Tender
for
Purchase of Control System Equipment for Thermal Power Plant Testbed

Centre of Excellence (CoE), in Complex & Nonlinear Dynamical Systems - (CNDS)

VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE (VJTI)
H R Mahajani Marg, Matunga, Mumbai – 400019
VEERMATA JIjabai Technological Institute (VJTI)
H R Mahajani Marg, Matunga, Mumbai – 400019.

Purchase of control system equipment for Thermal Power Plant Testbed
CoE CNDS

(Tender No.: VJTI/ CoE CNDS/Control System Equipment/2022/Tender/01,
Dated: 14/12/2022)

No editing /addition/deletion of matter (in document) is permitted. If such action is observed
at any stage, such bidders are liable for rejection outright and decision of the institute shall be
final and binding for all the bidders.

For Enquiry Contact:
Dr. Faruk Kazi Phone: + (91) 8355968909, Email id: fskazi@el.vjti.ac.in
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<table>
<thead>
<tr>
<th>Sr.No</th>
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<th>Yes/No</th>
</tr>
</thead>
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<tr>
<td>1.</td>
<td>EMD Rs. 16,000/- (Rs. Sixteen Thousand only) and Tender document Cost of Rs 3,776/-, in favour of &quot;The Director VJTI&quot; Payable at Mumbai</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Letter of authorization from the manufacturer/parent company (In case of authorized dealer)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>List of clients/customers with complete name, address and contact number during last 5 years</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Documentary proof of experience in sale of equipment and software in Automation and simulation of Power Plants.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Documentary proof of Goods and Service Tax (GST) Registration Certificate</td>
<td></td>
</tr>
</tbody>
</table>
VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE (VJTI)
H R Mahajani Marg, Matunga, Mumbai-400019

TENDER DOCUMENT FOR PURCHASE OF EQUIPMENTS
IN CoE CNDS

(Tender No.: VJTI/ CoE CNDS/Control System Equipment/2022/Tender/01,
Dated: 14/12/2022)

<table>
<thead>
<tr>
<th>Issuance/Component</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue of tender document</td>
<td>On all working days from 14/12/2022 to 28/12/2022.</td>
</tr>
<tr>
<td>Tender Document Cost</td>
<td>Non-Refundable Demand Draft of Rs. 3,776/- (Rs. Three Thousand Seven Hundred and Seventy Six only.) in favour of “The Director, VJTI” payable at Mumbai to be submitted separately.</td>
</tr>
<tr>
<td>Earnest Money Deposit (EMD)</td>
<td>Rs. 16,000/- (Rs. Sixteen Thousand only)</td>
</tr>
<tr>
<td>Last date and time for submission of Tenders</td>
<td>Upto 3:00PM on 28/12/2022</td>
</tr>
</tbody>
</table>

No tender document will be accepted after the date and time given above.

Tender to be submitted to inward section of VJTI.

REGISTRAR
VJTI, Matunga
Mumbai-400019
CHAPTER-1

INVITATION OF THE BID

SCOPE OF THE WORK:
VJTI invites sealed bids for supplying of Control System Equipment for Thermal Power Plant Testbed in CoE CNDS as per the specifications contained in Chapter-6 of this Tender Document. The bidder should be a reputed manufacturer or authorized dealer/distributor. The Control System Equipment for Thermal Power Plant Testbed will need to be supplied and installed at VJTI Matunga, Mumbai-400019.

DETAILS OF THE BID:-

<table>
<thead>
<tr>
<th>Issue of tender documents</th>
<th>On all working days from 14/12/2022 TO 28/12/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prebid meeting</td>
<td>On 21/12/2022 at 5:00 PM</td>
</tr>
<tr>
<td>Last date and time of submission of bids</td>
<td>Upto 3.00 PM on 28/12/2022</td>
</tr>
</tbody>
</table>

BIDDING PROCEDURE:-
The prescribed document consisting of (i) Technical Bid and (ii) Financial Bid, sealed separately in two different envelopes, super-scribing “Technical Bid” and “Financial Bid”, as the case may be, and placed in a duly sealed big single envelop super-scribing “Bid for Purchase of Control System Equipment for Thermal Power Plant Testbed in CoE CNDS” may be submitted in inward section of VJTI at main building administrative office, Matunga, Mumbai-400019 before 3.00 PM on 28/12/2022. The bids may be sent through Post and ensure that it should to reach at the aforesaid address 3.00 PM on 28/12/2022.

In case an acknowledgement of receipt of quotation is desired (applicable to bidders sent THROUGH POST ONLY), it should be sent under Registered Post with an acknowledgement due cover, so as to reach VJTI, Matunga, Mumbai - 400019, 3.00 PM on 28/12/2022
The Technical Bid shall be accompanied by a Demand draft for EMD Rs 16,000/- (Rs. Sixteen Thousand Only) and Tender document Cost of Rs. 3,776/- drawn in favour of “The Director, VJTI” payable at Mumbai. Technical Bids received without the demand draft or not fulfilling the prescribed conditions will be summarily rejected and decision of the Institute in this regard shall be final and binding. Only those bidders, whose technical bids are complete in all respects and satisfy all laid down terms and will be considered for financial bids.

