. The tenderer shall expressly accept all the terms and conditions of the Tender. The tender which does not comply with the BHEL's Terms & Conditions may be rejected as Non-responsive/non-conforming and non-acceptable.
- 2.2.3 Part 'B' must be duly completed with reference to the tender conditions and put in a separate sealed envelope super-scribed "Tender Enquiry No HY/AGM/GT/TDP/OT-01/2022-23/01 Dt.27.01.2023, Technical data package creation comprising of Creation dimensional record (in the form of 3D Models/2D manufacturing drawings) of turbo-machinery components, sub-assemblies and main assembly, Part 'B' - Price Bid, Name of work, Contractor name & address".
- 2.2.4 The Techno commercial Bid (Part - A) and general terms and conditions shall be attached to Techno-commercial offer with each page duly signed by the tenderer (at the bottom of each page) as a token of acceptance.
- 2.2.5 Part 'B' – Price Bid should not carry any conditions. Price / rate should be quoted in clear terms in the format given by BHEL.
- 2.2.6 Part 'B' Price bid will be opened only in respect of those tenderers who are qualified in Techno-Commercial Bid.
- 2.2.7 The tender forms both Part 'A' & 'B' duly filled in all respects shall be signed on each page by the tenderer. Any alteration, erasure or over-writing will render the tender invalid. However, alteration neatly carried out and duly attested over with the full signature of the tenderer is permitted.
- 2.2.8 The tenderer should submit the tender documents intact without detaching any page or pages.
- 2.2.9 The Name of the tenderer should be written or the contractor's seal to be put on the sealed envelope.
- 2.2.10 Before making the offer, the tenderers are advised to carefully go through the terms and conditions, which form part of the Agreement.
- 2.2.11 All entries in the tender document should be in one Ink. Corrections, over writing, cuttings etc. are not permitted. All the columns in the tender form should be filled without leaving any column blank in any page of the tender. In case any of the columns is left blank, the tender would be rejected.
- 2.2.12 The price/rate should be quoted in figures as well as in words.
- 2.2.13 Each and every page of tender documents should be stamped & signed by the tenderer.
- 2.2.14 Tender documents consisting of Part 'A' & 'B' duly sealed in separate envelopes should be sealed in another envelope and should be deposited in the **Vendor Complex, BHEL-RC Puram, Hyd-32 addressed to Sr.DGM/SDC & CMM Vendor Complex, BHEL-HPEP, RC PURAM, HYDERABAD, TS-502032** so as to reach on or before 11:00 hrs. on **08.02.2023** The tender documents may also be sent either by **registered post / Speed Post / Courier** so as to reach on or before the said date and time. Part 'A' of tender form i.e. Techno-commercial Bid will be opened on **09.02.2023** at 13:30 hrs. The same day in the presence of tenderers or their representatives who are present for the tender opening. Tenderers who qualify in the Techno-commercial Bid will be intimated to attend the tender opening of part 'B' - price bid at a date to be notified separately. Part 'B' i.e. price Bid will be opened at the specified date in the presence of the tenderers or their representative who are notified to attend the tender opening. If any Contractor submits combined bid i.e., Tech. Bid and Price Bid in one cover, such offer shall be summarily rejected.

- 2.2.15 For any further details required, AGM / GT-Engineering, first floor, GT-Engineering Building, BHEL-HPEP, RC PURAM, HYDERABAD-32. may be contacted in person or through Telephone Nos. 040-2318-4598/2278.
- 2.2.16 BHEL reserves the right to assess the capacity and capability of the parties for pre-qualification. The company also reserves the right to accept or reject any or all the tenders or any part thereof at any stage of process without assigning any reason whatsoever. The company has no obligation to accept the lowest tender. Offer of the Tenderer if prima-facie found not comparable with the quantum of work envisaged and the bid is a desperate effort to be L1, then the offer is liable to be rejected. BHEL's decision in this regard shall be final and binding.
BHEL reserves the right to reject the tender of bidder, who committed default and having bad track record in execution of previous contracts in BHEL. For the purpose of this clause default and bad track record means violation of contractual terms, breaching of data privacy and backing out from contract after reverse auction or after receipt of LOI / entering of agreement etc., Agencies who are presently working with BHEL are also required to submit proof of satisfactory performance and completion of contract otherwise the bid will not be considered further evaluation.
- 2.2.17 PRICE BID - The tenderers are required to submit their quotation for all the items listed in the Price Bid format given along with the tender documents. The service charge % should be quoted for each activity after careful study of the actual job requirement so that, in case the contract is awarded, contractor should not express any difficulty in execution of the contract.
- 2.2.18 VALIDITY OF RATES: The price bid validity quoted should be valid for 120 days initially from the date of opening of the Techno-Commercial bid.
- 2.2.19 Tender document cost and Earnest Money deposit via Demand draft / Bankers Cheque shall be enclosed to the techno-commercial bid only. Otherwise the offer will not be considered.
- 2.2.20 The tenderers are advised to enquiry with BHEL GT office regarding the site of work and its environments and other prevailing conditions, position of materials and work related procedures & practices adopted including payments, billing and practices etc.
- 2.2.21 The contractor shall be responsible for observance of local laws, employment of personnel, payment of taxes etc. As far as possible, workers shall be engaged from the local areas in which the work is being executed.

2.2.22 DISCREPANCY IN WORDS & FIGURE QUOTED IN PRICE BIDS:

- i) 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
 - ii) 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 (i) and (ii) above.
 - iii) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to 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.
- 2.2.23 BHEL reserves the right to reject any bid, which is technically unacceptable and unworkable. Further, BHEL also reserves the right to reject any or all tenders without assigning any reasons thereof.
- 2.2.24 BHEL reserves the right to cancel the contract at the initial stage or during the contract period without assigning any reason to the tenderer.
- 2.2.25 wherever prescribed formats are specified for the tenderers use, he shall use the same for making his Claims.
- 2.2.26 Tender document should be complete in all respects.
- 2.2.27 Successful tenderers shall enter into an Agreement on stamp paper of Rs.200/- for having accepted the rates, terms and conditions of the contract as per the pro-forma given by BHEL.
- 2.2.28 The Offers should be in full conformity with the terms and conditions of this tender. No contra conditions are acceptable. Incorrect and incomplete tenders are liable to be rejected. Tenders not submitted in the prescribed forms will be rejected.
- 2.2.29 BHEL reserves the right to accept or reject any tender in part or full at their discretion without assigning any reason.

- 2.2.30 If a tenderer deliberately gives wrong information in his tender or creates conditions favorable for the acceptance of his tender, then BHEL reserves the right to reject such tender at any stage.
- 2.2.31 If the tenderer indulges in any unethical practice for securing the contract, the offer of such tenderer shall be rejected.
- 2.2.32 Any written communication required to be sent to the contractor in writing shall be sent at the address mentioned on the tender form or to any other address subsequently intimated by Contractor in writing to BHEL HPEP for the contract purposes or to his e-mail address.

2.2.33 EVALUATION OF PRICE BID:

- i. A single percentage (%) must be quoted for all categories mentioned in the price bid Proforma.
- ii. Evaluation of the L-1 offer shall be computed on overall lowest cost to BHEL basis.
- iii. In the course of 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 or else respective RA guidelines will be followed.
- iv. 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).
- v. The evaluation currency for this tender shall be INR.

2.2.34 SITE VISIT:

- a. Before quoting, the tenderers are advised to enquiry with BHEL GT office regarding the site of work and its environments and other prevailing conditions, position of materials and work related procedures & practices adopted including payments, billing and practices etc. They should be well versed with BHEL General Conditions of Contract, Instructions to tenderers, drawings wherever applicable and specifications and all other documents which form part of the agreement to be entered into subsequent to award of work. The tenderers shall specially note that it is the tenderer's responsibility to provide any item which is not specially mentioned in the specification or drawing, but which is necessary to complete the work.
- b. The tenderer/Bidder and any of his authorized personnel or agents will be granted permission by the BHEL to enter upon its premises and lands for the purpose of enquiry about site locations (BHEL (Hyd) and third party location(Vizag)) and work related information. However, the bidder shall express condition that he, his personnel, and agents will be responsible against all liability in respect thereof, including death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection. Tenderer/Bidder not allowed to visit third party work location (Vishakhapatnam), where Technical data package creation work to be done.
- c. The cost of visiting the BHEL shall be at the Bidders' own expense. Any deviations of information in the report and the actual site will not be the responsibility of the BHEL.

