

Tender Notice No.001/SPV-CETP/JETL/ LT-WHE/2023-24 Dated:26.01.2024

NOTICE INVITING TENDER

FOR

DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA.

TENDER DOCUMENT

JEEDIMETLA EFFLUENT TREATMENT LTD.

Plot No.267, Phase-I, IDA, Jeedimetla, Medchal-Malkajgiri Dist., Hyderabad-500055

Ph.No.8886446201/040-23092141

Email : spvcetp@jetltd.org

Price. Rs. 10,000/-

DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA.

PUBLISH OF TENDER	: 26.01.2024
PRE-BID MEETING DATE & TIME	: 01.02.2024 FROM 11:00 A.M. TO 4:00 P.M.
PRE-BID MEETING VENUE	: JEEDIMETLA EFFLUENT TREATMENT LTD. PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL- MALKAJGIRI DIST., TELANGANA STATE, INDIA
SUBMISSION OF QUERIES	: 03.02.2024 BEFORE 5:00 P.M. THROUGH E-MAIL
REPLY TO QUERIES	: 05.02.2024 BEFORE 5:00 P.M. THROUGH E-MAIL
DATE & TIME OF SUBMISSION OF TENDER	: 02.03.2024 BEFORE 5:00 P.M. AT JETL
DATE & TIME OF OPENING OF TENDERS (TECHNICAL BID)	: 04.03.2024
DATE & TIME OF OPENING OF TENDERS) (COMMERCIAL BID)	: 12.03.2024

NOTE:

1. Payment should be made online for Tender Cost and EMD. Bank details are as follows.

JETL Upgradation Project
Account No. 50200090196051,
Name of the Bank: HDFC Bank Ltd.,
Branch: Ground Floor, Bank House, Roxana Palladium,
Road No. 1, Shyam Rao Nagar, Banjara Hills,
Hyderabad, Telangana – 500034
IFSC Code: HDFC0009817

2. Tender should be submitted in 2 packet system (Technical Bid with proof of Tender Cost payment and EMD paid receipts and Commercial Bid).

1. SUBMISSION OF TENDER:

JEEDIMETLA EFFLUENT TREATMENT LTD.

Plot No.267, Phase-I, IDA, Jeedimetla, Medchal-Malkajgiri Dist.

Hyderabad-500055

Ph.No.8886446201/040-23092141

Email : spvcetp@jetltd.org

1. Name of the Tenderer:

2. Tenderer Address:

3. a. PAN No. of the Firm:

b. GST No:

4. Authorised Representative Name:

Mobile No:

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Letter comprising of quotation for “Design, Supply, Fabrication, Erection and Commissioning of 160 KLD Capacity LT-WHE Plant with PEB Structure.”

To,

The Executive Director

Jeedimetla Effluent Treatment Ltd.

Plot No.267, Phase-I, IDA, Jeedimetla

Medchal-Malkajgiri Dist.

Hyderabad– 500 055

TELANGANA, INDIA

e-mail: spvcetp@jetltd.org

Dear Sir,

1. With reference to your TENDER notice dated, I have examined the TENDER document and understood its contents. I hereby submit my Technical & Commercial Bid for **“Design, Supply, Fabrication, Erection and Commissioning of 160 KLD Capacity Low Temperature Waste Heat Evaporator [LT-WHE] Plant with PEB structure as per the attached drawing”** at Jeedimetla Effluent Treatment Ltd., Plot No.267, Phase-I, IDA, Jeedimetla, Medchal-Malkajgiri Dist., Hyderabad – 500 055, Telangana, INDIA.
2. The Application is unconditional for the said Tender. This bid is valid for a period not less than 90 days.
3. It is acknowledged that the Authority will be relying on the information provided in the tender and the documents accompanying such tender for qualification of the bidders for the above subject project, and we certify that all information provided in the tender and in Annexures is true and correct nothing has been misrepresented and omitted which renders such information misleading and all documents accompanying the bid are true copies of their respective originals.
4. This statement is made for the express purpose of the above-mentioned subject.
5. We shall make available to the Authority any additional information it may find necessary or require to supplement or authenticate the Qualification statement.
6. We acknowledge the right of the Authority to reject our bid without assigning any reason or otherwise and hereby relinquish, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.

Tenderer

5/25

for Jeedimetla Effluent Treatment Ltd.

7. It is declared that:

- (a) We have examined and have no reservations to the Tender document.
- (b) We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in respect of any Bid or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any government, Central or State.

8. It is understood that the JETL may cancel the Bidding Process at any time without incurring any liability to the JETL and that you are neither bound to invite the applicants to Bid for the Project nor to accept any bid that you may receive.

9. It is certified that we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

10. It is further certified that no investigation by any regulatory agency is pending against us.

11. We hereby irrevocably relinquish any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of bidders, selection of the Tenderer, or in connection with the selection/Bidding Process itself, in respect of the above-mentioned Project and the terms and implementation thereof.

12. We agree to undertake to abide by all the terms and conditions of the TENDER document.

13. We agree to undertake to be liable for all the obligations of the Tenderer under the agreement. In witness thereof, we submit this application under and in accordance with the terms of the TENDER document.