Note: Fax/Telex and incomplete offers will be rejected. VJTI reserves the right to accept or reject any or all bids at its absolute discretion without assigning any reason, whatsoever or any notice.
PRE-BID MEETING:

A Pre-Bid meeting will be held on Wednesday, 21st December 2022 to clarify and offer comments on any items mentioned in the Tender. Bidders should make sure to attend the meeting for any clarifications. The meeting will be held in CoE-CNDS Lab, Veermata Jijabai Technological Institute, Matunga, Mumbai - 400019 at 05:00 pm.
CHAPTER – 2

INSTRUCTIONS TO BIDDERS

1. The bid document can be obtained from Stores section or can be downloaded from VJTI website, http://www.vjti.ac.in. No editing, addition/deletion of matter is permitted. If such action is observed at any stage, such tenders are liable for outright rejection.

2. Only enclosed formats as provided in original should be used. All sheets need to be submitted after affixing seal of the Company and Signature of the authorized signatory. Additional sheets, duty authenticated, may be attached to elucidate specifications or clarify the specific issues.

3. The prescribed documents consisting of (i) Technical Bid and (ii) Financial Bid, sealed separately in two different envelopes, super-scribing “Technical Bid” and “Financial Bid”, as the case may be, and placed in a duly sealed big single envelop super-scribing “Bid for Purchase of Control System Equipment for Thermal Power Plant Testbed in CoE CNDS” may be submitted to inward section of administrative office, main building of VJTI, Matunga, Mumbai – 400019 or sent through Post at the same address before 3.00 PM on 28/12/2022.

4. Bidders has to submit EMD Rs. 16,000/- (Rs. Sixteen Thousand only) and Tender document Cost of Rs. 3,776/- along with the technical bid. Bids received without EMD shall be summarily rejected. The EMD shall be refunded (without interest) after the execution of the contract. The earnest money shall be deposited by crossed Pay Order / Demand Draft/ Bank guarantee in favour of Director VJTI payable at Mumbai. Cheques, Bearer Bonds, Promissory Note, Cash Certificate etc. will not be acceptable towards the EMD. VJTI reserves the right to forfeit the EMD amount on non-acceptance/ non-compliance of offer in full or part or if VJTI feels that has bidder misguided in any way.

5. Relevant product literature may be enclosed with the bid along with media (if any).

6. Corrections/Alterations, if any, in the offers should be attested properly duly signed by authorized signatory and affixing seal by the vendor, failing which the tender will be rejected.

7. The items can be supplied by the manufacturer directly or through their authorized dealer/authorized channel partners/distributors. Letter of authorization from the manufacturer/parent company to be enclosed in case of authorized dealer/distributor.

8. The bidder shall quote the prices in INR of goods and services inclusive of all duties and all taxes, freight, levies, or charges.
9. In case of any discrepancy between the unit price and the total price, the unit price shall prevail and total price shall be corrected unless it is lower than the sum total of unit prices. If there is any variation between amount written in figure & words and then amount whichever is lower shall be taken into consideration.

10. All the terms and conditions for the supply, delivery, payment, warranty, penalty, etc. will be as given herein and no change in any term or condition by the vendors will be acceptable.

11. The firms should also submit a list of their clients/customers (with complete name, address of the firms and telephone number of the contact person therein) including in Govt. educational institutions & public sectors with details of the equipment supplied by them for information of the Institute.

12. Canvassing in any form will be viewed seriously and if any bidder is found to be resorting to such practice, the tender of such firm will be rejected.

13. The vendor should comply with the COVID-19 related safety health practises as laid by the Govt. of India, during completion of work.
CHAPTER -3
TERMS & CONDITIONS OF CONTRACT

1. Bidder should have registration of Goods and Service Tax (GST) documentary proof the same will need to be enclosed.

2. All the terms and conditions for the supply, delivery, payment, warranty, penalty, etc. will be as given herein and no change in any term or condition by the vendors will be acceptable.

3. To assist the examination, evaluation, and comparison of bids, VJTI may at its discretion, ask the bidders for clarification of bids including price. The request for clarification and the response shall be in writing.

4. Delivery and Installation period: Maximum Eight (8) weeks from the date of purchase order. Penalty for late delivery @ 5% per day after due date will be charged. The installation report should be signed by the firm engineer jointly with authorized VJTI personnel/representative. The items shall be delivered and installed at VJTI, Matunga, Mumbai-400019.

5. Payment terms: 100% of the payment shall be released on successful satisfactory delivery and installation of Equipment and same to be certified by firm’s engineer jointly with authorized VJTI representative and successful Training and satisfactory acceptance as per acceptance criteria (ref. point 15 & 16) by authorized VJTI representative with submission of irrevocable 10% Public Bank Guarantee (PBG) from a recognized public sector bank valid for 1 year.

6. The supplier’s request for payment shall be made in writing accompanied by relevant document such as proper invoice and satisfactory installation reports duly signed by VJTI’s representative.

7. VJTI reserves the right to accept or reject any or all offer(s) in part or full without assigning any reason thereof, and to amend the terms and conditions before award of the contract.

