

**NOTICE INVITING TENDER**

NOTE: TENDER DOCUMENT IS AVAILABLE ON WEBSITE AS DETAILED BELOW. BIDDERS CAN DOWNLOAD FROM WEBSITE AND SUBMIT THEIR OFFER. BIDDERS INTENDING TO PARTICIPATE MAY DOWNLOAD FROM WEBSITE

SEALED OFFERS ARE INVITED FROM REPUTED & EXPERIENCED BIDDERS (MEETING PRE-QUALIFICATION CRITERIA AS MENTIONED) THROUGH HARD COPY MODE / ONLINE for THE SUBJECT JOB BY THE UNDERSIGNED ON BEHALF OF BHARAT HEAVY ELECTRICALS LIMITED AS PER THE TENDER DOCUMENT. ISSUE OF TENDER TO ANY BIDDER SHALL NOT CONSTRUCT THAT THE BIDDER IS CONSIDERED TO BE QUALIFIED. FOLLOWING POINTS RELEVANT TO THE TENDER MAY PLEASE BE NOTED AND COMPLIED WITH.

1.0 Salient Features of NIT:

SL NO	ISSUE	DESCRIPTION	
i	TENDER NUMBER	BHEL:MSTPP:BOP:GRP:UF:01	
ii	Broad Scope of job	GRP pipe laying, alignment, joining, erection, assembly of fittings and hydrotest of the entire GRP piping of UF, Remin and Ext Piping at 2X660 MW Maitree STPP, Rampal, Bagehat, Bangladesh	
iii	Issue of Tender Documents	From BHEL website (www.bhel.com) Tender documents can be downloaded from website till due date of submission. Start date 04/07/2021.	Applicable
iv	DUE DATE & TIME OF OFFER SUBMISSION	Date: 12/07/2021, Time: 15-00 Hrs BST. Place BHEL Site Office /RAMPAL/BAGERHAT /BANGLADESH (Offer to be submitted through conventional hard copy bid submission)	Applicable
v	OPENING OF TENDER	Techno-commercial offer will be opened on same day Date: 12/07/2021, Time: 16-00 Hrs BST for which bidder may depute representative. Bidders are requested to visit website for viewing Tender Change Notice (TCN) / Corrigendum etc. informing any change before submitting the tender. Bidder may depute representative to witness the opening of tender.	Applicable
vi	EMD AMOUNT	NIL	Not Applicable
vii	COST OF TENDER	NIL	Not Applicable
viii	LAST DATE FOR SEEKING CLARIFICATION	Date: 08/07/2021 Along with soft version also, addressing to undersigned (in email) as per contact address given below	Applicable

BHARAT HEAVY ELECTRICALS LIMITED
2x660MW, MSTPP, RAMPAL, BAGERHAT, BANGLADESH

ix	SCHEDULE OF Pre Bid Discussion (PBD)	Not Applicable (In case BHEL decides to conduct PBD, date, time & venue of PBD will be intimated suitably through TCN)	Not Applicable
x	INTEGRITY PACT & DETAILS OF INDEPENDENT EXTERNAL MONITOR (IEM)		Not Applicable
xi	Latest updates	--	Shall be intimated to bidder

2.0 The offer shall be submitted as per the instructions of tender document. Only One set of tender document (**in original, downloaded from website**) signed by authorised company representative of bidder and stamped on each page shall be submitted as detailed further, as given below. Bidders to note specifically that all pages of tender document, including these NIT pages etc. appearing in the website(s) for this particular tender shall be submitted by them (after signing/stamping on each page) as a part of their offer. **Price shall not be mentioned by them anywhere in the techno-commercial portion of offer. Best price shall be mentioned in the relevant price schedule only and submitted in separate sealed envelope.** In case of bidders facing any difficulty in downloading the tender from internet website, they should contact BHEL Bangladesh office (DGM, Maitree STPP, Ph No **+8801714056139**). No alteration/changes by bidders is permitted in the tender/NIT appeared in the website.

3.0 Successful bidder shall have to submit additional set of tender/sign on tender document provided by BHEL, if so decided by BHEL.

4.0 DOCUMENTS TO BE UPLOADED & MODALITY OF UPLOADING:

Offers are invited in two-parts only. Offer to be submitted through conventional hard copy bid submission mode or through online.

BID SUBMISSION:

Offer is to be submitted through hard copy bid conventional or online ; complete set of offer shall be sent to BHEL, PSER, Bangladesh Site Office as per address given below as per following details. In case of voluminous document the tender may be submitted in properly bounded form.

The offers shall be sent in three separate sealed envelopes as under :

COVER NO	SHALL CONTAIN FOLLOWINGS:
COVER-I (TECHNO-COMMERCIAL BID)	i) Covering letter of offer. ii) Pre-qualifying documents with all credential documents. iii) Un-priced price schedule mentioning only 'QUOTED' / 'UNQUOTED' against each item as per tendered format. iv) Duly filled all annexures v) References of subsequent correspondences, if any vi) Copy of records notes of Pre Bid Conference, if applicable/ pre-bid MOM. vii) Copy of Tender change notice (TCN), if applicable. viii) All supporting documents/ Annexures etc. as applicable. ix) NIT pages along with all volumes/parts of the tender (all pages) x) No deviation certificate in bidders letterhead as per format given.
COVER-II (PRICE SCHEDULE)	i) Copy of covering letter given in Cover-I ii) Duly filled in Price Schedule (as per tender format).