- 2.2.35 The contractor's/ Firms who are entering first time in BHEL, Ramachandrapuram are requested to provide the following NEFT details (Bank official Signature) along with cancelled cheque. This information is required for transactions between BHEL and the Contractor's/Firm's.

(Vendors to furnish this mandate on their Letter Head.)

Ref No:

To

Date:

Ref No.

Dy. Manager/Finance-CM
Bharat Heavy Electricals Limited
Ramachandrapuram
Hyderabad 502 032

Dear Sir,

Sub: Details for National Electronic Fund Transfer

We request and authorize you to effect payment through NEFT to our Bank account, subject to RBI Guidelines, as per the details given below

- A. Sup code (As per PO/SCO) / Staffno :
B. (Name as per PO/SCO) :
(Retd Employee to indicate address here)
C. PAN of Beneficiary :
D. TIN of Beneficiary :
E. e-mail address of Beneficiary :
F. City (of Beneficiary) :
G. Bank Name :
H. Branch (of Bank) :
I. A/c Number :
J. A/c type (Savings or Current) :
K. MICR Code of the branch (9 digit) :
L. IFSC for NEFT (11 char) :
M. IFSC for RTGS (If different from L) :

Thanking you,

(Signature with Seal) Authorised Signatory
Authorised Signatory Name
Name Designation
Designation

Certified that the particulars furnished above are correct as per our records

Date

(Signature of authorized official of bank)
Bank Stamp

3.0 GENERAL TERMS AND CONDITIONS

- a) Contractor shall take workmen compensation policy before commencement of work as applicable.
- b) BHEL reserves the right to split up the work into convenient portions and award them to different contractors.
- c) The tenderer shall keep the contents of his tender and rates quoted by him to be kept confidential
- d) All expenses in preparation and submission of bids and visits to the office or any place in connection with the preparation of Bid shall be borne by Bidder. BHEL in no case shall be responsible or liable for these costs regardless of the outcome of the Bidding process.
- e) The bid prepared by the Bidder including all correspondence etc. relating to his offer/ bid shall be in ENGLISH language.
- f) No interest shall be payable by BHEL on earnest money or security deposit or any money due to the contractor by BHEL

3.1 ELIGIBILITY CRITERIA

- 3.1.1 In case the contractor is a Partnership Firm or a Company, the same should be a registered under the relevant Indian Partnership Act 1932 or Companies Act, 1956 and well established organization having at least three years' existence in business consecutively for the past three years.
- 3.1.2 Tenderer should have independent PF code under Employee Provident Fund and Miscellaneous Provisions Act 1952.
- 3.1.3 Photocopy of letter from PF Commissioner's Office to establish that tenderer is independently registered as an employer under PF to be produced.
- 3.1.4 The tenderer shall also mention the PAN Number issued by Income Tax Department, copy of the PAN card or PAN number allotment letter shall be submitted along with the tender documents.
- 3.1.5 There should be no litigation or charge under investigation / enquiry / trial against the Tenderer, or conviction in a court of law or suspension or blacklisting by any organization on any ground. Tenderer shall confirm this in the Declaration. During the course of work, if any such information comes to light, the contract may be terminated.
- 3.1.6 The opinion / decision of BHEL regarding the bid shall be final and conclusive. BHEL reserves the right to reject any or all the bids at any time without assigning any reason.
- 3.1.7 In case the tenderer has a relative employed in BHEL, the authority inviting tender shall be informed of this fact in writing at the time of submission of tender, failing which the tender may be disqualified, or if such fact comes to light subsequently, the contract may be terminated.
- 3.1.8 Data obtained by the parties during the performance of this contract shall be that data which is strictly necessary for the performance of the same and may only be applied or used to fulfil the purpose of the contract.
- 3.1.9 Data should always be kept and stored anonymously using the latest security and de-anonymization methods. You have a responsibility to protect data from loss, theft, unauthorized use and modification. Data should not be accessed without permission or a specific, lawful purpose.

3.2 EARNEST MONEY DEPOSIT:

- 3.2.1 An amount of **Rs. 1.04 lakhs** towards EMD shall be paid by NEFT/Pay order/Demand Draft/Banker's cheque on any nationalized bank / scheduled bank in the name of "Bharat Heavy Electricals Limited" payable at Hyderabad and shall be enclosed to the tender bid. No other means of payment shall be accepted. EMD / any money due to the tender by BHEL shall not carry any interest.
- 3.2.2 Tenders received without EMD as specified above shall be rejected. If EMD accompanies price bid, such bids shall not be considered and will be rejected. If EMD is not in line with amount called for, the EMD as well as the quotations will be returned and unopened to the tenderers.
- 3.2.3 EMD of unsuccessful bidders shall be returned promptly upon award of Contract.
- 3.2.4 EMD of successful bidder will be returned upon the bidder's accepting the contract and furnishing the requisite security deposit **or** EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

- 3.2.4 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.
- 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.

3.3 SECURITY DEPOSIT

- 1 Upon acceptance of his tender bid, the successful tenderer must deposit Security Deposit within the time specified in the letter of intent. Security Deposit should be collected from the successful tenderer. The rate of Security Deposit will be as below:
The total amount of Security Deposit will be 3% of the contract value.
- 2 Security Deposit means the security provided by the Contractor towards fulfilment of any obligations in terms of the provisions of the contract.
- 3 If the work is awarded, the agency has to pay 50% of SD in advance on contract value before commencement of work.
- 4 The balance amount to make up the required Security Deposit of 3% of the contract value may be accepted in the following forms:
 - i) Local cheques of Scheduled Banks (subject to realization) Demand Draft in favour of BHEL.
 - ii) Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
 - iii) Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).
 - iv) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL)

(Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith)
- 5 At least 50% of the required Security Deposit should be collected before start of the work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.
If the value of work done at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or recovered from payment/s due to the Contractor.
- 6 Failure by the successful tenderer/bidder to deposit the security deposit amount as mentioned above within the stipulated time, which will include any extension that may be granted by the authorities, will render his tender shall be consider as withdrawn. Security Deposit shall not be refundable to the contractor except in accordance with the terms of the contract.
- 7 The Security Deposit will be released along with the final bill or after completion of maintenance period for the work, whichever will be later, subject to the condition that nothing is outstanding against the Contractor.
- 8 **Bidder agrees to submit performance security required for execution of contract within the time period mentioned. In case of delay in submission of performance security, enhanced performance security which would include (SBI rate + 6%) for the delayed period, shall be submitted by the bidder. Further if performance security is not submitted till such time the first bill becomes due, the amount of performance security due shall be recovered as per terms defined in NIT/contract, from the bills along with due interest.**
- 9 **Refund of Security Deposit:** Security Deposit of contractor will be refunded only after the expiry of the contract period and based on the certification of successful completion of the contract.
- 10 The Bank account details of BHEL for payment of tender document cost, EMD and Security Deposit through RTGS/NEFT mode is as follows:

BANK ACCOUNT DATA FOR RTGS/NEFT MODE OF PAYMENT

1. Party Code

2. Option : RTGS/NEFT

3. Beneficiary Details:

A) Name of Beneficiary : BHARAT HEAVY ELECTRICALS LIMITED

B) Address : RAMACHANDRAPURAM, HYDERABAD- 502032.

C) Bank Name : STATE BANK OF INDIA

D) BRANCH NAME : BHELTOWNSHIP, HYDERABAD- 502032.

E) Account No. : 62048154115

F) Account type : Current A/c

G) Bank IFSC Code : SBIN0020075

H) Bank MICR Code : 500002370

3.4 STATUTORY REQUIREMENTS:**3.4.1 Posting of design Engineers:**

Activities for data acquisition for technical data package creation will be carried out at Vishakhapatnam.

After completion of data acquisition activities, required design engineers are to be exclusively posted in BHEL for generation of 3D Models and 2D drawings.

The personnel identified for data acquisition activities and further processing of cloud data to 3D models & manufacturing drawings should have minimum 4 years' experience in the same field and experience certificate to be submitted along with technical bid. Vendor shall ensure the availability of its personnel on all the Working Days of BHEL.

The vendor personnel should follow the BHEL working timings i.e. 8:00 AM to 16:30 PM.

PVC, BONUS & ORC are not applicable in this contract.