Yours Truly

(Signature, name and designation of the Authorized Signatory)

Place:

Name and seal of the Bidder:

JETL, Hyderabad invites sealed tenders from potential and reputed manufacturers, companies authorized for the **DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA.**

S. No.	Name of Work	EMD	Tender Cost
1	TENDER FOR DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA.	Rs.5.00 Lakhs (Rs. Five Lakhs only)	Rs. 10,000/- (Rs. Ten Thousand only)

Note:

1. Publish of Tender: 26.01.2024
2. Last Date & Time for submission of Tenders: 02.03.2024 before 5:00 PM.
3. Opening of Tender (Technical Bid): 04.03.2024
4. Tender Committee will select the technically qualified bids and those who qualified in the technical bid will be eligible for opening of financial bid and Tender Committee decision will be final.
5. Tender Cost Rs: 10,000/-(Non-refundable) to be paid online and payment receipt to be attached with Technical Bid. If proof of payment is not attached, tender will be disqualified.
6. EMD should be paid online and payment receipt to be attached with Technical Bid. If proof of payment is not attached, tender will be disqualified.
7. Period of Contract: 8 Months from date of entering into an agreement
8. JETL reserves the right to reject or accept the tender in part or in full without assigning any reason.
9. JETL have sole discretion can postpone/ advance or cancel the tender.
10. The dates mentioned above by any reason falls on holiday the next working day shall be considered.

Sd/-

EXECUTIVE DIRECTOR

JEEDIMETLA EFFLUENT TREATMENT LTD.

Plot No.267, Phase-I, IDA, Jeedimetla, Medchal-Malkajgiri Dist., Hyderabad-500055

Ph.No.8886446201/040-23092141

Email : spvcetp@jetltd.org

SCHEDULE - 1

GENERAL TERMS & CONDITIONS:

1.0 Preface:

1.1 The Jeedimetla Effluent Treatment Ltd. (JETL), Hyderabad invites tender for **DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA** from the reputed and long-standing Manufacturers / Authorized distributors / Dealers etc.

1.2 The Tender Committee of JETL, reserves the right to accept or reject any or all the tenders in full or part thereof, which in their opinion, justifies such action, without further explanation to the Tenderer.

1.3 The Tenderer should submit the clientele list with contact details for verification of genuinity by the Tender Committee.

1.4 The Tenderer should contact the following for technical clarifications.

Mr. K. Bhanu Prasad
Asst. General Manager
bhanu@jetltd.org

2.0. Definition of Terms:

In the contract documents as here in defined where the context so admits, the following words and expressions will have the following meanings:

2.1 JETL shall mean Jeedimetla Effluent Treatment Limited or their duly authorized representatives.

2.2 Officer-in-Charge shall mean the in-charge officer at the plant or his representative.

2.3 Purchaser shall mean JETL.

2.4 Tenderer shall mean the firm/party/individual/manufacturer who quotes against this enquiry.

2.5 Contract price mean the price referred to in against the corresponding item quoted.

2.6 Notice in writing or 'Writing notice' shall mean a notice in written typed and printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the address and shall be deemed to have been received when in the ordinary course of post, it would have been delivered.

2.7 "This Contract" shall mean the Articles of Agreement, the conditions, the Appendix, the Schedule of Quantities and / or specification attached hereto and duly signed.

2.8 The "Site" means the areas on which the permanent works are to be executed or carried out and any other places provided by the JETL for purpose of the Contract.

2.9 Month shall mean Calendar month.

2.10 "The Supplier" shall mean the successful Tenderer to whom an order of supply is issued by the JETL.

2.11 "The Supply" shall mean the supply to be made in accordance with the Contract or part thereof as the case may be and shall include extra, additional, altered or substituted supply as required for purpose of the contract.

2.12 "The Make" shall mean the original company from where the particular material has been originated and manufactured.

2.13 "The Quantity" shall mean the units in Numbers/Length/Weight, the equipment is measured.

2.14 "The Specification" shall mean the various technical specifications attached and referred to in the tender documents. It shall also include the latest editions including all addenda/corrigenda, of relevant Indian Standard Specifications.

2.15 The "Completion Certificate" shall mean the Certificate to be issued by the Officer in-Charge after due inspection in respect of quantity, quality, make and specifications of the spares supplied by the Tenderer.

2.16 The "Period of Liability" in relation to spares equipment the specificised period from the date of supply and to the end of warranty period during which the Tenderer stands responsible for replacement of the defect spare.

2.17 The "ETP" shall mean Effluent Treatment Plant

2.18 The "MEE" shall mean Multiple Effect Evaporator.

2.19 The "CETP" shall mean Common Effluent Treatment Plant.

2.20 The "LT-WHE" shall mean Low Temperature – Waste Heat Evaporator

3.0 Submission of Tender:

a. Pre-bid meeting:

- Prior to submission of the Tender, Tenderer shall attend the Pre-bid meeting to interact with JETL team and see the Proposed plant location and clarify the doubts if any.
- Pre-bid meeting will be conducted on the scheduled date as mentioned in tender document.

b. Submission of Documents:

Drawings & Documents to be submitted in TECHNICAL BID.

- a) Technical Specifications
- b) Lay out
- c) GA drawing
- d) P&I drawings
- e) Mass Balance
- f) Cost of Operation/m³ of Feed

3.1 Tenders must be submitted at JETL.

3.2 Covering letter along with its enclosures accompanying the tender document and all further correspondence shall be submitted in duplicate.

3.3 The Tenders, as submitted, shall consist of the following:

Complete set of tender documents as sold duly filled in and signed by the Tenderer as prescribed in different clauses of the tender documents.

3.4 All Pages to be initiated. All signatures in Tender documents, shall be dated as well as all the pages of all sections of tender documents shall initiated at the lower left-hand corner and signed wherever required in the tender papers by the Tenderer or Authorized Representative.