SPECIAL NOTE:

A) FOR HARD COPY BIDS- Above two separately sealed covers shall together be enclosed in a third cover (Cover-III). All the three sealed covers shall be clearly super scribed with COVER NO. WITH NOMENCLATURE, NAME OF THE JOB, TENDER DOCUMENT NO. AND DUE DATE OF SUBMISSION.

B) Your offer & documents submitted with the offer shall be signed and stamped in each page by your authorized representative. No overwriting / correction in tender documents by bidders shall be allowed. However if correction is unavoidable, the same may be signed by authorized signatory.

All documents / annexure submitted with the offer shall be properly annexed and placed in respective places of the offer as per enclosure list mentioned in the covering letter. BHEL shall not be responsible for any missing documents.

C) Integrity Pact : Not Applicable

- 5.0** No deviation with respect to tender clauses and no additional clauses/ suggestions/clarification in Techno-commercial bid/Price bid shall normally be considered by BHEL. Bidders are requested to positively comply with the same. Offers with deviation are liable for rejection.
- 6.0** BHEL reserves the right to accept or reject any or all offer without assigning any reasons thereof. BHEL also reserve the right to cancel the tender wholly or partly without assigning any reason thereof. BHEL also reserve the right to split/part award the job. Also, BHEL shall not entertain any correspondence from bidders in this matter.
- 7.0** You are free to visit the site and study the prevailing site conditions including law & order situation etc. before quoting for this tender.
- 8.0** For any clarification on the tender document, you may seek the same in writing as per specified format within the last date of seeking clarification as per tender. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay, and receipt of any query after due date shall not be entertained.
- 9.0** BHEL may decide holding Pre-Bid Discussion [PBD] with all intending bidders. On such communication from BHEL, the bidder shall ensure participation for the same at the appointed time, date and place as may be decided by BHEL. Outcome of PBD (if any) shall also form part of tender.
- In case of absence of any queries from bidder(s), their quoted price will be PRESUMED to be final and complete with reference to the tender documents (including Tender change notes (TCNs), clarifications, corrigendum issued by BHEL, if any). Bidders are requested to study the tender documents in detail and prepare their queries/clarifications accordingly. All such queries / clarifications shall be cleared/replied by BHEL. Such clarification letters, corrigendum and/or Tender change notes (TCNs), if issued by BHEL, shall form part of tender document.
- 10.0** In the event of any conflict between requirement of any clause of this specification/ documents /drawings /data sheets etc. or requirements of different codes/ standards specified/ contradictions between any two clauses of tender document, the same to be brought to the knowledge of BHEL by bidders in writing for clarification before due date of seeking clarification, otherwise, more stringent requirement as may be interpreted by BHEL shall prevail and shall be binding on you. Any typing error/missing pages/ other clerical errors in the tender documents, noticed by you must be pointed out before submission of offer, or else, BHEL's interpretation shall prevail & binding on you.
- 11.0** Unless specifically mentioned otherwise, bidder's quoted price shall deemed to be in compliance with tender including PBD.

- 12.0** Tender document containing above mentioned volumes shall be signed & stamped in all pages including this covering letter. Price bid shall be furnished in the specified format enclosed with the tender. Any additional copy, if required, may be taken by photocopying from the tender document given in the web.
- 13.0** **The Bidder has to satisfy the Pre-Qualifying Requirements stipulated for this Tender in order to be qualified. The Price Bids of only those bidders will be opened, who will qualify for the subject job on the basis of pre-qualification evaluation & Techno-Commercial bids etc. BHEL reserves the right to reject the bidders with unsatisfactory past performance in the execution of a contract. BHEL's decision in this regard shall be final & binding.**
- 14.0** While BHEL reserve the right to open the price bid of the offers in camera, the date & time to open the PRICE BID, tender opening shall be intimated to the bidders in case BHEL decides it to be 'Public opening' and in such a case, one authorised representative of the bidder shall be allowed to attend.
- 15.0 Deleted.**
- 16.0** Price Bids shall be evaluated in the manner as prescribed in Price Schedule. However, Unit Rates shall also be furnished if applicable in the Price Schedule.
- 17.0** 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.
- 18.0** Bidders are required to submit their BEST price as per tender Price Schedule format in e-procurement portal/platform in the form & manner as mentioned in tender.
- 19.0** If it is found that L1 bidder has quoted higher in online seal bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).
- 20.0** The Bidder shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.
- 21.0** The offers of the bidders who are on the banned list as also the offer of the bidders, who engages the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.
- 22.0** The bidder shall submit documents in support of possession of 'Qualifying Requirements' duly self certified and stamped/ digitally signed (as applicable) by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents/proofs, these shall be submitted immediately.
- 23.0** The bidder may have to produce original document for verification if so decided by BHEL.
- 24.0** Suspension of Business dealings with Suppliers/ Contractors: BHEL reserves the right to take action against contractors who fail to perform or indulge in malpractices, by suspending business dealings with them.

25.0 Order of Precedence: In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:

- i) Amendments/Clarifications/Corrigenda/Errata/TCN issued in respect of the tender documents by BHEL
- ii) Notice Inviting Tender (NIT)
- iii) Price Schedule
- iv) Technical Conditions of Contract (TCC)
- v) Special Conditions of Contract (SCC)
- vi) General Conditions of Contract (GCC)

All the bidders are requested to note that all the errata / technical clarifications / corrigendum / extension etc. shall be published in website www.bhel.com and CPP Portal <http://eprocure.gov.in>. As such, all the bidders are requested to be in continuous touch with these websites.