- 3.4.2 The tenderer shall comply with the provisions of the Factories Act 1948, Contract Labour (Regulation and Abolition) Act 1970, ESI Act 1948, Employees Provident Fund and Miscellaneous Provisions Act 1952, Minimum Wages Act 1948, Payment of Gratuity Act 1972, Industrial Disputes Act, 1947, Payment of Bonus Act 1965, Employers Liability Act 1938, Inter State Migrants Workmen (Regulation of employment and conditions of Service) Act 1979 T.S Labour Welfare Fund Act, and or any other Laws and Rules that may be applicable from time to time to the workmen engaged by him. The tenderer, when required by the Company shall produce the registers and records for verification and comply with other directions issued by the company for compliance of the statutory provisions.
- 3.4.3 The tenderer shall fully indemnify the loss if any caused to BHEL due to any default or non-observance of any of the laws, or any omission or commission or inability on the part of the Tenderer or his representative.
- 3.4.4 The Income tax as applicable will be deducted from the bill of the contractor.
- 3.4.5 The contractor shall be responsible for safety of his workmen while they are engaged for work connected with the contract. The Contractor shall be responsible for the appropriate usage of the Uniform and PPE's by their workmen.
- 3.4.6 The contractor, as the employer of his workmen, shall manage them. In the event of any dispute arising between the Tenderer and his employees, the Tenderer alone is solely responsible for

resolving the dispute between them and BHEL will in no way be responsible for settling the dispute either statutory or otherwise.

- 3.4.7 The contractor will be solely responsible for executing the agreed work and the employees of BHEL will only oversee the proper execution of work. The contractor or his representatives shall be available in the work location to control and supervise his workers and take down instructions from the designated officials of BHEL. The cost of deployment of supervisor has to be borne by the Contractor.
- 3.4.8 The contractor shall have full control over his workmen w.r.t determining service conditions, discharge, dismiss, or otherwise terminate their services at any time. The contractor shall be solely responsible for any claim arising out of employment or termination of employment of his employees and for statutory payments.
- 3.4.9 The contractor shall employ only such personnel who are medically fit. The company has right to direct the contractor to remove from the premises such of his personnel who may be physically, hygienically, clinically or medically unfit.
- 3.4.10 The contractor shall employ only such personnel who have not been found unfit for employment in Organizations such as Central/State/Public Undertakings by the Police authorities. Persons against whom criminal cases are pending or under investigation and persons found guilty of offences involving moral turpitude shall not be engaged for executing work.
- 3.4.11 The Contractor shall comply with all the operational rules and regulations, including safety and security rules framed by the company from time to time wherein the Contractor or his workmen happen to be operating / working. In the event of any of the workmen of the contractor violating any of the said rules and regulations, the Contractor would be required to remove forthwith such workmen from the company's premises.
- 3.4.12 Contractor shall be required to submit a list of his employees to be deployed for the works contract giving details regarding Name of employee, Fathers Name, permanent and Present Address, Date of Birth, Qualification & experience certificate.

3.5. SAFETY:

- (i) Any casualty or damage caused to the property or person by any untoward incidents while executing this contract will be at the contractor's risk & cost.
- (ii) Violation of applicable safety, health & environment related norms, a penalty of Rs. 5,000.00 (Rupees Five thousand) per occasion shall be imposed.
- (iii) Any compensation paid to victim shall be recovered from contractor, agency or firm, if the accident is attributable to negligence of Contractor, Agency or firm or any of its employees
 - a) Victim: Any person who suffers permanent disablement or dies in an accident as defined below:
 - b) Accident : Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/ operation and works incidental thereto at BHEL factories/offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, serving, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/during working at BHEL Units/Offices/townships/third party locations and premises/project sites.
 - c) Compensation in respect of each of the victims:
 - (1) In the event of death or permanent disability resulting from Loss of both limbs: Rs. 10,00,000/- (Rs. Ten Lakhs)
 - (2) In the event of other permanent disability: Rs.7,00,000/- (Rs. Seven Lakhs).
 - d) Permanent Disablement: A disablement that is classified as a permanent total disablement under the proviso to Section 2 (I) of the Employee's Compensation Act, 1923.
- (iv) The authorized BHEL officials shall have the right to ban the use of any item, if such use is considered to be dangerous by the concerned BHEL officials. If the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions issued by the authorized BHEL officials, BHEL shall have the right to take corrective steps at the risk and cost of the contractor. The contractor shall take necessary fire safety precautions as per directions of the authorized BHEL officials.

- (v) In case the contractor employs women, he will discharge his obligation under law in respect of such women employee such as prohibition of engaging them during night hours, prohibition of employing them more than 9 hours per day, provision of crèche facility, grant of maternity leave as per rules etc.

3.6 PERIOD OF CONTRACT

- i) The contract shall be for a period of **18 months** from date of awardal. Hence the quoted rates should be valid for 18 months from the date of entering into the contract.
- ii) In case BHEL intends to extend the contract, the contract can be extended for a further period of 6 months on the same terms and conditions subject to mutual acceptance.
- If the contractor fails to execute the contract, BHEL reserves the right to execute the contract through any other contractors at the risk and cost of the contractor and the company reserve the right to take appropriate action against the defaulted contractor.
- iii) BHEL is at liberty to terminate the Agreement by giving 30 days' notice in writing.

3.7 FAILURE TO COMPLY WITH CONTRACT

- i) Notwithstanding anything contained in any other clause, BHEL reserves the right to terminate the contract due to any failure on the part of the Tenderer in discharging his obligations under the contract or in the event of his becoming insolvent or going into liquidation. The decision of the BHEL about the failure on the part of the Tenderer shall be final and binding on the tenderer.
- ii) In case of any damage to the existing building, structures, materials, tools, furniture and fixtures, machines etc., caused from contractor's end directly or indirectly, the cost of its repairs or replacement will be recovered from the contractor. If there is any work stoppage in any area of the Plant due to the fault of the contractor, the contractor is liable to compensate the same.
- iii) In the event of any failure on the part of the tenderer, BHEL shall have the right without prejudice to any other right or remedies, to get the work done through any other agency and the Tenderer shall be liable to compensate BHEL for any losses on this account. The additional cost, loss, if any incurred by BHEL will be recovered from the bills, security deposits, other dues, directly from the Tenderer or by initiating appropriate legal action.

3.8 PAYMENT TO THE CONTRACTOR

- i. The Contractor shall raise the bill for payment of actuals completed as per the contractual terms & conditions mentioned in the contract, which should be duly certified by the BHEL official in charge of the contracted work.
- a) Payment shall be disbursed on the basis of actual unit executed, duly certified by the concerned executing agency in measurement book.
- b) The Contractor shall record the executed work and get it certified by the concerned executing officials for processing the bills.
- c) **Payment to the contractor shall be made as per the following milestone activities**

S.no	Milestone	%age payment
1	Module level "Technical data creation"	5
2	Technical data creation for Compressor module 1	2.5
3	Technical data creation for Compressor module 2	2.5
4	Technical data creation for Turbine Module 1	2.5
5	Technical data creation for Turbine Module 2	2.5
6	Technical data creation for Turbine Module 3	5
7	Technical data creation for Combustion components	5

8	Technical data creation for Base frame, Drive mechanism	5
9	Technical data creation for Bearings, supports and miscellaneous hardware like piping, fuel nozzles, instrumentation items, screw, studs etc.	5
10	Compressor & Turbine Modules Assembly (3D Models & 2D Drawings)	5
11	MGT assembly (3D Models & 2D Drawings)	10
12	Review of complete package and BHEL certification	50

***Refer clause 4.1 for definition of Technical data creation**

- ii. The contractor shall provide Personal Protective Equipment including one helmet, one pair of safety shoe to all his workmen during the contract period.
- iii. The rates quoted by the bidder shall remain unchanged during the period of contract. Price variation clause (PVC) is not applicable.
- iv. The quoted rates should be applicable for additional quantity as well as for reduced quantity also. The Contractor is bound to execute the work in the period of contract on the same terms and conditions without any demur.
- v. ORC (Over Run Compensation), Bonus are not applicable.
- vi. **Penalty Clause:** 0.50 % of the gross value of work will be levied for every week's delay by the agency subject to a maximum of 10 % ordered value of the work from the last date mentioned in the PO. Penalty amount so determined along with GST if applicable thereon shall be recovered.
- vii. The Contractor shall be required to deposit GST as applicable as assessed by GST Authority as per the timelines mentioned in GST Act / Provisions, if same is applicable as per rules in force from time to time. The amount so spent can be claimed from BHEL after submitting the proof of the same.
- viii. Contractor shall inform his PAN to BHEL. Income tax as applicable will be deducted at source by BHEL from the bills of contractor.

3.9 SUBCONTRACTING

The contractor shall not sub-contract or transfer or assign the contract in full or any part thereof to any other person or firm or company without the previous express written approval of BHEL.