8. Warranty period as and where applicable shall be mentioned with free services.

9. Any disputes arising out of this tender will be under the jurisdiction of court of Mumbai only.

10. The Supplier shall not without the VJTI’s prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the VJTI in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

11. The VJTI or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the VJTI.

12. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance,
including access to drawings and production data shall be furnished to the inspectors at no charge to the VJTI.

13. Should any inspected or tested Goods fail to conform to the specifications, the VJTI may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the VJTI.

14. The VJTI's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the VJTI or its representative prior to the Goods shipment.

15. The device shall be accepted after Configuration and demonstration of exchange of data from device to any other device and submission of technical documentation.

16. System shall be accepted only after the completion of all the scope of supply and services and network wiring in scope as mentioned in Chapter 4.

17. The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.

18. This warranty shall remain valid for at least 36 months after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified otherwise.

19. The VJTI shall promptly notify the Supplier in writing of any claims arising under this warranty.

20. Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the VJTI.

21. If the Supplier having been notified fails to remedy the defect(s) within a reasonable period, the VJTI may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other right, which the VJTI may have against the Supplier under the Contract.

22. The Supplier shall indemnify the VJTI against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

23. The VJTI at any time, by written order given to the Supplier, make minor changes.

24. The Supplier is required under the Contract to transport the Goods within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the contract Price.

25. The supplier should, at his responsibility check and ascertain the existing rail/road limitations for safe transport of the equipment to the site. Each package shall be limited to size and weight that are permissible under the existing rail and road limitation.
CHAPTER – 4

SCOPE OF SUPPLY AND SERVICES

Scope of Supply & Services
1. Installation, testing and commissioning of the item as per the details.
2. Testing and calibration of the hardware.
3. The selected supplier shall provide the 3 days onsite overall training for up to 20 students and 5 staff members.

Testing and Support

• Supplier must provide maintenance and support services for components installed under this proposal to keep the test bed system running 24x7 for next three years.

Soft services

• Installation and configuration of programming software where applicable.
CHAPTER-5

SITE CONDITIONS

- Electric supply
  i. 3 Phase, 3 wire, 415 V AC +/- 10%, 50 Hz +/- 3% and UPS supply
  ii. Fault level: 25 kA

- Environment
  i. Location (Indoors) : Mumbai, Maharashtra
  ii. Max ambient air temperature(°C) : 45
  iii. Minimum ambient temperature(°C) : 15
  iv. Environment Type : Non-corrosive
  v. Average daily ambient air temp(°C) : 35 - 40
  vi. Maximum relative humidity (%) : 95%
  vii. Average annual rainfall(mm) : 242.2 cm
  viii. Maximum wind measure(kg/m2) : 200
  ix. Max attitude above mean see level(m) : 1000m
  x. Seismic Zone : Zone – 3
**CHAPTER -6**

**SPECIFICATION FOR PURCHASE OF CONTROL SYSTEM EQUIPMENT FOR THERMAL POWER PLANT TESTBED IN CoE CNDS**

**Required Equipment:**

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Item</th>
<th>Make/ Model</th>
<th>Specification</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RTU</td>
<td>Schneider SCD2200 RTU, with DI 10, DO 6, IO 5, 12 volts supply</td>
<td>CP35- CPU – 2 Nos RS-485 / 1 No. Ethernet port (DNP3.0 or Ethernet Modbus)-1 No, MC-35 – Communication Module – 2 Nos RS-485 / 1 No. Ethernet port (DNP3.0 or Ethernet Modbus)-1 No, PLUS 1 No. HART Looping Interface card &amp; 2 Nos ISOLATED RS-485 card loaded. DI 10- Digital Input module with 16 channel supporting SOE functionality DO-6 – Digital Output Module with 16 channels. IO-5 – Combination IO card – 4 DI/4DO/4AI/1AO. 6 Slot Externally powered backplane (12 VDC)- 1 slot will be free after populating the above cards. 12 VDC power supply – Reputed make Input to Power supply will be 230VAC 1Phase. Programming software for above hardware – 1 No.</td>
<td>1</td>
</tr>
</tbody>
</table>

Bidder to submit offer in following format:

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Equipment</th>
<th>Quantity (Nos)</th>
<th>Specification as per tender Document</th>
<th>Bidders Specifications</th>
<th>Deviation (if any)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date:-

Name and Signature with seal of Bidder
CHAPTER – 7

FINANCIAL BID

Price should be quoted in INR inclusive of Goods and Service Tax (GST).

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Equipment</th>
<th>Quantity</th>
<th>Rate per No.</th>
<th>Amount (Rs)</th>
<th>Taxes: Goods and Service Tax (GST)(Rs)</th>
<th>Total Amount (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>(5+6)</td>
</tr>
</tbody>
</table>

Total Bid Price in Rs (figure)
Total Bid Price in Rs (word)
Signature of Bidder with seal
Business Address
Tel No
Mobile No.
Email Id:
Fax No.

We accept all terms & conditions of the contract.

Place:
Date: 

Name and Signature of Bidder with seal.