Complete offer to be addressed to: CONSTRUCTION MANAGER (M)/MAITREE STPP, BHARAT HEAVY ELECTRICALS LIMITED, 2X660 MW MAITREE SUPER THERMAL POWER PROJECT, PO-KALEKKHARBER, UNION-RAJNAGAR, UPAJILA-RAMPAL, DIST: BAGERHAT-9343, BANGLADESH, clearly mentioning the Tender No. along with latest due date of offer submission.

BHEL RESERVES THE RIGHT TO ACCEPT/REJECT ANY OR ALL THE BIDS WITHOUT ASSIGNING ANY REASON THEREOF. RESPONSIBILITY OF POSTAL/COURIER DELAY SHALL NOT REST WITH BHEL.

for BHARAT HEAVY ELECTRICALS LTD

DGM/ Maitree STPP

Agency	Contact details	
BHEL, PSER, Maitree STPP Banglades h	Address	2x660 MW Maitree Super Thermal Power Project, PO-Kalekkharber, Union-Rajnagar, Upajila-Rampal, Dist: Bagerhat-9343, Bangladesh
	Phone no	+8801714056139, +8801716603283, +8801308524373
	E-mail	schattopadhyay@bhel.in ; rjd@bhel.in ; sanjay.ghosh@bhel.in

Enclosures:

01. ANNEXURE-I: Pre qualifying Criteria
02. ANNEXURE-II : No Deviation Certificate
03. ANNEXURE-III: Format for seeking clarification
04. ANNEXURE-IV: CHECK LIST
05. ANNEXURE-A: Declaration for relation in BHEL
06. ANNEXURE-B: Detailed scope of work
07. ANNEXURE-C: GRP PIPING BOQ
08. ANNEXURE-D: Guidelines/ rules for Bank Guarantee submission by Foreign vendor
09. Tender documents as per this NIT:
 - a. Technical conditions of Contract (Vol 1F)
 - b. General Conditions of Contract (Vol 1B)
 - c. Special Conditions of Contract (Vol 1D)

ANNEXURE-I
PRE QUALIFICATION CRITERIA

JOB	GRP pipe laying, alignment, joining, erection, assembly of fittings and hydrotest of the entire GRP piping of UF, Remin and Ext Piping at 2X660 MW Maitree STPP, Rampal, Bagehat, Bangladesh
TENDER NO	BHEL:MSTPP:BOP:GRP:UF:01

SL NO	CRITERIA
1.0	FINANCIAL CRITERIA
1.0 (a)	<p>BIDDER SHOULD HAVE AVERAGE MINIMUM ANNUAL FINANCIAL TURNOVER OF BDT 3.75 MILLION OR EQUIVALENT DURING THE LAST 3 (THREE) YEARS, ENDING ON 31-03-2020 OR CORRESPONDING FINANCIAL YEAR FOLLOWED BY THE BIDDER AND HAVING POSITIVE NET WORTH AS ON LATEST AUDITED ACCOUNTS AS SUBMITTED FOR PARA 1(C).</p> <p>BIDDER MUST HAVE EARNED PROFIT IN ANY ONE OF THE LAST THREE FINANCIAL YEARS ENDING ON 31-03-2020 OR CORRESPONDING FINANCIAL YEAR FOLLOWED BY THE BIDDER. AUDITED BALANCE SHEET AND PROFIT & LOSS ACCOUNT OF THE COMPANY FOR LAST 3 (THREE) FINANCIAL YEARS, ENDING ON 31-03-2020 OR CORRESPONDING FINANCIAL YEAR FOLLOWED BY THE BIDDER NEED TO BE SUBMITTED IN SUPPORT OF ABOVE.</p> <p>IN CASE AUDITED BALANCE SHEET AND PROFIT AND LOSS ACCOUNT HAS NOT BEEN SUBMITTED FOR ALL THREE YEARS INDICATED ABOVE THEN THE APPLICABLE FINANCIAL AUDITED STATEMENTS SUBMITTED BY THE BIDDERS AGAINST THE REQUISITE THREE YEARS WILL BE AVERAGED FOR THREE YEARS.</p> <p>IF FINANCIAL STATEMENTS ARE NOT REQUIRED TO BE AUDITED STATUTORILY, THEN INSTEAD OF AUDITED FINANCIAL STATEMENTS, FINANCIAL STATEMENTS ARE REQUIRED TO BE CERTIFIED BY CHARTERED ACCOUNTANT.</p>
2.0	GENERAL CRITERIA
2.1	<ol style="list-style-type: none"> i. Bidder should have erected & successfully hydro-tested the GRP piping system. ii. The reference piping systems shall be a combination of pipes, fittings (Flanges, Elbows, Equal Tee, Unequal Tee etc.) of size not less than DN100 of pressure rating not less than the PN 6. iii. Bidder shall furnish necessary documentary evidence (viz. Purchase order / contract completion certificate, etc.) as a proof of meeting the qualifying criteria for the review by BHEL. Acceptance of documentary evidence rests with BHEL iv. Bidders who defaulted, in any of the previous tenders floated by BHEL are not permitted to respond. Such offers, if found later, will not be considered for evaluation. v. After receipt of offers, during scrutiny, if any vendor found to have been banned by BHEL, then their offer will be summarily rejected at any stage. vi. Bidder to make provision in case BHEL decides to visit the reference plant furnished by the bidder for meeting the PQR requirements. <p>RELEVANT DOCUMENT IN SUPPORT OF ABOVE SHALL BE SUBMITTED.</p>
2.1.1	1 (SINGLE) WORK OF VALUE NOT LESS THAN BDT 7.60 MILLION

	OR
2.1.2	2 (TWO) WORKS EACH OF VALUE NOT LESS THAN BDT 4.75 MILLION OR EQUIVALENT AMOUNT.
	OR
2.1.3	3 (THREE) WORKS EACH OF VALUE NOT LESS THAN BDT 3.8 MILLION OR EQUIVALENT AMOUNT.
3	CONSORTIUM BIDDING IS NOT ALLOWED.
4	THE BIDDER SHOULD HAVE VALID TIN NO , BIN & TRADE LICENSE.OF BANGLADESH RELEVANT COPY OF DOCUMENT TO BE SUBMITTED.