3.10 LAWS GOVERNING THE CONTRACT

- i) The contract will be governed by the Laws of India for the time being in force and as amended or made from time to time.
- ii) All disputes shall be settled in accordance with the Laws of India for the time being in force and as amended from time to time.
- iii) All disputes arising out of or in relation to this contract or Agreement shall be settled by mutual discussions through Conciliation and in the event of failure of conciliation, such disputes shall be referred to Arbitration in accordance with the provisions of Arbitration and Conciliation Act, 1996.

3.11 LEGAL JURISDICTION:

In respect of all matters arising out of or pertaining to the contract, the cause of action thereof shall be deemed to have arisen only at RC Puram, Hyderabad, where BHEL - HPEP / BHEL PE&SD is situated. All legal proceedings pertaining to the above matters or dispute shall be instituted only in courts having territorial jurisdiction over the place where BHEL-HPEP / BHEL PE&SD is situated and no other court shall have the jurisdiction.

3.12 ARBITRATION:

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL Unit issuing the Contract. The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause, the seat of arbitration shall be at Hyderabad.

The cost of arbitration shall be borne as per the award of the Arbitrator. Subject to the arbitration in terms of Clause above, the Courts at Sangareddy, Telangana State shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.

Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator."

3.13 CONCILIATION CLAUSE:

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

The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof.

3.14 FORCE MAJEURE:

The following shall amount to force majeure conditions:

Acts of God, Act of any Government, war, sabotage, riots, civil commotion, Police action, revolution, flood, fire cyclone, earthquake, epidemic and other similar causes over which the vendor has no control. If the vendor suffers delay in the due execution of the contract, due to delays caused by force majeure conditions, as defined above, the agreed time of completion of the work covered by this contract may be extended by a reasonable period of time in consultation and after agreement of BHEL's clients/owner, provided that on the occurrence of any such contingency, the Vendor immediately reports to BHEL in writing the causes of delay. The Vendor shall not be eligible for any compensation on this account.

3.15 Applicable Laws and Jurisdiction of courts:

The Contract shall be governed by the Law for the time being enforced in the Republic of India. The Civil Court at Sangareddy /Hyderabad having ordinary Original Civil Jurisdiction shall alone have exclusive jurisdiction in regard to all claims in respect of this contract.

4.0 SPECIAL INSTRUCTIONS TO THE CONTRACTOR REGARDING THIS CONTRACT WORK:

4.1 Name of the Work:

Broad scope of work includes Technical data creation for turbo-machinery components, sub-assemblies and main assembly.

Technical data package creation comprises of

- a) Data acquisition by means of high resolution 3D structured light/laser-data capturing equipment and create detailed digital point cloud
- b) Creation of dimensional record (in the form of 3D Models/2D manufacturing drawings) of turbo-machinery components, sub-assemblies and main assembly.

4.2 Scope of Work:

- 4.2.1** Acquire sample parts and any existing background documentation provided by BHEL. Tagging of components shall be done in line with BHEL provided document structure. Contractor shall take adequate photographs/videos of the component from various angles for future records and understanding during 3D modelling.
- 4.2.2** Raw data acquisition: Create detailed digital point clouds of multiple parts using high resolution 3D structured light/laser-data capturing equipment. The data may be captured at an adequate distance to allow an adequate quality of data resolution. The equipment should have capability to capture deep grooves, intricate profiles, threads on internal as well as on external surfaces etc. Data gathered through multiple shots shall be filtered and aligned using suitable software. The cloud data submitted to BHEL shall be aligned and noise free. Equipment details shall be provided for BHEL review.
- 4.2.3** Contractor shall self-verify/cross-check basic dimensions such as Length/Radius/Diameter/Pitch/Thread size etc. of part using precision measuring instruments such as Vernier, micrometer, pitch gauge, slip gauges, protectors, calipers (inside and outside), CMM etc. and prepare report of the measured dimensions. The report shall be submitted as part of deliverable documents.
- 4.2.4** Contractor may consider usage of foaming techniques/ silicon fills/ clay/ poly-urethane fills to capture internal/complex profile features which cannot be captured by laser/light imagery.
- 4.2.5** To ensure proper fit, contractor may also require to cross-verify dimensions of mating component geometry (if available). For example, in case of Blade & Wheel Assembly, digital & physically measurement of Blade Groove in the Rotor may also be carried out to achieve all Blade Root dimensions. Report of the same to be submitted as part of deliverable documents.
- 4.2.6** Compressor blades & vanes and Turbine blades & vanes shall also be verified by CMM laser/probe scan. Data generated by CMM and 3D models shall be co-related before generation of final model.
- 4.2.7** Some components of the machine like first stage of turbine blade and Nozzle vanes have internal cooling features. The dimensions of these internal passages to be mapped accurately to enable replication. Perform X-Ray scans/CT scans, as necessary to determine geometry of hidden features. Final model shall be created after mutual understanding with BHEL technical team.
- 4.2.8** Accuracy: The expected accuracy for various GT components is as per the table below. Contractor may kindly make note of the same and choose the equipment accordingly:

Sl No	Component type	Accuracy Requirement	Resolution (Point to point distance in data cloud)
01	Casings/ outer body (Outer Dimension)	< 400 Microns	<0.5 mm
02	Casings/ outer body (Inner Dimension)	< 200 Microns	<0.5 mm
03	Blades & Vanes (Compressor/ Turbine section)	< 20 Microns	<0.2mm
04	Shaft/ Wheels Body	< 100 Microns	< 0.5
05	Shaft/ Wheels Grooves	< 20 Microns	<0.2 mm
06	Shaft/ Wheels Journal area	< 40 Microns	<0.5 mm
07	Hardware	< 100 Microns	<0.5 mm
08	Combustion Components	< 200 Microns	<0.5 mm
09	Base Frame & Support	< 400 Microns	<0.5 mm

4.2.9 Convert point cloud to 3D constructive solid geometry for standard CAD software tools such as NX.

4.2.10 Create average data set from multiple parts to identify allowable tolerances.

4.2.11 Review key feature and interfaces with next higher assemblies to confirm non-documented design intent.

4.2.12 Record details of material analysis as provided by BHEL

4.2.13 Create full definition 3D CAD model of the finished part with suitable annotations and GD&T. 3D Model of individual components, module level sub-assemblies & Main Assembly—compatible with UGNX versions 10.0, 12.0 & upwards, i.e., editable & usable in prt format. In addition to this, other format such as parasolid/ step/ iges shall also be provided.

4.2.14 Generate full set of 2D manufacturing drawings from the CAD model: Manufacturing drawings (.dwg format/ compatible with AutoCAD) to be generated from the best use of available digital information. For 2D drawings of main assembly and all sub-assemblies, BOM to be provided in drawing as well as in excel format. Data pertaining to material information, special coatings, hardness & any additional information provided by BHEL shall be documented on individual drawings. Identification marks on individual components shall be transferred on the drawings. The drawings shall be generated in line with ASME Y14.5 in third angle projection along with an Isometric view. Templates for 2D drawings will be provided by BHEL. During this phase, the contractor shall discuss with BHEL personnel regarding the details to be included in 2D drawings. Support during manufacturing for any data/ geometric/ dimensional interpretation is to be provided.

4.2.15 Organize all TDP data into database package.

After data acquisition activities at site for a particular module/set of components is completed data transfer from site computer shall be done by authorized BHEL personnel. The data shall be deleted after BHEL's confirmation. At no point during the data acquisition activities, the contractor computer shall be connected to internet. Further processing of cloud data to 3D solid models, virtual assemblies and 2D manufacturing drawing creation etc. shall be done at BHEL, Hyderabad premises.

Contractor shall mobilize their team to BHEL with computers of requisite configuration and licensed software required for post processing of cloud data and subsequent 3D model generation (contractor scope), Hyderabad premises. Necessary office space will be provided by BHEL. After completion of work, the hard disk will be retained by BHEL. Data/information collected is solely for BHEL use and shall not be shared with any other party officially/unofficially. Confidentiality agreement shall be signed before start of the project.

4.2.16 Location of work :

- a) Data acquisition at Vishakhapatnam.
- b) 3D Modelling and 2D manufacturing drawing creation at BHEL, Hyderabad premises.

