

**GOVERNMENT OF INDIA
BHABHA ATOMIC RESEARCH CENTRE
WASTE MANAGEMENT DIVISION
WASTE MANAGEMENT FACILITY, TROMBAY**

Ref: WMD/ETP/IX/PLC/2K22/P-29776

Date: 14.02.2022

NOTICE INVITING TENDER

Sealed quotations are invited on behalf of President of India by 'Associate Director, N.R.G., B.A.R.C., Trombay' for the following work from contractors having adequate experience and capabilities to execute such magnitude of work and who have similar experience with different units of Department of Atomic Energy (DAE), Nuclear Power Corporation of India Ltd., Public sector undertakings etc.

Name of work:

Supply, Installation, Testing and Commissioning of Digital control system for Ion-Exchange system as per following specifications at ETP, B.A.R.C., Trombay.

Terms & Conditions:

- 1. The brief scope of work (covered under the tender enquiry) is mentioned in attached herewith - 'WMD/ETP/IX/PLC/2K22///Work-details'. It provides, in concise, the brief specifications & Architecture of Digital control system / associated accessories / gadgets to be supplied and works to be carried out – for overall understanding ONLY. The detailed specification and total scope of work (tender enquiry document) shall be e-mailed to only those bidders who send a request mail to the undersigned on rguru@barc.gov.in – after they have read & feel can adhere to all the points 1 - 11 of "General Notes for the tender" of the contract.**

Last date for request (through e-mail) for "tender enquiry document" is 28.02.2022.

- The bidder shall contact telephonically on '022-25594127 / 022-69294127' for clarifications, if any, w.r.t. scope and details of the works. Last date for entertaining such queries shall be **09.03.2022** up to **17:30 hrs**, only on working days.
- The tender inquiry document shall comprise of the following **TWO Documents**.
Annexure -A: Technical & General Specifications
Annexure -B: Technical Compliance Sheet

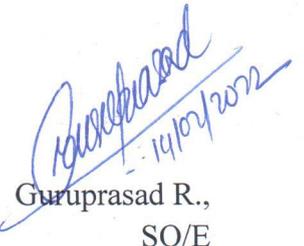
Both the Annexure (A & B) shall be mailed only to bidders from whom request mail is received (on or before 28.02.2022). Editable version of Annexure B document shall be shared with bidders on a later date, if requested for.

- Bidder shall submit the quotations - **Technical and Commercial in two separate envelopes**. These 2 envelopes (offers) shall be submitted in another main envelope. All the 3 envelopes shall be sealed and **should clearly indicate, TECHNICAL or COMMERCIAL, Name of Work, Reference No. & Due date of submission of quotation**. Address on the envelope should read:


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Kind attention: Guruprasad R., SO/E,
Room No - 122, Effluent Treatment Plant (ETP),
Bhabha Atomic Research Centre,
Trombay, Mumbai - 400 085.

5. Sealed quotation should reach above address through '**Registered post / Speed post**' **only** through **Indian Postal Service**. Last date for receipt of sealed quotation is **16.03.2022 up to 14:00 hrs.**
6. All qualified bidders are requested to prepare the **technical offer as per the Annexure-B**. It may please be noted that evasive or ambiguous response in the Annexure-B will be treated as **non-compliance**.
7. **Commercial offer (format attached)** shall be printed on letter-head and break-up of Taxes, duties, levies, other charges. Commercial offer of those firms whose technical bid is **acceptable and suitable will only be considered for the commercial evaluation**.
8. **All the pages of the technical compliance sheet and the page / s where price and commercial terms are mentioned should be signed and stamped**. The price bid should be prepared on letter head of the firm clearly **showing the GST registration No., PAN Card details** and stamp of the firm.
9. The Sealed Quotations (**Technical offer**) will be opened on **17.03.2022 at 14:30 hrs** in the office of Accounts Officer, Works (II), B.A.R.C., Trombay
10. Associate Director, N.R.G., Trombay, reserves the right to accept / reject any or all the quotations, without assigning any reason thereof.
11. Quoted offer by the tenderer shall be valid for **minimum 90 days** from the date of opening and also the quoted price shall remain firm during the period of execution of the order.


Guruprasad R.,
SO/E

Tel.: 022-25594127

022-69294127

Email: rguru@barc.gov.in

GENERAL NOTES FOR THE TENDER

- 1. Quotation:** **Quotations shall clearly mention the make & model no. of each item offered.**
The bidder shall attach, in technical offer, the **technical leaflet** of each item being offered.
The desired format of price bid is presented in the tender inquiry form. All bidders shall **strictly** follow this format while preparing the price bid.
- 2. Technical : Evaluation** **Bids submitted by OEM or authorized system integrators / channel partners of the OEM of the offered system will only be treated as valid bids.**
A letter in this regard, specific to this enquiry, from the OEM stating the authorization and after sales support shall be attached in the technical offer by the system integrators / channel partners.
Further, technical evaluation will be based on the technical compliance sheet. Criteria of acceptability will be the compliance of the performance indices and design features mentioned in the sheet with the technical & general specifications.
- 3. Commercial: Evaluation** Commercial evaluation of all technically acceptable offers shall be on the basis of the base cost plus 18% uniform GST applied to both supplied materials as well as installation & commissioning jobs. Part-wise orders will not be issued. However at the time of issue of work order, the department shall apply a **concessional GST rate of 5% on supplied materials** against the issue of a certificate by the end user stating the materials are meant for R&D purpose.
- 4. End User: Certificate** BARC (the end user) **will not** provide **end user certificate** and / or details regarding the application / use for any components. It **will also not** entertain any demand of **post-supply inspection** of the supplied item by any third party.
- 5. Factory evaluation:** Purchaser reserves the right to evaluate the manufacturer's work himself or by his authorized representative. The bidder shall co-ordinate & arrange a visit for the evaluation.
- 6. Documen-: tation** All the test reports / certificates in their proper format shall be submitted time of inspection.
- 7. Guarantee:** All the offered items shall be guaranteed against faulty material, defective design and poor workmanship for a period of **12 months** from the date of **installation, Commissioning and final acceptance of the system.**
- 8. Location of: Work** **Supply and site performance/acceptance test of the specified system** shall be carried in Effluent Treatment Plant, Waste Management Division, B.A.R.C., Trombay, Mumbai – 400085.