ANNEXURE - IINO DEVIATION CERTIFICATE
(TO BE SUBMITTED IN BIDDER'S LETTERHEAD)

To,
BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Maitree STPP, Bangladesh

Su b	No Deviation Certificate.	
Jo b	GRP pipe laying, alignment, joining, erection, assembly of fittings and hydrotest of the entire GRP piping of UF, Remin and Ext Piping at 2X660 MW Maitree STPP, Rampal, Bagehat, Bangladesh	
Ref	1.0	TENDER NO. BHEL:MSTPP:BOP:GRP:UF:01
	2.0	Other references (if any).

Dear Sir,

With reference to above tender, this is to confirm you that we have gone through each and every terms and conditions mentioned in the enquiry (Terms and Conditions) and we offer our unqualified acceptance of the same.

We also confirm that we have not changed/modified the tender documents as appeared in the website/newspapers and in case of observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT *and* we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT.

It is also confirmed that the price has been quoted in the format received with the enquiry.

Our price shall remain firm till the completion supply and erection of full ordered quantity.

Any deviation found subsequently at any time during execution of order shall be treated null and void.

Thanking you,

Yours faithfully,

(Signature of bidder with Seal)

ANNEXURE-III**FORMAT FOR SEEKING CLARIFICATION**

JOB		GRP pipe laying, alignment, joining, erection, assembly of fittings and hydrotest of the entire GRP piping of UF, Remin and Ext Piping at 2X660 MW Maitree STPP, Rampal, Bagehat, Bangladesh		
TENDER NO		BHEL:MSTPP:BOP:GRP:UF:01		
Sl. no	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification

ANNEXURE-IV
CHECK LIST

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

1	Name and Address of the Tenderer		
2	Details about type of the Firm/Company		
3.a	Details of Contact person for this Tender	Name : Mr/Ms Designation: TelephoneNo: Mobile No: Email ID: Fax No:	
3.b	Details of alternate Contact person for this Tender	Name : Mr/Ms Designation: TelephoneNo: Mobile No: Email ID: Fax No:	
4	EMD DETAILS	DD No: Date : Bank : Amount: Please tick (√) whichever applicable:- ONE TIME EMD / ONLY FOR THIS TENDER	
5	Validity of Offer	TO BE VALID FOR SIX MONTHS FROM DUE DATE	
		APPLICABILITY(BY BHEL)	ENCLOSED BY BIDDER
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-I) is understood and filled with proper supporting documents referenced in the specified format	Applicable	YES / NO
7	Audited profit and Loss Account for the last three years	Applicable/Not Applicable	YES/NO
8	Copy of PAN Card	Applicable/Not Applicable	YES/NO
9	Whether all pages of the Tender documents including annexures, appendices etc are read understood and signed	Applicable/Not Applicable	YES/NO
10	Integrity Pact	Applicable/Not Applicable	YES/NO
11	Declaration by Authorised Signatory	Applicable/Not Applicable	YES/NO
12	No Deviation Certificate	Applicable/Not Applicable	YES/NO
13	Declaration confirming knowledge about Site Conditions	Applicable/Not Applicable	YES/NO
14	Declaration for relation in BHEL	Applicable/Not Applicable	YES/NO
15	Non Disclosure Certificate	Applicable/Not Applicable	YES/NO
16	Bank Account Details for E-Payment	Applicable/Not Applicable	YES/NO
17	Capacity Evaluation of Bidder for current Tender	Applicable/Not Applicable	YES/NO
18	Tie Ups/Consortium Agreement are submitted as per format	Applicable/Not Applicable	YES/NO
19	Power of Attorney for Submission of Tender/Signing Contract Agreement	Applicable/Not Applicable	YES/NO
20	Analysis of Unit rates	Applicable/Not Applicable	YES/NO

NOTE: STRIKE OFF 'YES' OR 'NO', AS APPLICABLE. TENDER NOT ACCOMPANIED BY THE PRESCRIBED ABOVE APPLICABLE DOCUMENTS ARE LIABLE TO BE SUMMARILY REJECTED.

DATE :

AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

BHARAT HEAVY ELECTRICALS LIMITED
2x660MW,MSTPP,RAMPAL,BAGERHAT,BANGLADESH

ANNEXURE-A

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: **Declaration for relation in BHEL**

Ref : 1) NIT/Tender Specification No:

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

Tick (√) any one as applicable:

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

OR

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

(i)

(ii)

Signature of the Authorized Signatory

Note:

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

ANNEXURE-B

Erection Specification

For

**GRP Piping & fittings (Ultra Filtration system ,
Remineralisation system & External area)**

FOR

MAITREE UF-RO-MB PLANT

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1.1. Scope

This specification is intended for Erection and Installation (E&C) of GRP pipes & fittings in Ultrafiltration system, Remineralisation system & External areas of UF-RO-MB plant for Maitree project . The E&C includes collection of materials, Laying, joining by jointing materials, assembly of BHEL supplied Valves and other acc to be assembled in the pipe line as flanged joints with fasteners, gaskets etc and hydro testing of complete GRP piping with complete system to ensure to meet performance guarantee of system.