3.5 Rates to be in figures and words. The Tenderer should quote in English both in figures as well as in words.

3.6 Corrections & Erasures:

All corrections, and alterations in the entries of tender papers will be signed in full by the Tenderer with date. No erasures or over-writings are permissible.

3.7 Tenderers should state in their offers the address to which the orders, notices and correspondence relating to the tender are to be sent. Any change of address should be notified to Jeedimetla Effluent Treatment Limited, and correspondence thereafter will be done with the state address.

3.8 The acceptance of tender and award of purchase order to one or more than one Tenderer if considered necessary will rest with the JETL which does not bind itself to accept the lowest tender. JETL reserves the right to reject any or all the offers received without assigning any reasons and no explanation can be demanded of the cause of rejection of his tender by any tenderer.

3.9 The tender documents in which tender submitted by a Tenderer shall become the property of the JETL and the JETL shall have no obligation to return the same to the tenderer.

3.10 For any clarification regarding the tender or nature or scope of work, the office of JETL, Hyderabad may be contacted during office hours on any working day.

3.11 Negligence of the bidder in preparing bid confers no right to withdraw the bid after it was opened.

4.0 Transfer of Tender Document:

Transfer of tender documents purchased by one intending tenderer to another is not permissible.

5.0 Earnest Money Deposit (EMD):

The intending Tenderer shall deposit with JETL, Hyderabad as Earnest Money Deposit Rs.5.00 Lakhs (Rupees Five Lakhs only) through online as a guarantee of good faith, which amount shall be forfeited in the event of any evasive refusal or delay in executing the order. The deposit of the unsuccessful tenderer will be returned without interest, immediately after the decision is taken regarding the award of the order. The Earnest money of the successful tenderer will be returned after completion of supply and successful commissioning.

6.0 Price:

6.1 Price offered by the tenderer should be firm and free from escalations. The prices offered should be valid for a period of 90 days from the date of tender opening.

6.2 Price quoted should inclusive of packing & forwarding, transit insurance & transportation charges to JETL, Jeedimetla, Medchal-Malkajgiri dist., Hyderabad, Telangana State, INDIA.

6.3 Price Quoted should be Exclusive of GST.

7.0 Liquidated Damages:

7.1 If the Tenderer fails to deliver any or all of the Goods within the time period specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to:

7.2 1% value of the undelivered portion of the supply/ incomplete supply for each week of delay beyond the scheduled delivery date.

7.3 The total amount so deducted shall not exceed 5% of the work order value. Once the maximum is reached, the purchaser may consider termination of the contract.

7.4 Any incremental taxes and levies on account of delay in performance of the contract by the Tenderer shall be to the Tenderer's account.

7.5 Bidder shall guarantee standalone results for water evaporation and Final concentration.

7.6 Penalty clause will be implicated on final guarantee water evaporation and Final concentration as per the tender submission designed values. If fails, the bidder/Tenderer will have to correct in 30 days otherwise PBG will be forfeited.

8.0 Termination:

8.1 The purchaser may without prejudice to any other remedy for breach of work order by written notice of default sent to the Tenderer, terminate the order in whole or in part:

8.2 If the Tenderer fails to deliver any or all of the goods within the time period specified in the contract or any extension thereof granted by the purchaser.

8.3 If the Tenderer fails to perform any other obligation under the contract.

8.4 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deemed appropriate, goods similar to those undelivered, and the Tenderer shall be liable to the purchaser for any excess costs for such similar goods. However, the supplier shall continue performance of the contract to the extent not terminated.

8.5 Consequent to such termination of work order, the purchaser shall recover the advance paid, if any, to the Tenderer along with the interest @18% per annum compounded quarterly on the last day of March, June, September and December on the advance paid for the entire period for which the advance was retained by supplier.

8.6 The purchaser may at any time terminate the contract by giving written notice to the Tenderer, without compensation to the Tenderer, if:

8.6.1 The Tenderer becomes bankrupt or otherwise insolvent.

8.6.2 The Tenderer being a company is wound up voluntarily by the order of a court receiver or a Manager appointed on behalf of the debenture holders or circumstances shall have arisen which entitle the court or debenture holders to appoint a receiver or a Manager.

9.0 Force Majeure:

9.1 Notwithstanding the provisions of delay clause, the Tenderer shall not be liable for forfeiture of their Earnest money deposit, liquidated damages or termination for default, if and to the extent that, it's delay in execution or their failure to perform their obligations under the contract is the result of an event of Force Majeure.

9.2 For the purpose of this clause, "Force Majeure" means an event beyond the control of the Tenderer and not involving the Tenderer's fault or negligence and not foreseeable. Such events may include, but

are not restricted to, acts of the Federation either in its sovereign or contractual capacity, wars or revolutions, fires floods, epidemics, riots, terrorism and all acts of god.

9.3 If a Force Majeure situation arises, the Tenderer shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchase in writing, the Tenderer shall continue to perform its obligation under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

10.0 Extension of time for completion:

Should the supply of extra or additional items or services of any kind be any cause of delay referred to in these conditions, or exceptional adverse climatic conditions or other special circumstances of any kind whatsoever which may occur, be such as fairly to entitle the Tenderer to an extension of time for the completion of the supplies, the purchaser shall determine the amount of such extension and shall notify the Tenderer accordingly. Provided that the purchaser is not bound to take into account any extra or additional supplies or services or other special circumstances unless the Tenderer has within twenty-eight days after such work has been commence, or such circumstances have arisen, or as soon thereafter as in practicable submitted to the purchaser full and detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

11.0 Review and Co-ordination meeting:

The Tenderer shall depute senior and competent personnel to attend the site, Co-ordination meetings that would generally be held at the site every month. The Tenderer take necessary action to implement the decisions arrived at such meetings shall also update the supply schedule.