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9. Important Note:

The bidder will have to furnish the following **documentary evidence - along with their quotation (Technical bid) – regarding** past installations of similar system that they have carried out at any of DAE units / Public Sector Undertaking / Private sector: Orders (executed in last 4 years) – for the sum quoted or more.

At least 3 nos. Purchase Orders, related to similar systems (or of higher configuration / Architecture) being offered shall only be submitted and entertained.

Quotations without these documents are liable for rejection.

In future course, **if desired**, the bidder may have to:

- i. Provide name & contact details of the concerned officers (previous clients) who can be contacted for obtaining feedback regarding work carried out.
- ii. Arrange a site visit for the department representative at the previous client's works / factory.

10. Notes (Commercial):

- 10.1 Offer shall be **valid for minimum 90 days** from the date of opening and quoted price shall remain firm during the period of execution of the order.
- 10.2 Any deviation from the specification shall be clearly mentioned in your offer.
- 10.3 It may please be noted that **NO FREE ISSUE MATERIAL** will be issued from BARC for this work.
- 10.4 Payment will be made within **45 days** of completion of the work.
- 10.5 Work shall be completed within **150 days** of release of work order.
- 10.6 Quoted price shall be **exclusive** of all taxes. Tax rates and amount shall be columned separately.

11. Other General Notes:

- 11.1 Contractor personnel shall have **police verification clearance** and adhere to all Security norms of the department.
- 11.2 All the health & safety norms as stipulated by the department shall be followed by the contractor personnel. All the safety wears required for the job and tools, tackles shall be arranged by the contractor.
- 11.3 Injury, if any to the contractor's personnel shall be the responsibility of the contractor and not of the department. Contractor will bear all the medical expenses however First-aid help will be given by the department as far as possible.



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1. Supply & Installation of PLC system - WMD/ETP/IX/PLC/2K22///Work-details

Brief Scope of Work			
Sl. No.	Description of item	Unit	Qty
1	PLC system / panel with following features: <ul style="list-style-type: none"> • Single Standalone PLC-CPU • Power supply module (as per requirement) • Communication Modules (as required) • Backplanes (as per requirement) • Relay card / Slim Relay Module • PLC cable & connectors (as per requirement) • Licensed PLC Programming Software with for development. 	Lot	01
1.1	• Analog Inputs (Isolated) - 40 nos.		
1.2	• Analog Outputs (Isolated) - 04 nos.		
1.3	• Digital Inputs - 128 nos.		
1.4	• Digital Outputs - 64 nos.		
2	SCADA Software Package 500 Tags	Lot	01
3	PLC Panel.	No.	01
4	SCADA Work Station (with dual monitor)	No.	01
5	Laser Black & White Printer	No.	01
6	SS Angle Stand for PLC panel	No.	01
7	Development of PLC logic & SCADA GUI , integration of full package as per software per requirement specification as per spec and subsequent FAT	Lot	01
8	Pre dispatch Inspection testing at supplier premises : Delivery , Installation, testing & commissioning at ETP, BARC, Mumbai (including FAT &SAT)	Job	01
9	Installation, commissioning & testing at Purchaser site	Lot	01
10	Training and Documentation	Job	01

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2. Supply of SPARES

Sr. No	Description of Items	Qty.	Remark
	SPARES		
a)	PLC CPU	01 No.	
b)	AI Module {equivalent to signals / channels}	16 Nos.	
c)	AO Module {equivalent to signals / channels}	04 Nos.	
d)	DI Module {equivalent to signals / channels}	64 Nos.	
e)	DO Module {equivalent to signals / channels}	32 Nos.	
f)	Redundant Power Supply CPU Rack / IO Rack	01 No.	
g)	Ethernet Communication Module – (if required by the system)	01 No.	
i)	Power Supply ORing Module for Redundancy (Rating 10 Amps)	01 No.	
j)	Power Supply ORing Module for Redundancy (Rating 20 Amps)	01 No.	
k)	24V DC Relays / Card (for 24 nos. channels) of DO	24 Nos.	
l)	24V DC, 10 A, DIN rail mounted SMPS	02 Nos.	
m)	24V DC, 20 A, DIN rail mounted SMPS	01 Nos.	
n)	Work station CPU (only) loaded with SCADA software. License NOT Required.	01 No.	
o)	All other accessories as required by the system.	01 Lot	
p)	Memory card, (if applicable).	01 No.	

Signature

ARCHITECTURE OF DIGITAL CONTROL SYSTEM