1.2. General

- a. Item : GRP piping system
- b. Application : Conveying of Sea water, corrosive fluid at low pressure in RO-DM plant.
- c. Surroundings : Hot, dusty & humid atmosphere
- d. Installation : Indoor/Outdoor
- e. Ambient Temperature : 45 °C Maximum & 15 °C Minimum
- f. Operation : Continuous/Intermittent

1.3. Project Information

1.	Owner	:	BIFPCL
2.	Project Title	:	Maitree 2x660 MW TPS
3.	Location	:	Rampal Upazila of Bagerhat , Khulna Division, Bangladesh

1.4. Installation and testing

Bidder shall carry out the installation and testing of GRP piping as per the BHEL erection drawings and manuals/documents.

2.1. Scope of Work

The vendor's scope of work in installation and testing comprises of the following:

- 1) The following materials are to be collected as per applicable procedure from BHEL stores:
 - i) Vendor supplied GRP pipes & pipe fittings. (list of joints enclosed as **per BOQ**)
 - ii) BHEL free supplied Piping components like Valves, Bellows, Static Mixers (list flanged joints enclosed in BOQ)
- 2) Safe custody of above drawn materials
- 3) Laying and joining of GRP pipes and fittings with jointing material as per the enclosed **erection drawings.**
- 4) Erection of piping components along with valves, fasteners & gaskets.
- 5) Hydro-testing & leakage rectification of piping system
- 6) Handing over of piping system after commissioning and trial operation
- 7) Reconciliation of drawn material from the store and material accounting for all the materials used.

2.2. Detailed Scope of Work

- a. Erection of GRP pipes & fittings shall be carried out as per BHEL erection drawing enclosed along with the specification for information. Bidder are advised to go through the drawing to understand the scope of work. The drawing gives only tentative work content and any minor modification shall be carried out to meet the site requirement by the vendor without any additional commercial implication to BHEL.
- b. Temporary joints of pipes segments to be made as per erection drawings and shall be offered for stage inspection to BHEL. Final joining of piping shall be done after getting approval from BHEL.
- c. Assembly of valves, bellows, static mixers and other accessories along with gaskets are to be taken care during erection of pipe segment.
- d. All the fasteners and gaskets used for assembly of pipes, valves, bellows etc. will be issued by BHEL, but proper accounting and returning of surplus items after erection is bidder's responsibility.
- e. The piping system shall be installed at site as per the erection drawing provided by BHEL. After the completion of pipe installation at site, entire piping, including instrument tapings will be cleaned and flushed with water and tested for **hydrostatic testing at 1.5 times the working pressure as per applicable standards.** All pipe joints shall be watertight. Joints that are found to leak by observation or during testing shall be repaired and retested. Protocol for hydro-test shall be obtained from the customer by the contractor.

2.3. Erection, Commissioning & Testing of GRP Pipes and Fittings

- a) Details furnished above cannot be considered as exhaustive. Contractor shall make all efforts to carry out piping works in total as per the specific requirements of the system and as per the good engineering practice to suit site conditions. All testing requirements as per the relevant and applicable standards are to be ensured by the Supplier.
- b) The Intent of this specification is to provide erection, commissioning services for execution of projects according to most modern and proven techniques and codes. It is not the intent to specify completely herein, all aspects of the entire system. Nevertheless, the entire system shall conform in all respects to high standards of engineering, design and workmanship and shall be capable of performing in continuous commercial operation. The contract services towards installation of the Plant shall not relieve the contractor of the responsibility of providing such services, facilities to complete the project of portion of project awarded to him. The quoted rate shall deem to be inclusive of all such contingencies.
- c) The Contractor shall carry out the work in accordance with instructions/ drawings/ specification/ standard practices supplied / approved by BHEL from time to time.
- d) Modification / Rectification / repair / replacement of defective components if any shall be under bidder's scope within specified time during execution.
- e) Bidder to submit the erection schedule along with stage checks list. For each and every stage, the bidder shall get clearance from the BHEL Engineer / Customer.
- f) All the supplied materials will be issued from BHEL stores and it shall be the responsibility of the contractor for identification of the consignment and to take delivery from BHEL stores, transport the same to site & kept in their safe custody for erection.
- g) Necessary site co-ordination and clearance for stage checks, hydraulic test, pre-commissioning tests, leak check etc., from the customer engineer shall be carried out by the bidder.

- h) Alignment of the pipe support, fixing of rubber sheet (as per erection drawings), etc. at the pipe support location is under vendor's scope
- i) All the piping systems, fittings and accessories supplied under this package shall be designed to operate without replacement and with normal maintenance for a plant service life of about 25 years and shall withstand the operating parameter fluctuations and cyclic fluctuation which can be normally expected during this period.
- j) Extensive use of templates, gauges, plumb lines shall be made for laying, cutting fitting up of various piping components for fabrication.
- k) On completion field fabrication, all subassemblies shall be cleaned for the inside and outside by suitable mechanical means ensuring that they are free from all loose foreign materials such as scales, sand, oil grease, cutting chips etc.
- l) Smooth glassy finish to be maintained for all field joints with the parent color of the pipes and fittings.
- m) All field joints shall be kept clean for detecting leaks during testing. Test pressure shall be maintained long enough to facilitate complete inspection of system. Pressurizing equipment shall be isolated immediately after the test pressure is attained.