12.0 Eligibility Criteria:

Eligibility Criteria for submitting the Tender is as follows.

(Proof of Experience certificates/work done certificates must be attached to the technical bid, work orders will not be considered)

S. No.	Description
1	The Tenderer should have at least 4 years of experience in Design / Retrofitting of MEE. Technical Experience which shall include i) No. of similar projects executed in ETPs ii) No. of Projects functioning optimally iii) No. of Projects under execution iv) No. of projects retrofitted
2	The Tenderer should have supplied / Retrofitted a minimum capacity of 200 KLD & above at ETP/CETP
3	The Tenderer should have Annual turnover of minimum Rs. 6.00 Crores in last 3 years. Financial competences shall include i) Execution of single project with value of Rs. 4.0 Cr and above

	ii) IT returns for last 3 Financial Years
4	Industry Establishment shall include i) Capacity to fabricate and manufacture all related component of the MEE ii) Capacity to procure bought out items
5	Design and Engineering shall include i) Facilities to design and execute the project ii) Details of technical manpower involved in execution of the project
6	Cost of operation/m3 of Feed [Preference shall be given to Design requiring least Utilities at comparable Capex]

13.0 Terms of Payment:

The terms of payment applicable to the contract will be as Stated below:

13.1 30% advance payment will be released with Work Order and after concluding of agreement against Advance Bank Guarantee (ABG) from a nationalised / scheduled banks only.

13.2 50 % payment against delivery of the Equipment.

13.3 10% After completion of Erection & Commissioning of the Equipment.

13.4 Balance 10% after completion of 30-days performance Trial and meeting the design performance against submission of 10% PBG.

13.5 The EMD will be released after successful Trial commissioning & Submission of PBG.

14.0 Project Completion Period:

14.1 Total Project to be complete including Supply, Installation and Commissioning 8 Months from date of entering into an agreement.

14.2 After successful commissioning, Bidder has to submit the SOP, O&M Manuals, Software Licence copies (in the name of JETL) & Warranty cards within 3 weeks to JETL.

15.0 Performance Bank Guarantee (PBG):

An amount equivalent to 10% (Ten percent) on final Tender Value payable as Performance Bank Guarantee (PBG) from a nationalised / scheduled banks only as per the given format. The PBG will be refunded after 12 months from the date of successful commissioning of the plant with design performance. If the plant does not perform to the designed parameters, the PBG will be forfeited.

16.0 Compliance with Labour Laws

Tenderer shall comply with all laws and statutory regulations dealing with the employment of labour such as:

- i) The payment of Wages Act, 1936
- ii) The Minimum Wages Act, 1948
- iii) The Workmen's Compensation Act, 1923
- iv) Employer's Liability act, 1938
- v) Industrial Disputes Act, 1947
- vi) Maternity Benefit Act 1961

- vii) The Employees State Insurance Act, 1948
- viii) Employee's Provident Fund Scheme.
- ix) Child labour (Prohibition & Regulation) Act-1986
- x) The Contract Labour (Regulation and Abolishing) Act, 1970 & Contract Labour (Regulations & Abolition) Central Rules, 1971.

17.0 Insurance for works and damages to persons and property:

17.1 Insurance for works:

The Tenderer at the time of signing the contract or before commencing the execution of the work, without limiting his obligations and responsibilities shall insure the works at his own cost and keep them insured not only until the virtual completion of the contract, but up to satisfactory completion of the defect liability period including extended defect liability period, if any, against all acts of God including Fire, Theft, Riots, War, Floods, etc. with Nationalised Insurance Agency in the joint names of the Employer and Tenderer (the name of the former being placed first in the policy) for the full amount of the contract and inclusive of the full market value of the materials to be supplied free of cost by the Employer, fees for assessing the claim and in connection with Tenderer's services generally therein. This policy, however shall not cover any property of the Tenderer or of any sub-Tenderer or their employees.

17.2 Insurance in respect of damages to persons and property:

- i) The Tenderer shall be responsible for all injury/mishaps to persons, animals or things and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any approved sub- Tenderer's or Employee's, whether such injury/mishaps or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause should be held to include any damage to roads, streets, footpaths, bridges, sewerage, water supply & other services and works forming the subject of this contract by frost or other inclemency of the weather. The Tenderer shall indemnify the Employer and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claims made in respect of injury or damage under any Acts of Government or otherwise and also in respect of any award of compensation of damages consequent upon such claims.
- ii) The Tenderer shall reinstate all damages of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.
- iii) The Tenderer shall indemnify the Employer against all claims which may be made against the Employer by any member of the public or other third party in respect of works in consequence thereof and shall at his own expense arrange to effect and maintain, not only until the virtual completion of the contract, but up to satisfactory completion of the defect liability period, if any, with any Nationalized Insurance Agency in the joint names of the Employer and the

Tenderer against such risks and deposit such policy or policies with the Employer from time to time during the currency of this contract. The Tenderer shall similarly indemnify the Employer against all claims which may be made upon the employer whether under the Workmen's Compensation Act or any other statute in force during the currency of this contract or at common law in respect of any employee of the Tenderer or any sub-Tenderer and shall at his own expense effect and maintain with an approved office a policy of insurance in the joint names of the employer and the Tenderer. (The name of the employer appearing being place first in the policy) against such risks and deposit such policy or policies with the Employer from time to time during the currency of the contract. The Tenderer shall be responsible for anything which may be excluded from the Insurance Policies above referred to and also for all other damages to any property arising out of and incidental to the negligent or defective carrying out of this contract. He shall also indemnify the Employer in respect of any cost charges or expenses arising out of any claim or proceedings and also in respect of any award of/or compensation of damages arising there from.