4.2.18 Contact Persons:

- **Commercial queries**

Manager/GT, email: reddykr@bhel.in, Contact No: 040-23183166

- **Technical queries**

a) DGM / GT – Engineering, email: kamaldeep@bhel.in, Contact No: 040-23184598.

b) DM / GT – Engineering, email: shridhar@bhel.in, Contact No: 040-23182278

Approximate number of components for which Technical data package has to be generated are mentioned in table 1

Table-1

BOM Level	Description	Scanning required Y/ N	No of components to be scanned	Remarks	Sizes (in mm)
1.1	Compressor module 1	Y	1		1000-1500
1.1.1	Front Support	Y	2		100-300
1.1.2	Rotor compressor module1	Y	1		1000-1500
1.1.2.1	Drum	Y	1		1000-1500
1.1.2.1.1	Individual Wheels	Y	7		500-1000
1.1.2.2	Blades	Y	24	7 Stator + 1 IGV stages with 3 blades per stage.	100-300
1.1.3	compressor case module1 Casing	Y	1		1000-1500
1.1.3.1	Sector	Y	1		1000-1500
1.1.3.1.1	Ring Segments	Y	14	7 Stages with 2 halves each	1000-1500
1.1.3.1.2	Stator Blades	Y	21	7 stages with 3 blades per stage.	100-300
1.1.3.2	Casing	Y	2	Casing (LH & UH)	1500-2000
1.1.4	Front Housing	Y	1	Casing	1000-1500
1.1.4.1	Body	Y	1		1000-1500
1.1.5	compressor case module1 Disc	Y	2	Assumed as 1 Fwd + 1 Aft	500-1000
1.2	Compressor module 2	Y	1		1000-1500
1.2.1	Adaptor	Y	1		1000-1500
1.2.1.1	Body	Y	1	Casing	1000-1500
1.2.1.2	Bush	Y	1		0-100
1.2.1.3	Manifold	Y	1		500-1000
1.2.2	Rear Support	Y	2		300-500
1.2.3	compressor case module2 Rotor	Y	1		1000-1500
1.2.3.1	Drum	Y	1		1000-1500
1.2.3.1.1	Individual Wheels	Y	9		1000-1500
1.2.3.2	Blades	Y	27	9 stages with 3 blades per stage.	0-100
1.2.4	compressor case module2 Casing	Y	1	Casing	1000-1500
1.2.4.1	Sector	Y	1		1000-1500
1.2.4.1.1	Ring Segments	Y	18	9 Stages with 2 halves each	500-1000
1.2.4.1.2	Stator Blades	Y	27	9 stages with 3 blades per stage.	0-100
1.2.4.2	Casing	Y	2	Casing (LH & UH)	1000-1500
1.2.5	Rear Housing	Y	1		1000-1500
1.2.5.1	Body	Y	1		1000-1500
1.2.5.2	Manifold Covers	Y	4	Assumed 4 covers	300-500
1.2.6	compressor case module2 Disc (compressor)	Y	2	Assumed as 1 Fwd + 1 Aft	300-500
1.3	Turbine Module 1	Y	1		1000-1500
1.3.1	Turbine Module 1 Rotor	Y	1		1000-1500
1.3.1.1	Drum	Y	2		1000-1500
1.3.1.2	Blades Stg 1	Y	5	1 stages with 5 blades per stage.	100-300
1.3.1.3	Blades Stg 2	Y	5	1 stages with 5 blades per stage.	100-300
1.3.2	Nozzle Box (NB)-I	Y	1		1000-1500
1.3.2.1	Sector	Y	3	3 Nozzle Segments.	100-300
1.3.2.2	Casing	Y	2	LH + UH	1000-1500
1.3.3	NB-II	Y	1		1000-1500
1.3.3.1	Sector	Y	3	3 Nozzle Segments.	100-300
1.3.3.2	Casing	Y	2	LH + UH	1000-1500
1.3.4	Turbine Module 1 Support Rim	Y	1	Casing	1500-2000
1.3.4.1	Body	Y	1		1500-2000
1.3.4.2	B/ Cover	Y	1		1000-1500
1.3.4.3	Manifold	Y	1		300-500
1.4	Turbine Module 2	Y	1		1500-2000
1.4.1	Turbine Module 2 Rotor	Y	1		1500-2000

Continued..

BOM Level	Description	Scanning required Y/ N	No of components to be scanned	Remarks	Sizes (in mm)
1.4.1.1	Drum	Y	2		1000-1500
1.4.1.2	Blades	Y	10	2 stages with 5 blades per stage.	100-300
1.4.2	NB-III	Y	1		1000-1500
1.4.2.1	Sector	Y	3	3 Nozzle Segments.	100-300
1.4.2.2	Casing	Y	2	LH + UH	1000-1500
1.4.3	NB-IV	Y	1		1500-2000
1.4.3.1	Sector	Y	3	3 Nozzle Segments.	100-300
1.4.3.2	Casing	Y	2	LH + UH	1500-2000
1.4.4	Turbine Module 2 Support Rim & Interconnection	Y	2		1500-2000
1.4.4.1	Body	Y	1		1500-2000
1.4.4.2	B/ Cover	Y	1		300-500
1.4.4.3	Manifold	Y	1		300-500
1.5	Turbine Module 3	Y	1		2000-3000
1.5.1	Turbine Module 3 Rotor	Y	1		1500-2000
1.5.1.1	Drum	Y	3		1500-2000
1.5.1.2	Blades	Y	20	3F +1R stages with 5 blades per stage.	300-500
1.5.2	NB-V	Y	1		1500-2000
1.5.2.1	Sector	Y	3	3 Nozzle Segments.	100-300
1.5.2.2	Casing	Y	2	LH + UH	1500-2000
1.5.3	NB-VI	Y	1		1500-2000
1.5.3.1	Sector	Y	3	3 Nozzle Segments.	300-500
1.5.3.2	Casing	Y	2	LH + UH	1500-2000
1.5.4	Turbine Module 3 Support Rim	Y	1		1500-2000
1.5.4.1	Body	Y	1		1500-2000
1.5.4.2	B/ Cover	Y	1		300-500
1.5.4.3	Manifold	Y	1		300-500
1.5.4.4	Prop Stop blades	Y	3	1 stage 3 blades	100-300
1.7	Others	N	0		
1.7.1	Combustion Chamber outer Casing	Y	2	UH + LH	1000-1500
1.7.2	Flame Tubes	Y	3		500-1000
1.7.4	DORT Bottle	Y	3		100-300
1.7.5	Fuel Nozzle	Y	3		100-300
1.7.6	Bearings	Y	11	Approximately	300-500
1.7.7	Reversing Mechanism parts	Y	10	Approximately	300-500
1.7.8	Hardware	Y	0		
1.7.8.1	Parting plane Horizontal	Y	12	Approximately	0-100
1.7.8.2	Vertical Flange (for Modules)	Y	20	Approximately	0-100
1.7.8.3	Stator Locking hardware	Y	34	Approximately	0-100
1.7.8.4	Piping Flanges Hardware	Y	50	Lumpsum	0-100
1.7.8.5	Support Hardware	Y	40	Approximately	0-100
1.7.8.6	Others	Y	68	Lumpsum	0-100
1.7.8.7	Quill Shaft	Y	2		300-500
1.7.8.8	Gear Drive Mechanism and Miscellaneous items	Y	31	Approximately	100-300
1.7.8.9	Base Frame Oil tank	Y	1	Approximately 6 meters	Above 3000
1.7.8.10	Cordon shaft	Y	1	Approximately 3 meters	2000-3000

The list provided above is tentative in nature.

In case, number of components, exceeds or are below the projections provided in table 1, payment shall be made on actuals. Applicable rates will be based on component size.

Note

- (a). In the event of becoming lowest bidder in the contract and before placement of order, the contractor shall be required to arrange for demonstration & benchmarking on BHEL standard two number of components in BHEL Hyderabad premises. Such data created through digital imagery shall be verified w.r.t. CMM / drawings of the same component.

If vendor wishes to demonstrate its capability before price bid opening, benchmarking activities can be done any time after receipt of this tender enquiry.

Benchmarking may be waived off at BHEL's prerogative, in case vendor has already demonstrated its capability on similar components. Reports shall be submitted along with tender document for BHEL's review.

- (b). Turbo-machine, for which TDP has to be created, will be dismantled module wise. Hence, activity at site may be intermittent in nature involving multiple (7-8) mob/ demob cycles. Machine dismantling activities may take up to 6-8 months.

4.3 BHEL Responsibility:

4.3.1 Providing components of turbo-machinery in dismantled & clean condition is in BHEL scope

4.3.2 Providing office space at site and at BHEL Hyderabad premises

4.3.3 Entry permission at site and BHEL Hyderabad premises.

4.4 Contractor Responsibility:

4.4.1. Contractor shall have special arrangement for accessibility of the intricate areas of the components to have adequate quality of data resolution.