2.4. Exclusions

The following are excluded from the scope of supplier and will be arranged by BHEL

- a. Storage of supplied items at BHEL store as of received condition
- b. All civil works pertaining to GRP piping system
- c. Supply of jointing materials (Bidder to use the material to an optimum extent and complete the work with the allocated material).
- d. Service water at one point near RO-DM Plant
- e. Free Power supply at one point near RO-DM Plant for erection.
- f. Supply of service / instrument air at one point
- g. Supply of Rubber bellows, valves, Instruments, Rubber sheet (Fasteners and Gaskets) etc. for the piping system
- h. Supply & erection of pipe supports.

The requirement shall be specified by the bidder in their technical offer and the supply shall be limited to the specified quantities.

2.5. Specification, Standards & Codes

All pipe and pipe fittings shall be installed and tested as per the specification, relevant national / international standards & statutory codes.

2.6. Tools and Tackles

All the Tools & tackles, transport equipment , handling equipment etc required for the complete erection of components shall be arranged by the contractor at his cost. The bidder shall have & own a complete set of special tools and tackles required erection. The bidder shall also supply any special tools and tackles that may be required additionally during testing. All tools & tackles shall be reputed make acceptable to the Purchaser.

2.7. Flushing

- a. Completed piping systems shall be flushed by bidder with fresh water to clean the pipe of all dirt, debris, and foreign material. Bidder shall prepare a procedure for flushing of the system for approval of purchaser/consultant. Flushing shall not be commenced without approval of flushing procedure.
- b. Bidder shall perform all activities like dismantling and reinstalling of all strainers, in line instruments etc. before and after completion of flushing.
- c. Flushing shall be considered as complete only after inspection and approval by purchaser/consultant.
- d. Disposal of muck and flushing media shall be arranged by bidder as directed by purchaser/consultant, in such a manner that it does not spoil the adjacent installation. Bidder shall obtain purchaser consultant approval regarding the place and method to be adopted for disposal of debris.
- e. Record of flushing giving following details shall be submitted by bidder to purchaser/consultant for its approval and record:
 1. Date of flushing
 2. Identification of line: flushed line number

2.8. Disposal of Scraps / Unused Items

All the pipe scraps & materials are to be removed from the working area and transported to BHEL scrap area / as per the direction of customer. Un-used balance GRP pipes & materials are to be handed over at BHEL stores with acknowledgement.

2.9. Inspection

All the stage checks shall be offered to BHEL / Customer for inspection.

2.10. Hydrostatic Testing

- a. **Completed piping system as approved by purchaser/consultant shall be hydrostatically tested in the presence of purchaser/consultant. The general requirement for hydrostatic test shall be accordance with design requirement of this specification and standard codes specified here in.**
- b. **Bidder shall prepare hydrostatic test procedure based on specified codes. The hydrostatic test shall commence only after approval of procedure by purchaser/consultant.**
- c. Site test pressure of GRP pipes and fittings for pressure application should be 1.5 times the working pressure as per applicable standards. For non-pressured line the site test pressure shall be 1.5 bar as per BS-8010-2.5-1989. Necessary test certificate for all pipes to be presented to BHEL for review BHEL will witness one of such tests. The duration of the holding time will be 10 minutes for all the cases.
- d. **All equipment and instrument used for hydrostatic test shall be approved by purchaser/consultant before start of test.**
- e. **Pressure gauge shall be installed on line to measure test pressure. In case of longer lines two are more pressure gauge shall be installed as directed by purchaser/consultant. One gauge shall be installed at the discharge of the pressuring pump. Pressure gauge used**

for hydrostatic testing shall be calibrated with dead weight tester in the presence of engineer-in-charge. Range of pressure gauge shall generally be 1.5 times the test pressure.

- f. Orifice plates and restriction orifices shall not be installed until hydrostatic test is completed.
- g. All equipment, lines instruments and relief valves shall be disconnected from piping system by means of blinds during testing. Control valves shall be replaced by spool pieces during testing, which is in the scope of vendor.
- h. High point vent and low point drain required for testing in addition to those marked in the drawings shall be provided by bidder at his own cost.
- i. Vendor shall arrange Gaskets & blind/dummy flanges required for Hydro testing of GRP Piping System.

2.11. Test Records

The records in duplicate shall be prepared and submitted by bidder as below:

- a. Date of test
- b. Identification of pipe tested – line number
- c. Test pressure and duration of holding the pressure.
- d. Initial test pressure and the final test pressure after the holding time.
- e. Test result
- f. Signature of bidder
- g. Approval signature by purchaser/consultant / customer.

2.12. Additional Requirements

During execution at site, pipe routing is susceptible to change. The bidder shall carryout these changes at site without any commercial implications to BHEL.

2.13. General Requirements to The Bidder

- a. Vendor shall post experienced site engineers with skilled/adequate man power for execution of piping system. Vendor shall prepare a schedule for completion of the work before the commencement of work which will be reviewed by BHEL.
- b. Bidder shall quote for complete work specified in the document. Incomplete quotations for the part of the work will not be considered even if the quoted rates/price is lower.
- c. Bidder shall contact BHEL and obtain additional details/data if any required to submit proper quotation.
- d. The BHEL reserves the right to omit any one or more items of work at any time of the contact without assigning any reason what so ever.
- e. Adequate lighting facilities such as low volt hand lamps shall be arranged by the contractor at the site of construction etc. at his cost.
- f. All the lifting tackles including wire ropes, slings, shackles and electrically operated equipment shall be got approved by BHEL Engineer before they are actually put on use. Test certificates should be submitted before their usage. Test certificate obtained from the statutory authority should be submitted before their usage.