17.3 If the Tenderer fails to comply with the terms of these conditions, the employer may insure the works and may deduct the amount of the premiums paid from any moneys that may be payable or become payable to the Tenderer or may as an option, not release running payment to the Tenderer until the Tenderer shall have complied with the terms of this condition.

17.4. Such insurance, whether effected by the Employer or the Tenderer will no limit or bar the liability and obligation of the Tenderer to deliver the works to the Employer complete in all respects according to the contract. In case of loss or damage due to any of the aforesaid causes, the moneys payable under any such insurance shall be then received and retained by the Employer until the works are finally completed and satisfactorily maintained during the defect liability period including extended defect liability period. If any, and such moneys shall then be credited to the Tenderer in final settlement of accounts.

17.5 The employer shall be at liberty and is empowered to deduct the amount of any damage, compensation cost, charges and expenses arising or accruing from or in respect of any such claim or damage from any sum or sums due to or become due to the Tenderer including the retention amount.

17.6 The Tenderer shall as soon as any claim under the policy is settled or the work reinstated by the insurance office should elect to do so, proceed with all diligence with the completion of the works in the same manner as though misfortune/accident has not occurred and in all respects under the same conditions of contract. The contractor in case of rebuilding or reinstatement after the accident shall be entitled to such extension of time from the Employer as deemed fit.

17.7 The Tenderer shall deposit the original policy/policies and original receipts for the premium with the Employer within 10 (ten) days from the date of signing the contract/commencement of execution of works or unless otherwise instructed by the Employer.

17.8 Issue of Materials by the Employer:

For execution of work under this contract, Employer will not provide any Materials.

17.9 General:

- i) Tenderer should pay the Electricity charges to JETL for site Fabrication of PEB Structures, Equipment's site welding, etc. as per the actual consumption recorded and prevailing tariff.
- ii) In case the Tenderer to procure materials for execution in time or if the Client feels the progress is delayed due to non-availability of materials at site, the client shall arrange to supply the required materials at site and the full procured cost of materials shall be deducted from the Tenderer's bill.
- iii) The Tenderer shall not have the option to refuse to take delivery of the stores mentioned above, and offered to him. No claim on this account shall be entertained.
- iv) All incidental charges for cartage at the site unloading, storage and safe custody of materials shall be borne by the Tenderer.
- v) The Tenderer shall construct suitable accommodation within double locking arrangement at the site of work duly approved by the Engineer for storing the material safe against damage by sun, rain, dampness, fire, theft etc. The Tenderer shall employ necessary watch and ward establishment for the purpose to the satisfaction of the Engineer.

18.0 Jurisdiction Clause:

Any legal dispute arising out of the resultant contract will be subject to the jurisdiction of the Hyderabad & Secunderabad Courts, if the same cannot be resolved by mutual consent.

SCHEDULE - 2

1.0 SPECIAL CONDITIONS:

- i. The MAKES & Specifications mentioned against each item in the schedule is to be strictly adhered. If any spurious material is received the Tenderer will be blacklisted and the same would be circulated in all the Govt. departments while confiscating the EMD amount.
- ii. On insistence the Tenderer should submit the proof of source of procurement of spares in order to prove genuinely.
- iii. If the Tenderer is a dealer /distributor of the spares he should submit copy of the dealership /distributorship certificate issued by the manufacturers.
- iv. The tenderer has to participate fully in the tender.
- v. The Tenderer should accept for third party inspections appointed by the JETL.
- vi. The Successful Tenderer will be issued LOI for the contract. The detailed drawings as per the specifications should be submitted within 2 weeks of issuing of the LOI.
- vii. The Agreement /work order of the successful bidder/tenderer will be awarded after submission of the final drawings as per the specifications and its approval.
- viii. The tenderer should submit the Equipment Foundations details after entering into the agreement within 2 weeks to start the civil works.

SCHEDULE - 3

SCOPE OF SUPPLY AND TECHNICAL SPECIFICATIONS FOR DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR (LT-WHE) PLANT WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JEEDIMETLA EFFLUENT TREATMENT LTD. [JETL], PLOT NO – 267, PHASE – 1, IDA, JEEDIMETLA, HYDERABAD - 500055, MEDCHAL-MALKAJGIRI DIST., TELANGANA STATE, INDIA.

LT – WHE PLANT CAPACITY: 160 KLD considering 20 hrs. of operation per day

To process the R.O. reject in LT-WHE by taking waste heat available in the form of process vapours (vapour contains air) at our ATFD plants. Provision to be made to use fresh steam for the system in case non-availability of ATFD vapours.