4.4.2. Effect of surrounding vibrations & ambient temperature shall be taken care suitably for accurate data acquisition that may be realized later in 3D Modelling & in manufacturing drawings. Effect of wear & tear, scaling, corrosion effect & damage, if any in the component shall be suitably accommodated/ simulated in the final deliverables.

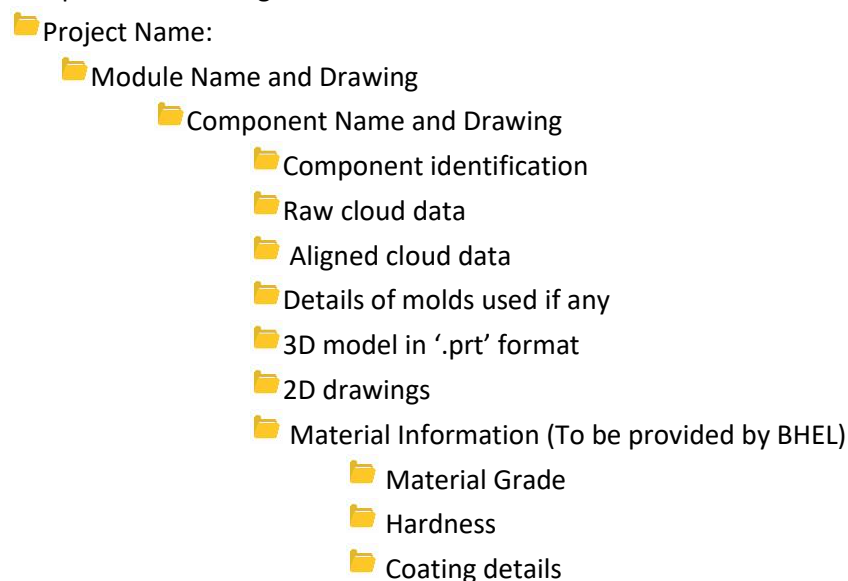
4.4.3. Identification of assembly parts in welded components to achieve cross-sectional dimension is to be taken care during data acquisition, support for the same will be provided by BHEL team. Contractor shall depute their representative to the reference site with all equipment required to execute the work in synchronization with BHEL.

4.4.4. The contractor shall provide a structured approach for field technicians and document their methods of data acquisition. Usability, accuracy and necessary data correction shall be the responsibility of firm/agency. BHEL shall not be liable for any fault/deficiency in equipment/executing person. Equipment / Executing Person competency shall be sole responsibility of the contractor. The contractor must describe the methods to be used to achieve the level of accuracy (LOA) as required in the project specifications. The contractor and the BHEL representative should discuss the intent of the accuracy requirements and determine the methods needed to satisfy the actual intent. All potential sources of error must be considered and combined in determining the procedures that will be employed to achieve the final overall level of accuracy.

4.4.5. The contractor must provide information concerning staffing, data security and schedule.

- 4.4.6.** It is the contractor's responsibility to ensure that all field equipment is calibrated and operating within manufacturer's specifications for the duration of the project. The contractor shall submit evidence that the above calibration requirements have been met by producing copies of the calibration certificates.
- 4.4.7. Data Acquisition Plan** – The contractor shall submit a data acquisition strategy that outlines the field methods that will be employed to ensure that all necessary data will be collected at the required resolution and accuracy. It is the contractor's responsibility to ensure that all field equipment is calibrated and operating within manufacturer's specifications for the duration of the project. The contractor shall submit evidence that the above calibration requirements have been met by producing copies of the calibration certificates. **Data Acquisition Plan** – The contractor shall submit a data acquisition strategy that outlines the field methods that will be employed to ensure that all necessary data will be collected at the required resolution and accuracy.
- 4.4.8. Data Processing and Validation** – The contractor will outline the methodology used to post-process the data and check its integrity. These checks, including Registration Reports detailing the accuracies, a statistical comparison of the point cloud data, and screen shots comparing point cloud with the derived CAD models shall be documented and included as part of the final deliverables. The BHEL representative then can review these without the use of proprietary software.
- 4.4.9.** The contractor shall also outline the proposed procedure to show/review deliverables with BHEL, prior to providing final deliverables. The data captured and processed shall be stored in an organized structure. This structure should be planned out in advance of processing the 3D imaging data

Sample of data storage structure is as follows:



4.5 Quality Assurance requirements:

Upon award of a project, the BHEL representative and the contractor shall meet to identify and agree upon the parameters, reports and forms that will govern the subject project.

Prior to commencing field work, the contractor shall submit a quality assurance plan for BHEL's review. This plan shall pre-define all QA aspects of the project.

QA plan shall include details w.r.t equipment selection, field procedures, staffing, data security, data processing and final delivery. The contractor will outline the quality checks that will be performed during each phase of the project.

Contractor shall fill up following check list pertaining to Quality assurance and data acquisition & processing during various phases of the project.

 Contractor  QA Project Plan	Quality Management Program ☐ Project Objectives ☐ Statement of Intent ☐ Level of Accuracy ☐ Level of Detail and Resolution ☐ Staffing ☐ Experience ☐ Qualifications ☐ Security ☐ Safety Plan ☐ On-site schedule ☐ Equipment ☐ Type and Model ☐ Equipment Calibration Reports ☐ On-site storage ☐ Data Acquisition ☐ Methodology ☐ Data density ☐ Survey Plan ☐ Survey control ☐ Targets ☐ On-site data storage ☐ Field Checks ☐ Data Processing ☐ Registration reports ☐ Statistical comparison of point cloud data and control points ☐ Visual point cloud data check report ☐ Model check reports ☐ Field Quality Demonstration Methodology ☐ Final Deliverables ☐ Field Quality Demonstration Report ☐ Final Certification
--	---

 Contractor	Data Acquisition Certification Report – To be submitted by Contractor ☐ Survey Instrument Calibration Report ☐ Instrument Calibration Certificate(s) - where applicable ☐ Date the calibration was performed
--	--

 Data Acquisition Certification Report	☐ Name of the person, company, or organization responsible for performing the calibration ☐ Describe methods used to perform the calibration ☐ Final calibration parameters or corrections determined through the calibration procedures ☐ Discussion of the results ☐ Maintenance Reports with the history of the sensors used in data collection ☐ Survey Control Report ☐ Project name and location ☐ Survey date ☐ Coordinate Datum ☐ Personnel, equipment used. ☐ Scan Plan Report ☐ Pertinent field notes
--	--

 Contractor  Data Processing Certification Report	Data Processing Certification Report– To be submitted by Contractor ☐ Visual Point Cloud Data Check Report ☐ Project name and location ☐ Date of report ☐ Author of the Report ☐ Describe method used to perform the visual data check ☐ Visual data check results ☐ Corrective action taken (if any) ☐ Name of the individual who performed the visual point cloud data check ☐ Model Check Report ☐ Project name and location ☐ Date of report ☐ Author of the Report ☐ Model Integrity Checks ☐ Provide certification that there are no undefined elements ☐ Provide certification that there are no incorrectly defined elements ☐ Provide certification that there are no duplicated elements ☐ Describe method used to perform the model integrity checks ☐ Present model integrity check results ☐ Corrective action taken (if any) ☐ Name of the individual who performed the model integrity check ☐ Model Control Checks ☐ Provide certification that model coordinates match the acquired data coordinates ☐ Provide certification of inclusion and proper alignment of the control points in the model ☐ Describe method used to perform the model control checks ☐ Present model control check results
---	--

	☐ Corrective action taken (if any) ☐ Name of the individual who performed the model control checks ☐ Interference Checks ☐ Provide clash reports showing and certifying the model is clash free ☐ Describe method used to perform the interference checks ☐ Present interference check results ☐ Corrective action taken (if any) ☐ Name of the individual who performed the interference checks ☐ Standards Checks ☐ Provide certification that any data format, CAD, ☐ Describe method used to perform standards checks ☐ Present standards check results ☐ Corrective action taken (if any) ☐ Name of the individual who performed the standards checks
--	--

 Contractor	Data Validation for critical component – To be submitted by Contractor ☐ Description of tests performed ☐ Results of data validation tests ☐ Summary of corrective actions taken
---	---

The contractor will certify through the issuance of a final version of the Project Deliverables Report that the final deliverables have been developed in accordance with the QA Project Plan established at the start of the project and that they meet the required guidelines.