- g. All equipment so used by contractor shall be of proven quality and safe in operation as approved by BHEL site Engineers from time to time.
- h. At periodic / intervals of work, complete and detailed account of the equipment so erected shall be submitted to the BHEL Engineer.
- i. All equipment shall be handled very carefully to prevent any damage and loss. No bare wire ropes, slings etc., shall be used for unloading and / or handling for equipment without the specific written permission of the engineer. The equipment from the storage yard shall be moved to the actual site of erection / location at the appropriate time as per the direction of BHEL Engineer so as to avoid damage for such equipment at site.
- j. The work covered under this scope of work is of highly sophisticated nature requiring best quality / precision workmanship engineering and construction management. He should also ensure successful and timely commercial operation of equipment installed. The contractor must have adequate quantity of precision tools, construction aids in possession. Contractor must also have adequate trained qualified and experienced supervisory staff and skilled personnel.
- k. All the necessary certificates and licenses required to carry out his scope of work are to be arranged by the contractor then and there at no extra cost.
- l. When the work is temporarily suspended he shall protect all construction materials equipment and facilities from causing damage to existing property interfering with the operations of the station when it goes into services. The contractor shall comply with all applicable provisions of the safety regulations clean – up programme and other precautionary measures which the BHEL has in effect at the site.
- m. It will be the responsibility of the contractor to ensure the safe lifting of the piping system taking due precautions to avoid any accidents and damage to other piping system and personnel.
- n. All piping shall be adequately supported and protected to prevent damage during handling and erection. Piping support will be provided by BHEL, however, vendor shall provide all necessary input details for pipe supports, thrust blocks etc. well in advance to BHEL. Piping & support erection shall be carried out in conjunction and jointly at site.
- o. Sometimes it may become necessary for the contractor to handle certain un-required components in order to install the required materials. The contractor has to take this contingency also into account. No extra payment is payable for such contingencies.
- p. Due to atmospheric conditions erected support materials are likely to get rusted more frequently. It is the responsibility of the contractor to preserve the erection materials drawn from stores for erection till these are commissioned and handed over to customer. The required paint, thinner all other consumables like painting brush, emery paper, cotton waste, cloth etc., have to be arranged by the contractor at his cost as applicable. The contractor should ensure that the materials are not rusted on any account till they are handed over to customer. The decision of the BHEL Engineer is final with regard to frequency of application of paint.
- q. Final Material accounting shall be provided by vendor for final payment.

2.14.Site Cleanliness and Safety Requirements

- a. Contractor shall strictly follow all safety regulations / conditions as per general conditions of contract booklet enclosed with this tender.
- b. Non – conformity of safety rules and safety appliances will be viewed seriously.

- c. Contractors shall ensure that the quality is maintained in all the works connected with this contract at all stages of the requirement of BHEL.
- d. Contractor shall ensure that all Inspection, Measuring and Testing equipment that are used, whether owned by the contractor or used on loan, are calibrated by the authorized agencies and the valid calibration certificate will be available with them for verification by BHEL(as applicable). A list of such instruments possessed by contractor at site with its calibration status is to be submitted to BHEL Engineer for control.
- e. Contractors shall arrange for the inspection of the works at various stages as required by BHEL. Immediate corrective action shall be taken by the contractor for the non-conformances if any, observed and pointed out by BHEL.

2.15. Other Statutory Requirements

- a. Contractor shall follow & adhere to all the statutory & safety laws, rules & regulations for labour deployed in executing erection works as amended time to time.
- b. Principle employer's security rules & regulations are to be followed by the contractor scrupulously in executing the contract works.
- c. Contractor shall also adhere to the requirements of the principle employer in respect of minimum wages, provident fund, insurance, etc. as applicable to the contract labour.
- d. Contractor should get the clearance from the principle employer (BIFPCL) & BHEL for wages etc. paid to the labour submitting the necessary proof for the same. Suitable records to be maintained by the contractor for a minimum of 3 years.
- e. The contractor shall submit a copy of labour license obtained from the licensing Officer.
- f. The contractor shall submit monthly running bills along with the copies of monthly wages (of the preceding month) as per contract labour rules, copies of monthly return of PF contribution with remittance challans and copy of renewed WC insurance policy or copies of monthly return of ESI contribution with challans (if applicable) in respect of the workmen engaged by them.
- g. It is advisable that Contractor shall visit the site to have adequate knowledge of all the above rules & regulations before bidding for the tender. No claim shall be entertained for any ignorance of the above rules & regulations during execution of work.
- h. BHEL shall have the right to with-hold suitable amounts from contractor bills for not making payments to labour engaged by them and not adhering to the statutory, safety rules & regulations till the contractor complies with them.

2.16. Time of Completion

The entire work shall be completed by the contractor within the time schedule of one month from the SOW or within the such extended time as may be allowed under relevant clause. The contractor has to submit the detailed work plan with manpower planning meeting the timelines for BHEL's review & approval.

2.17.Engagement of Labour

The contractor will be directly responsible for provision of health and sanitary arrangements more particularly described in contract labour (regulations & Abolition) Act, safety precautions etc., as may be required for safe and satisfactory execution of the contract.

The contractor shall be responsible for proper accommodation including adequate medical facilities & transportation to the work spot and back for the personnel employed by him.