DESIGN PARAMETERS

EQUIPMENT: LOW TEMPERATURE WASTE HEAT EVAPORATOR

1. FEED RATE	-	8000 LPH
2. FEED pH	-	6.5 to 7.0
3. TOTAL SOLIDS IN FEED w/w	-	3%
4. TOTAL SOLIDS IN CONCENTRATE w/w	-	35%
5. MAXIMUM WATER EVAPORATION	- kg/h
6. CONCENTRATE QUANTITY	- kg/h
7. SERVICES/UTILITIES REQUIRED		
a. PROCESS VAPOR QUANTITY AVAILABLE FROM ATFDs	-	2100 kg/h
b. ADDITIONAL STEAM REQUIRED IF ANY	- kg/h
c. POWER INSTALLED	- HP
d. POWER CONSUMPTION	- KWH
e. COOLING WATER REQUIRED	- m ³ /hr
f. COMPRESSED AIR REQUIRED	- Nm ³ /hr

SCOPE OF SUPPLY SHOULD INCLUDE THE FOLLOWING

1. **TRANSFER PUMP FROM STORAGE TANK**, Qty.: 01 No., MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with mechanical seal.
2. **FEED BALANCE TANK**, Qty. – 1 No, Capacity: 1000 Lit, MOC: SS316 Construction: Flat bottom with drain valve.
3. **FEED PUMP WITH NON FLP MOTORS [IE-3]**, Quantity: 01 No., Shaft sealing: with mechanical seal & MOC: Liquid Contact Parts—CF8M/SS 316.
4. **CALANDRIAs** [Forced Circulation Type], MOC: Tubes: 0.9 thick, seamless, Titanium Grade-2, Tube sheets: SS316, Bonnets: SS316, Bonnet flanges: CS with SS316 cladding & Shell: SS 316
5. **VAPOUR SEPARATORS**, Capacity: As per Design & MOC: SS 316.
6. **PREHEATERS**, MOC: Tubes: 0.9 thick, seamless, Titanium Grade-2, Tube sheets: SS316, Bonnets: SS316 Bonnet flanges: CS with SS316 cladding & Shell: SS 316.

- 7. CONDENSER**, Type: Barometric type & MOC: Liquid Contact Parts in SS 316.
- 8. TAIL TANK**, Qty. – 1 No, Capacity: 1000 Lit, Type: Vertical cylindrical with flat bottom and open top & MOC: SS 316.
- 9. RECIRCULATION PUMPS WITH NON FLP MOTORS [IE-3]**, Type: Axial Flow Type, Shaft sealing: with double mechanical seal & MOC: Liquid Contact Parts—CF8M/SS 316.
- 10. CONDENSATE PUMP WITH NON FLP MOTOR [IE-3]**, Qty. – 1 No, Type: Centrifugal, MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with double mechanical seal.
- 11. CONCENTRATE PUMP WITH NON FLP MOTOR [IE-3]**, Qty. – 1 No, Type: Centrifugal, MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with double mechanical seal.
- 12. CONDENSATE TRANSFER PUMP WITH NON FLP MOTOR [IE-3]**, Quantity: 01 No., Type: Centrifugal, MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with single mechanical seal
- 13. CONCENTRATE STORAGE TANK**, Capacity: 3000 Lit, MOC: SS316, Construction: Flat bottom.
- 14. CONCENTRATE TRANSFER PUMP WITH NON FLP MOTOR [IE-3]**, Quantity: 01 No., Type: Centrifugal, MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with single mechanical seal.
- 15. VAPOR/STEAM CONDENSATE STORAGE TANK**, Capacity: 10000 Lit, MOC: SS316 & Construction: Flat bottom.
- 16. VAPOR/STEAM CONDENSATE TRANSFER PUMP WITH NON FLP MOTOR [IE-3]**, Quantity: 01 No., Type: Centrifugal, MOC: Liquid Contact Parts—CF8M/SS 316 & Shaft sealing: with single mechanical seal.
- 17. VACUUM PUMP WITH MOTOR [IE-3]**, Quantity: 1 + 1 No., Type: Liquid Ring Water Sealed, MOC: Casing: CI with SS 304 sleeves, Cover: CI & Rotor: SS 304.
- 18. SEAL WATER COOLING SYSTEM FOR VACUUM PUMP AND ALL PUMP MECHANICAL SEALS**, Pump Seal water is cooled in a closed loop with a SS 316 Tank, pump and a Plate Heat Exchanger(PHE): 01 set.
- 19. VAPOUR DUCT**, Quantity: 1 Set as may be required, MOC: SS 316, Flanges: All flanges of 100 NB and above are CS with SS316 stub ends. This will be made of suitable thickness for interconnecting Calandrias, vapour separators and condenser.
- 20. LIQUID DUCTING**, Quantity: 1 Set as may be required, MOC: SS 316 (Sch-5), Flanges: All flanges of 100 NB and above are CS with SS316 stub
- 21. INTER CONNCETING PIPES AND FITTINGS**, Quantity: 1 Lot, MOC: Product & Condensate piping: SS 316 (Sch. 10) & Air Line: GI, Complete with necessary pipes, bends, tees, valves, pipe supports, etc. for interconnecting various components of the plant based on a compact layout.
- 22. VAPOUR DUCTING FROM ATFD PLANTS**, Process vapor ducting with necessary valves will be done in such a way that Vapor can be diverted either to the LT-WHE or to their existing individual condensers with the help of pneumatically operated butterfly valves. MOC of this ducting will be in SS316.

23. CIP SYSTEM, suitable capacity CIP Tank, Pump Set (Non FLP Motor) and interconnecting pipelines of MOC – SS 316

24. GENERAL NOTES

1. DESIGN CODE- ASME SECTION- VIII, DIVISION-1& MANUFACTURER'S STANDARD
2. ALL FLANGES ARE ASME CLASS- 150
3. ALL FLANGES UPTO 80 NB ARE IN SOLID SS316. FLANGES OF 100 NB AND ABOVE ARE IN CS WITH SS316 STUB ENDS.
4. THE LENGTH OF THE HEAT EXCHANGERS TUBES SHOULD OF STANDARD LENGTH OF 6 MTS

25. MCC PANEL (NON- FLP) (Common for Whole Plant), Quantity: 1 Set. The panel should have starters for all motors and one set push buttons for ON-OFF of all the electric motors in the plant with corresponding indication lamp for operation placed on the mimic diagram. The panel should be of damp-proof construction. The panel should be pre-wired to terminal connections. 20% Additional Feeders suitable to 5 HP Motors to be provided.