5.0 Terms and conditions of Contract Agreement

1. Refund of Security Deposit: Security Deposit of contractor will be refunded only after the expiry of the contract period and based on the certification of successful completion of the contract.
2. The contractor shall fully comply with the following enactments / guidelines:
 - a) Contract Labour (R & A) Act, 1970 & applicable Rules thereof
 - b) Minimum Wages Act 1948 (Wage Rates not less than that notified by State Labour Department / Central Labour Department / notified by BHEL, RC Puram (whichever is higher) from time to time).
 - c) Payment of Wages Act, 1936
 - d) ESI Act, 1948
 - e) EPF & Misc. Prov. Act, 1952
 - f) Employees Compensation Act, 1923.
 - g) A.P Labour Welfare Fund Act, 1987
 - h) Inter State Migrant Workmen (RE & CS) Act, 1979
 - i) Payment of Bonus Act, 1965
 - j) Payment of Gratuity Act, 1972
 - k) Equal Remuneration Act, 1976
 - l) The Company's instructions as issued from time to time in regard to working hours, wages, leave, holidays etc.
3. The contractor shall make himself or his representative available at the work spot every day during execution of work, for effective supervision.

4. Non-compliance of provisions under any Acts/Rule/instructions/guidelines shall make the contractor liable for penal action including termination of contract.
5. Contractor shall furnish in a separate letter, his place of residence and postal address. The delivery at the above named place or posting in a Post Box regularly maintained by the Postal Department or sending letters registered for acknowledgement of any notice, letter or other communication to the contractor shall be deemed sufficient service thereof upon the contractor. Change in address shall come into force at any time by an instrument executed by the contractor and delivered to the Company official who has signed the contract.
6. The contractor must satisfy himself by personal study and examination of the specifications furnished and understand thoroughly the scope of proposed work in detail and all conditions affecting the work before entering into the contract. There shall not be at any time, dispute/complaint of any nature regarding scope of work and interpretation of specifications or any misunderstanding with regard to nature or omission of the work to be done nor shall any application for compensation in terms of time and money shall be accepted by Company regarding the above.
7. Contractor shall in his absence keep competent agent constantly on the works and any directions or explanations given by the "Contract Signing Officer" or his representative to such agent shall be held to have been given to the contractor himself.
8. Contractor on the advice of the Company official shall immediately remove any person/s employed by him, who may in the opinion of the Company official is incompetent or misconducts himself and such persons shall not be again employed on the works without written permission of the Company official.
9. Data obtained by the parties during the performance of this contract shall be that data which is strictly necessary for the performance of the same and may only be applied or used to fulfil the purpose of the contract.
10. Data should always be kept and stored anonymously using the latest security and de-anonymization methods. You have a responsibility to protect data from loss, theft, unauthorized use and modification. Data should not be accessed without permission or a specific, lawful purpose.
11. The contractor shall give all notices required by the Acts, Regulation, Bye-laws, and pay all fees in connection therewith unless and otherwise arranged and decided in writing with the Company. He shall also ensure that no attachments are made against materials or work forming part of or for the use of the contractor.
In all such cases, contractor shall protect and indemnify the Company against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, orders, decrees or attachment either by himself or by his employees.
12. It shall be contractor's sole responsibility to protect the public and his employees against accident from any cause and provide required safety equipment's and shall indemnify the Company against any claims for damages for injury to the person or property resulting from any such accidents and shall, where the provisions of the Employees Compensation Act do not apply, take steps to properly insure against any claims thereunder. Contractor shall obtain the workmen compensation policy applicable to all his workmen at site before start of the work
13. The contractor shall keep his work place clean and safe to avoid injuries to men and damage to finished products / equipment.
14. On the occurrence of an accident, which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such an accident intimate in writing to the Company official in charge of the work. The Contractor will also pay compensation as determined by the Authorities.
15. The contractor shall indemnify the Company against all losses or damages sustained by the Company resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or dues if any and become payable by the Company, as a consequence of failure, the Company to give notice under the Employees Compensation Act 1923 or otherwise confirm to the provisions of the said Act in regard to such accident.
16. The contractor shall ensure adherence to all statutory requirements applicable to BHEL.
17. The contractor shall ensure abidance by all the labour laws especially including Contract Labour (R&A) Act 1970, Payment of wages Act 1936, Employees Compensation Act 1923, Factories Act, 1948,

Minimum Wages Act 1948, Payment of Bonus Act 1965, Payment of Gratuity Act 1972, ESI Act 1948 and Provident Fund Misc. Prov. Act 1952 etc., as amended from time to time.

18. The contractor shall fully indemnify the loss if any caused to BHEL due to any default or non-observance of any of the laws, or any omission or commission or inability on the part of the contractor or his representative.
19. The contractor shall, keep and produce for inspection at all times, laptops, scanners and other records required to be maintained under various statutes in order to enable scrutiny by the Company whenever required.
20. The Income tax as applicable will be deducted from the bill of the contractor.
21. The contractor should engage only those Indian workmen who shall be more than 18 (eighteen) years of age.
22. The contractor shall not resort to subcontracting under any circumstances without written consent from BHEL.
23. The contractor shall provide the required safety equipment to the workers engaged by him.
24. Contractor shall issue "Employment Card" to all workmen and supervisors covered under the labour / works / job work contract as prescribed under the Contract Labour (R&A) Acts/Rules.
25. Whenever the term "CONTRACTOR" is used, it shall be understood to refer to the particular person, firm or corporation with whom an agreement has been made by the concerned Company official for executing the work defined in the concerned agreement and for the purpose of instructions regarding compliance with contract conditions, it shall include the contractor's authorized agents, who are entrusted with the work by contractor.
26. The Company does not expressly or by implication agree that the actual amount of the work to be done at BHEL shall correspond there with, but reserves the right to increase or decrease the quantity of operations / unit / number of persons deployed etc., or portion of the work as he deems necessary.
27. All the works shall be carried out in accordance with the directions and to the satisfaction of the Company official in accordance with the drawings, specifications and instructions. Supplementing or explaining the same as may be from time to time shall be done by the Company official.
28. For all modifications, omissions or additions to the specifications, the Company shall issue revised written instructions and no modifications, omission or addition shall be made unless so authorized and directed by the Company in writing.
29. The Company shall have the privilege of ordering modifications, omissions, or additions at any time before completion of the work.
30. The contractor shall be solely responsible for executing the agreed work and the employees of BHEL will only oversee the proper execution of work. The contractor or his representatives shall be available in the factory/site to control and supervise his workers and take down instructions from the designated officials of BHEL.
31. The contractor shall have full control over his workmen w.r.t determining service conditions, discharge, dismissal, or otherwise terminate their services at any time. The contractor shall be solely responsible for any claim arising out of employment or termination of employment of his employees and for statutory payments.
32. The contractor shall employ only such personnel who are medically fit. The company has right to direct the contractor to remove from the premises such of his personnel who may be physically, hygienically, clinically or medically unfit.
33. Contractor shall provide to his employees all tools, tackles, software and equipment's and maintain the same to carry out the job under the contract at his cost and if necessary contractor may take insurance policy of his men, material, equipment's and tools and tackles.
34. The rates quoted by the contractor shall be firm for the contract period. There shall be no revision in contract rates under any circumstances.

6.0 Special Instructions:

1. If the tender is made by an individual, it shall be signed with his full name and his address shall be furnished. If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, also furnish the name and address of each member of the firm. If the tender is made by a corporation, it shall be signed by a duly authorised Officer who shall produce with the tender, satisfactory evidence of his authorisation. Such tendering corporation/firm is required to furnish evidence of its existence along with bid.
2. The EMD will be refunded to the unsuccessful Tenderers on application after rejection of the tender is intimated. The earnest money will be retained in the case of the successful tenderers and either of the cases will not carry any interest. It will be dealt with as provided in the conditions attached to the tender.
3. Whenever a tender is to be accepted, the tenderer, whose tender is under consideration, shall attend the Office of " Officer Inviting the Tender " on the date fixed by written intimation to him. He shall forthwith, upon intimation being given to him by the "Officer Inviting the Tender" (Ex. DGM (WSC)) for acceptance of his tender, complete the execution of the agreement by signing all documents connected therewith. Failure to do so and not to commence the work within one month from the date of intimation, shall entail forfeiture of the earnest money.
4. Tenderers shall peruse carefully the instructions and directions to the parties given in the tender document and the conditions there of and all other relevant documents before quoting the rates for the work. The approximate quantity of work to be executed under each class is given in the schedule. The quantities are given with a view to enable tenderer to quote his overall rate for each class of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the schedule is liable to alterations at the discretion of accepting authority.
5. Tenderers shall keep the offer valid for a period of 120 days from the date of opening of tender. After submitting the tender, he will not recall his offer or modify the terms and conditions thereof. Should the tenderer fail to observe or comply with the foregoing stipulations, the EMD shall be forfeited.
6. Tenderers have to quote their rates in the tender schedule legibly written in figures and words and those not submitted in proper form are liable for rejection.
7. The submission of tender shall be strictly in accordance with the terms and conditions stipulated in this tender notice. No counter conditions will be acceptable or valid.
8. The tenderers must satisfy themselves by personal study and examination of the drawings/specifications furnished and understand thoroughly the scope of proposed work in detail and all conditions affecting the work before quoting. There shall not be at any time after submission of the tender, dispute/complaint of any nature regarding the scope of work and interpretation of specifications or any misunderstanding with regard to nature or omission of the work to be done nor shall any application for compensation in terms of time and money shall be accepted by BHEL in regard to the above.
9. Contractor shall be deemed to have included in his tender price of all the plant, machinery and appliances required for the purpose of all operations connected with the work embraced under the contract to secure a satisfactory quality of work and rate of progress which in the opinion of the " Contract Signing Officer" will ensure the completion of the work within the time specified.
10. The contractor has to produce the bank guarantee, in the prescribed proforma valid for the contract period for a value calculated at the rates mentioned, towards security deposit. The claim period under the guarantee shall be valid for six months after expiry of the contract.
11. This is a time bound contract for period mentioned, and does not envisage any extension of time / period unless otherwise it is given in writing.
12. The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.