ANNEXURE-C

GRP Piping Joints(BOQ) - UF System

Sl. no	Size	No. of joints	Remarks
a) Butt Joint (Lamination)			
1	100NB	63	
2	150NB	11	
3	200NB	37	
4	250NB	158	
5	300NB	30	
6	350NB	140	
7	400NB	133	
8	450NB	84	
9	600NB	40	
10	700NB	31	
b) Fastener Joint (bolted)			
1	100NB	11	
2	150NB	5	
3	200NB	19	
4	250NB	68	
5	300NB	18	
6	350NB	50	
7	400NB	88	
8	450NB	38	
9	600NB	9	
10	700NB	10	
c) Branch Joint (Lamination)			
1	200X150NB	1	
2	350X150NB	1	
3	400X100NB	1	
4	400X150NB	3	
5	400X300NB	6	
6	400X350NB	7	
7	400X400NB	19	
8	450X250NB	5	
9	450X400NB	1	
10	600X250NB	6	
11	700X450NB	6	
12	700X700NB	2	
d) Stub Joint (Lamination)			
1	15NB	74	
2	25NB	16	
3	50NB	12	

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Reference:

1. UF system GRP Piping isometrics: 1-WT-220-01962 Rev.1

2.

GRP Piping Joints(BOQ) - Remin and Ext System

Sl. no	Size	No. of joints	Remarks
a) Butt Joint (Lamination)			
1	100NB	16	
2	150NB	392	
3	200NB	133	
4	250NB	78	
5	350NB	82	
6	450NB	192	
6	500NB	6	
b) Fastener Joint (bolted)-Flanged			
1	100NB	4	
2	150NB	96	
3	200NB	26	
4	250NB	31	
5	350NB	17	
6	500NB	1	
c) Branch Joint (Lamination)			
1	500x200	2	
2	500x350	3	
3	350x250	3	
4	250x150	8	
d) Stub Joint (Lamination)			
1	15NB	39	
2	25NB	7	
3	50NB	1	

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Reference:

1. Remin system GRP Piping isometrics: 1-WT-220-01961 Rev.0
2. External system GRP Piping isometrics: 1-WT-220-01952 Rev.0

ANNEXURE D**Guidelines/ rules for Bank Guarantee submission by Foreign vendor (Other than Indian vendor)**

As per tender provision Bank Guarantees shall be furnished by the contractor from scheduled Banks/ Public Financial Institutions in line with the following guidelines/rules for acceptance of the BG:

- i.** In case of Bank Guarantees submitted by the Foreign Vendors-
 - a)** From Nationalized/ Public sector/ Private Sector/ Foreign Banks (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the unit is located i.e. Demand can be presented at the Branch Located in the town / city or at nearest branch where the unit is located.
 - b)** From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)
 - b.1)** In such cases, Bank Guarantee issued by any of the Consortium Banks only will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter – Guarantee by Foreign Bank in favour of the Indian Bank (BHEL's Consortium Bank)(List of BHEL's Consortium Bank is given below). It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor.
 - b.2)** In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank, the same is acceptable. However, the procedure at sl.no. b.1 will required to be followed.
 - b.3)** The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time).
 - b.4)** The BG should clearly specify that the demand or other document can be presented in electronic form.
- ii.** Currency of BG shall be the currency indicated in the Letter of Intent (LOI).

List of Consortium Banks					
	Nationalised Bank		Nationalised Bank		Foreign bank
1	Allahabad bank	13	State Bank of Hyderabad	21	CITI Bank N.A
2	Andhra bank	14	Syndicate Bank	22	Deutsche Bank AG
3	Bank of Baroda	15	State Bank of Travancore	23	The Hongkong and Shanghai Banking Corporation Limited
4	Canara Bank	16	UCO Bank	24	Standard Chartered Bank
5	Corporation bank	17	Union Bank of India	25	J P Morgan
6	Central bank	18	United Bank of India		Private bank
7	Indian Bank	19	Vijaya Bank	26	Axis Bank
8	Indian Oversea Bank			27	The Federal Bank Limited
9	Oriental bank of Commerce		Public Sector Banks	28	HDFC
10	Punjab National Bank	20	IDBI	29	Kotak Mahindra Bank
11	Punjab & Sindh Bank			30	ICICI
12	State Bank of India			31	Indusind Bank
				32	Yes Bank



Bharat Heavy Electricals Limited

(A Govt. Of India Undertaking)

2x660 MW Maitree Super Thermal Power Project,
Rampal, Bagerhat, Banaagladesh

FORMAT FOR DETAILS OF BIDDER

NAME OF BIDDER	
FAX NO.	
Registration Number*	
Name of Partners / Directors	
Bidder Type Indian/ Foreign*	
City*	
State*	
Country*	
Postal Code*	
TIN Number*	
Company's Establishment Year	
Company's Nature of Business*	
Company's Legal Status* {limited company/undertaking/joint venture/partnership/other}	
Company Category* {micro unit as per MSME/small unit as per MSME/medium unit as per MSME/Ancillary unit/project affected person of this company/ssi/ other}	
Enter Company's Contact Person Details Title(Mr. / Mrs. / Ms. / Dr. / Shri)*	
Contact Name*	
Date Of Birth*	
Correspondence Email* (Correspondence Email ID can be same as your Login ID. All the mail correspondence will be sent only to the Correspondence Email ID.)	
Designation	
Phone*	
Mobile*	

ONLINE BANK PAYMENT FORMAT

Form for getting payment through RTGS (Real Time Gross Settlement)

01. NAME OF VENDOR
02. ADDRESS
03. VENDOR'S BANK A/C NAME
04. VENDOR'S BANK A/C NO.
05. NAME OF BANK
06. NAME OF BRANCH
07. BRANCH PH. NO.
08. CITY
09. ROUTING NO OF THE BRANCH

SIGNATURE OF AUTHORISED REPRESENTATIVE
OF VENDOR WITH DATE & SEAL

CONFIRMATION BY BANKER WITH
OFFICE SEAL

Note : Incorrect information will create accounting complications and payment will be delayed.