TECHNICAL PARTICULARS OF MCC PANEL:

System Design, Supply System: 415V +/-10%, 50hz +/-5%, AC, 3Ph, 4Wire, Ambient Temperature: 40° C

Control Supply: 230V AC, Fault withstand capacity: 50KA for 1 Second, Design of LT Panel: Metal Clad, Modular Construction, Compartmentalized, Cubicle, Design, draw out Type for ACB Feeders & Non Draw out Type (Fixed), for other Feeders, Projected Core, Single Front, Dust & Vermin Proof.

Fabrication Details, Main Frame: 16SWG (1.6mm) CRCA Sheet. Partition Sheet/Covers/Doors: 16SWG (1.6mm) CRCA Sheet. Base Frame& Cable Entry: 75 x 40 x 6mm, Incoming Cables & Outgoing Cables-Top entry, Type of Mounting: Free Stand Floor Mounting.

Sheet Metal Treatment Painting: All the sheet Metal should be treated in Seven Tank Process for degreasing, de resting and Phosphate thoroughly. After thorough treatment the panel should be Epoxy Powder Coated. Paint Shade: RAL 7032 [Siemens Grey] For all Outgoings

Bus bars & Accessories, Material & Grade: Aluminium Bus Bar Phase/Neutral & Current Density 0.8A/Sq. mm, Bus Bar Connections: Spring and Plain Washers (High Tension bolts & Nuts), Earth Bus bar: Aluminium Earth Bus should be Provided at the bottom. Bus bar supports (Insulators): Non Hygroscopic Heavy Duty SMC (sheet moulding compound)/ DMC type Insulators. The Maximum Distance between two insulators, channels should be 500mm. FRP Shrouding should be Provided at the live parts at the Required places. Minimum Clearance in Air: Phase to phase 25mm and 19mm between Phases to Neutral & Earth

Control Wiring: 1.5 Sq.mm, PVC insulated, single core, multi stand, Copper wire. CT /Power Wiring: 2.5 Sq.mm, PVC insulated, single Core, multi stand, Copper wire for CT wiring. Power wiring Suitable sized PVC Insulated, Single core, multi stand, flexible copper Cable for O/G Feeders up to 63A rating.

Miscellaneous Features, Busbar Sleeving: Heat shrinkable Color Coded PVC Sleeves should be provided Earthing: Door earthing should be provided with Green Color Copper Flexible wire. (4/2. 5Sq.mm) Lifting: Eye Bolts should be provided for Lifting purpose. Louvers should be provided for bus bar covers for heat ventilation for panels installed in indoor.

26. PLC AND SCADA BASED OPERATING PANEL

Specification of PLC and SCADA and Instrumentation System, PLC: Siemens, PLC Enclosure: Carbon Steel (Powder Coated), The system should be complete with CPU and necessary analog/digital input output cards. Latest version of SCADA Software having run time facility with original license should be provided. Communication between PLC, SCADA and I/O cards should be based on Ethernet/Profinet network.

SCADA will have following features:

- a) The CPU should be 32bit processor., b) SCADA Run time software should be provided, c) Capacity of SCADA software should be as per process requirement, d) All the process should be operated from SCADA station. Multiple trends in one display,
- b) Specification of PC: PC type: Desktop, CPU: I5, 4 GB RAM, display: Colour 32" LED, SSD: 500 GB min., CD / DVD read / write drive to be Provided, USB ports: Provided, Communication interface: Standard, Mouse: Optical, Keyboard: Bluetooth connected, Operating software: Windows 11, 1 KVA online UPS with 30 min. backup during power failure.

Specifications of PLC Panel:

Reputed make MS Powder coated enclosure with protection IP-54, should be provided and fitted with following components:

1. ON_OFF switch, 2. Incomer MCB for UPS Supply and non UPS supply, 3. Isolation Transformer, 4. Fused terminal blocks for digital outputs, 5. Terminal blocks for others I/Os, 6. MCB s for power distribution, 7. PLC including CPU, I/O card, Relay etc, 8. 24 V DC 6 A power supply, 9. Panel illumination and ventilation fan with louvers, 10. Power socket and switch, 11. Wiring accessories, 12. Cross ferruling, 13. Terminal blocks should be isolated with respect to their potential level. Colour codes wires should be used, 14. System earth and electrical earth should be separately provided, & 15. Siren with lamp post for audio visual alarm in case of fault, PLC panel to include Manual operation arrangement of plant with on-off push buttons, PID controllers, Scanner and signal distribution

27. INSTRUMENTATION

FIELD INSTRUMENTS FOR LT-WHE

- Vortex type steam flow meter for measurement of steam consumption of the plant.
- Electro pneumatic based Steam flow control valve.
- Electro Magnetic flow meter with integral flow indicating totalizer for input feed
- Electro Magnetic flow meter with integral flow indicating totalizer for process condensate
- One set of Vacuum transmitters for all Vapor separators.
- One set of RTDs for Temperature indication of Temperatures in all Vapor separators, RT water inlet and outlet etc.
- Pressure gauges for indication of the steam pressure before the jacket of first effect, cooling water inlet to condenser
- 1 Set Dial type vacuum gauges for indication of vacuum in all effects.