6.1 Specific information communicated to vendors

Apart from the fulfilment of general conditions, the vendors who wish to submit the bids for the above category have to know the following specific information

- a. The contractor should follow all the safety precautions while executing the work.
- b. The quantities are shown in price bid are approximate and liable for variation. The quoted rates should be applicable for additional quantity if any based on BHEL order receipts position and as well as for reduced quantity also. The Contractor is bound to execute the work in the period of contract on the same terms and conditions without any demur. Vendor has to engage required manpower with PPEs during the contract period.
- c. All BHEL General Conditions of the Contract shall be applicable.
- d. The agency should affix his signature at the end of each page of the document and enclosed supporting documents (by bidder) also with Rubber Seal.
- e. The contractor or his authorized representative shall be always present at the work site.
- f. The contractor shall submit the daily progress report of the works carried to the Engineer-in-charge.
- g. The contractor shall be responsible for observance of local laws, employment of personnel, payment of taxes etc. As far as possible, workers shall be engaged from the local areas in which the work is being executed.
- h. The contractor shall submit his quotation as per price bid proforma enclosed and shall follow strictly NIT conditions.
- i. Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.

7.0 Reverse Auction

“BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.”

8.0 MSE Supplier

MSE suppliers can avail the intended benefits (Tender documents fee of cost, exemption of EMD) only if they submit along with the offer, attested copies of either valid NSIC certificate or Udyam Registration certificate along with attested copy of a CA certificate (Format enclosed at Annexure-B) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarized or attested by a Gazetted officer.

Annexure-B**Certificate by Chartered Accountant on letter head for MSME bidder**

This is to Certify that M/S

(hereinafter referred to as 'company') having its registered office at

.....is registered under Micro, Small and Medium Enterprises Development Act , 2006 (**MSMED Act, 2006**) having **Udyam Registration Number No:**.....Category:....., (Micro/Small/Medium)(Copy enclosed).

Further Verified from the Books of Accounts, the **investment and turnover** of enterprise for the latest audited financial year is as follows:

1. Investment in plant and machinery or equipment (i.e. all tangible assets other than land and building, furniture and fittings) calculated as specified by the Ministry of Micro Small and Medium Enterprises vide its notification No. S.O.2119 (E) Dated: 26.06.2020 is ₹.....Lacs.
2. Turnover of the enterprise calculated as specified by the Ministry of Micro Small and Medium Enterprises vide its notification No. S.O.2119 (E) Dated: 26.06.2020 is ₹.....Lacs.
3. The above investment in plant and machinery or equipment is within the permissible limit of ₹..... Lacs **and** Turnover is within the permissible limit of ₹..... Lacs applicable for..... Micro / Small / Medium (Strike off which is not applicable) Category under MSMED Act 2006.

Date:

(Signature)

Name –

Membership Number –

Seal of Chartered Accountant.

9.0 DECLARATION BY TENDERER

I, -----, aged ----- Yrs., S/o -----,
residing at -----

Hereby declare as follows:

- (i) That my nationality is _____.
- (ii) That I am a major and eligible to enter into contract / my firm / my company is competent to enter into an agreement.
- (iii) I shall employ only such personnel who have not been found unfit for employment in Organizations such as Central / state / Public undertaking by the Police Authorities.
- (iv) I shall not employ persons against whom Criminal cases are pending or under investigation.
- (v) I shall also not employ persons found guilty of offences involving moral turpitude for executing work in BHEL contracts.
- (vi) That there are no Criminal cases pending or under investigation against me or my firm or company.
- (vii) I have not been found guilty of offences involving moral turpitude nor any of the company directors / partners of my firm have been found guilty of offences involving moral turpitude.
- (viii) Neither I nor my firm nor my company has been declared insolvent in the past.
- (ix) I have taken due care and efforts to furnish only information which are true in the tender document.
- (x) I shall employ Indian workers who are more than 18 years of age and having sound physical and mental health.
- (xi) I shall keep Photograph / identity proof / residential proof of the workers to be employed against this tender and arrange for police verification.

[Signature with Name & seal of the Tenderer]

Date :

Place :

PART - B**10.0 Price Bid****TENDER NOTICE NO: HY/AGM/GT/TDP /OT-01/2022-23/01 Dt.27.01.2023**

Name of work: Technical data package creation of a Turbo-machinery: Data acquisition of turbo-machinery and its sub-components by LASER/White/Blue Ray scanning, generation of 3D Models/2D manufacturing Drawings generation & material characterization of its components.

S.No	Description	Components Size range (mm)	Qty	Unit Rate in INR	Total Cost in INR
1	Technical data package (TDP) creation of a Turbo-machinery (Refer Clause 4 for detailed scope)- Components, Sub-Assy and Main Assy as listed in table 1.	0-100	279	8000	2232000.00
2		100-300	122	8000	976000.00
3		300-500	59	10000	590000.00
4		500-1000	31	10000	310000.00
5		1000-1500	59	12000	708000.00
6		1500-2000	24	12000	288000.00
		2000-3000	2	14000	28000.00
		Above 3000	1	24000	24000.00
Estimate include cost forTDP creation comprising of creation dimensional record (in the form of 3D Models/2D manufacturing drawings, material identification) of turbo-machinery components, sub-assemblies and main assembly. , lump sum cost for mob-demob, food & lodging of personnel, rental cost of equipment etc.					
Total Estimated Amount (Excluding GST) (Rs.Ps)					5156000.00

In Words: Fifty-One Lakh Fifty-Six thousand rupees plus GST extra as applicable.

Total Estimated Value is Rs. 51,56,000/- (excluding of GST)

Note:- The Tenderers are required to quote their tender value in Percentage (%) basis at excess or less or on par with estimation value.

Tender percentage (%)	In words	Figures
Less		
Estimated rates only (On par)		
Excess		

SIGNATURE OF CONTRACTORS(S)

ACCEPTING AUTHORITY

Notes:

1. The **GST** as applicable is **extra** which will be paid by BHEL to the agency after submission of necessary valid documents by the agency.
2. The above offered % age by bidder is proportionately applicable for all item rates and these finalized rates will be considered as rate contract rates for awarding additional works with in the contract period & in the extension period.
3. The rates quoted by the bidder shall remain unchanged during the period of contract.
4. The quantities are shown above are approximate and liable for variation.
5. BHEL reserves the right to increase or decrease quantity.
6. Security Deposit should be collected from the lowest bidder after the release of PO and before the start of work.
7. The tender evaluation is done based upon the lowest cost to B.H.E.L.
8. Penalty: 0.50 % of the gross value of work will be levied for every week's delay by the agency subject to a maximum of 10 % ordered value of the work from the last date mentioned in the PO. Penalty amount so determined along with GST if applicable thereon shall be recovered.
9. Payment will be released to the vendor inline to the milestones (mentioned at Clause 3.8.C of tender document) completed by the vendor. Completion of milestone will be certified by Head of section of execution dept.

10. Contract Period:

I. 18 months from the date of awardal.

II. The parties, if mutually agreed upon, may extend the contract for a further period of six months on the same terms and conditions.

SIGNATURE OF CONTRACTORS(S)

ACCEPTING AUTHORITY