28. SCOPE OF SUPPLY FOR PEB STRUCTURE – AS PER THE ATTACHED DRAWING & SPECIFICATIONS

- The successful Tenderer should design the PEB Structure and is to be submitted to JETL and will be vetted by the Structural Consultant and their decision is final.
- Providing, fabricating and erecting of Primary Structural Steel Members [Plate confirming to E345 Grade] consisting of base plates, foundation bolts, Built-up sections Columns & Rafters,

Intermediate tie rods & 6mm thick chequered plate in all floors including welding, lifting, aligning in the position, connections, etc., complete as per approved drawing and design duly finished with one coat of Anti-corrosive primer and two coats of Anti-Corrosive Paint [DTM 200 Smoke Grey Anti-corrosive co-polymer paint, Make: STANVAC]. Templates for base plates shall be provided and installed under vendor's scope.

29. EXCLUSIONS: Civil Foundation for the Structure

30. LIST OF APPROVED MAKES FOR BOUGHT OUT COMPONENTS AND INSTRUMENTS

ITEM	MAKE
Stainless Steel Sheet / Plates	Jindal / SAIL
Carbon Steel Sheets / Plates	Jindal / Essar / SAIL / TATA
PEB Structural Steel	TATA / JINDAL
Stainless Steel Tubes / Pipes	Jindal/Shubhlaxmi/Venus/Ratnamani
Titanium Tubes / Pipes	Jiangsu Votti Non-Ferrous Metals / Baoji Zhongxinbao Metal Materials
Carbon Steel Tubes / Pipes	Maharashtra Seamless / Jindal / BRG
Centrifugal Blower	Engicon/Ecomak/Cosmos/Flakt
Vacuum Pump	PPI / Finetech/ Prime/MAZDA
Stainless Steel Centrifugal Pumps	KSB/FLOWSERVE/KIRLOSAKR/JOHNSON
Axial Flow Pumps	Standard SUPPLIER
Motors (IE-3)	ABB / Bharat Bijlee / Crompton Greaves
Steam Trap	Rex / Spirax / Penault/Uni Klinger
Cast Iron Centrifugal Pumps	KSB / Kirloskar
Mechanical Seals	Rollon / Reliability/leak proof
Air Filter	Ultrafilter/TFI Filter
Plate heat exchanger	ALFA LAVAL / Kelvion
Temperature Sensor	Radix/Thermal Instruments
Vacuum/ Pressure Transmitter (FIXED RANGE)	Wika /E&H
Steam and Liquid Control Valves	RK Controls/ Samson / Teknik / Pneucon / Dembla
Level Switch	E&H/P&F/Baumer
Pneumatic Ball valves (On-Off)	Rotex/Aira/Micro Pneumatics / Process Techno
Local Gauges (Temperature, Pressure, Vacuum) Dial Type	Radix/GIC/Baumer-Waree/Wika
Switch and control Gear	L&T/Siemens/ Scheneider
Local Push Button Station	L&T/Schneider
Wires and Cables	Polycab/Finolex/LAPP Kabel
VFD	ABB/Siemens/Allen Bradly / Danfoss
Airline accessories	Festo/Shavo Norgen/Rotex/Aira/Micro Pneumatics/Janatics
Level Transmitter-Capacitance	E&H/Anderson Negele / Vega / ABB
Level Transmitter – Satic /Differential Pressure	E&H / Emerson / ABB / Yokogawa
Temperature Transmitter/Pressure	E&H/Emerson/Radix/Yokogawa/ABB

Transmitter	
Flow Switch	IFM/Switzer/Baumer
Magnetic/Mass Flow meters	E&H/Emerson/ABB/Yokogawa
Flow meter	E&H/Emerson/ABB
Pressure Switch/Temperature Switch/Thermostat	E&H/Switzer-Indfoss/ABB
Power/Energy Monitors/MFM	Siemens/L&T/Conzerv
PC (Personal Computer)	HP/Dell
DCS/PLC	Siemens/ABB/Schneider/Mitsubishi
Motor Isolators/Junction boxes	Hansel/L&T/Schneider/Esbee
Push Buttons	Tecnik/L&T/Siemens
Solenoid valve	Rotex/Aira/Festo/SMC/Micro Pneumatics/Janatic
Soft Starter	Allen-Bradley/Siemens/Schneider/Danfoss
Proximity Switch	IFM/Baumer/P&F
Manual Valves	AUDCO/MICRO FINISH / BDK/Process Techno
(Ball/Butterfly/globe/gate)	

PRICE BID

DESIGN, SUPPLY, FABRICATION, ERECTION & COMMISSIONING OF 160 KLD LOW TEMPERATURE WASTE HEAT EVAPORATOR [LT – WHE] PLANT WITH PEB STRUCTURE AS PER THE ATTACHED DRAWING AT JETL, JEEDIMETLA, MEDCHAL-MALKAJGIRI DIST., HYDERABAD - 500055, TELANGANA STATE, INDIA.

S.NO.	DESCRIPTION	QTY.	PRICE (Rs.)	TOTAL AMOUNT (Rs.)
1	LT-WHE	1 SET		

Sd/-
EXECUTIVE DIRECTOR
JEEDIMETLA EFFLUENT TREATMENT LTD.
Plot No.267, Phase-I, IDA, Jeedimetla, Medchal-
Malkajgiri Dist., Hyderabad-500055
Ph.No.8886446201/040-23092141
Email : spvcetp@jetltd.org

DRAWINGS:

Enclosed as an Annexure – I

BILL OF QUANTITIES (BOQ):

Enclosed as an Annexure – II