



F. No. 9-43/21-22/NIHSAD (P&S)

Dated: - 18.08.2021

To,

Sub:- Quotation (Under two bid system) for Repair of SCADA System of ETP – reg.

Dear Sir(s),

Reputed firms/Authorized firms are invited for quoting their rates for the supply of following stores as per under mentioned specification: -

Name of item	Qty.	Rate (In Rupees)	Total (In Rupees)
Repair of SCADA System of ETP (Refer Technical Specification enclosed, page 3-6)	01 Job		
GST as applicable			
*Total FOR NIHSAD, Bhopal			


***(Financial bid must be submitted in separate envelope duly sealed)**

Terms & Conditions :-

01. Quotations should be submitted under two bid system in a separate envelope (Technical Bid + Financial Bid) clearly mentioning at the top Tender No. F. No. 9-43/21-22/NIHSAD (P&S) "Repair of SCADA System of ETP". The Technical bid and the Financial bid should be sealed in separate envelopes and both these sealed covers are to be put in a bigger cover which should also be sealed. The last date of receipt of above quotation is **13.09.2021 upto 5:00 PM**. This Institute will not be responsible for any postal delays.
02. The rates should be quoted for F.O.R. ICAR-NIHSAD, Bhopal basis alongwith indicating separately brand name its price, packing forwarding, freight, tax percentage and insurance etc. in clear terms.
03. Discount, if any, should be indicated clearly.
04. The above price is including/exclusive GST. However, as per notification No. 45/2017-Central Tax (Rate) dated 14.11.2017 issued by the Min. of Finance, Scientific and Technical instruments, etc. are exempted from the Central tax (in excess of 2.5%) livable there on under section 9 of the Central Goods and Service Tax Act, 2017 supplied to the Departments & laboratories of the Central Government and State Governments, other than a hospital. Since, this Institute is a Scientific Research Institution under Indian Council of Agricultural Research, Min. of Agricultural Govt. of India, and also registered by Min. of Science and Technology, DSIR New Delhi vide their Registration Certificate No. TU/V/RG-CDE/1235/2019 dated 01.09.2019.

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05. The relevant documents like GST registration, PAN, MSME (if applicable) etc. shall be enclosed with the Technical bids.
06. Unless otherwise mentioned in the quotation, it will be presumed that the quoted rates are inclusive of all taxes/levies and free deliver/installation at our Institute.
07. The rates quoted should be valid for **180 days** from the date of opening of quotation.
08. There should be no cutting/overwriting if any should be duly attested.
09. Warranty – 01 Year as above from the date of repair of SCADA at ICAR-NIHSAD, Bhopal.
10. Unattested/amended/overwritten figures will not be considered.
11. In all matters of disputes, the decision of the Director of this Institute shall be final and binding.
12. Minimum period of repair (not more than 60 days) should clearly be specified in the quotation.
13. TDS will be deducted from the bill as per applicable tax rules.
14. PAYMENT TERMS: Payment will be made reasonable time say within 30 days from the date of receipt of material in good condition without any damage and after installation of the equipment in accordance with the ordered specification at the end. **Since the mode of payment will be e-payment system, hence, Bank Account, Number, name of bank with location and IFSC code Number of Bank may be furnished on the body of the bill.**
15. **Bid Security (EMD):** Rs. 5000/- must be submitted alongwith the quotation in the form of Demand Draft/FDR drawn in favour of “**ICAR Unit, NIHSAD, Bhopal**” otherwise the bid will not be taken into consideration. Micro & Small Enterprises as defined in MSME Procurement Policy are exempted for producing the EMD subject to submission of their valid registration certificate.
16. Performance Security: Within 30 (Thirty) days before undertaking the repair. The supplier, shall furnish performance security to the institute for an amount of 3 % (of Total Ordered value) including the warranty obligation.
17. The Institute reserves the right to reject any or all the quotation(s) received without assigning any reasons thereof.
18. Tentative date of opening of Technical bid **14.09.2021 at 11:30 AM.**


19/8/2021
(PS Sunil Kumar)

Admn. Officer

Phone No. 0755-2754672

Name of Work - Repair of SCADA System of ETP

Technical Description :-

The SCADA system is installed in control room for monitoring of live parameters of six number of sterilizer tanks. In each sterilizer tanks the effluent water is sterilized at 121°C for 30 minutes before release outside. The top and bottom temperatures of sterilizer tank are measured by using RTD sensors, and pressure inside tank is measured by pressure transmitter in pressure recorder and level of effluent water is measured by continuous capacitance type level probe. These parameters were also display in instrument panel at basement and simultaneously on SCADA screen.

The existing SCADA hardware system (Make-Cadtrack Digital System) is located in the basement of ETP plant in the containment facility .The analog input card(4-20mA)interface module consists of 4 PCB and power supply. Each PCB has 10 universal inputs (4 -20mA). The PCB in total will read 40 analog inputs, the analog input is converted into digital value by A/D converter .This value is scaled to the standard requirement by the micro controller .The data from this microcontroller is transferred through an isolated RS485 driver to the communication module and then to the computer SCADA screen installed in control room for displaying live reading of temperatures, pressures and levels of six number sterilizer tanks. Refer **Annexure I & II** for drawing of SCADA set up.

Sr no.	Scope of work	Qty
1	<p>Repairing of existing SCADA system with replacement of hardware and software /addition of the sensors, transmitters, PLC with Analog input cards, PLC/SCADA software, wiring, communication cable etc without effecting the functioning of ETP plant.</p> <p>A) Hardware(Make- Cadtrack Digital System)</p> <p>I) Analog input PCB card 4-20 mA , 12 channel for the display of top and bottom temperature of 6 sterilizer tank - 1nos.</p> <p>II) Analog input PCB card 4-20 mA, 06 channel for the display of pressure inside 6 sterilizer tank -1nos.</p> <p>III) Analog input PCB card 4-20 mA, 08 channel for the display of water level of 6 sterilizer tanks -1nos.</p> <p>B) Communication module (Make-Cadtrack Digital System) 01 nos</p> <p>C) SCADA software (make-MERZ) -01nos.</p>	One Job

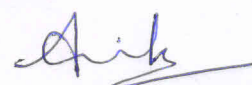
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ELIGIBILITY OF THE TECHNICAL BID:-

- (i) The firm should have minimum 1 work order of at least an amount of 3 lakhs in supply, installation, testing and commissioning of SCADA system or repair of SCADA system in any Central Govt./State Govt./PSUs/Autonomous bodies of Govt./Reputed private organization during last 4 years. **(Proof of work order/completion certificate must be enclosed, failing which the technical bid shall not be considered for further evaluation).**
- (ii) **Bid Security (EMD):** Rs. 5000/- must be submitted along with the quotation in the form of Demand Draft/FDR drawn in favour of **“ICAR Unit, NIHSAD, Bhopal”** otherwise the bid will not be taken into consideration. Micro & Small Enterprises as defined in MSME Procurement Policy are exempted for producing the EMD subject to submission of their valid registration certificate.
- (iii) Copies of GST & PAN registration shall be enclosed with the technical bid.
- (iv) An undertaking in letter head offering 1 year warranty from the date of successful repair shall be submitted.
- (v) A detailed technical project proposal must be enclosed with the technical bid indicating name of manufacturer of all proposed spares (Allen Bradley/ Siemens/ GE/ Mitsubishi/ Delta/ ABB/ Omron/ Schneider make).

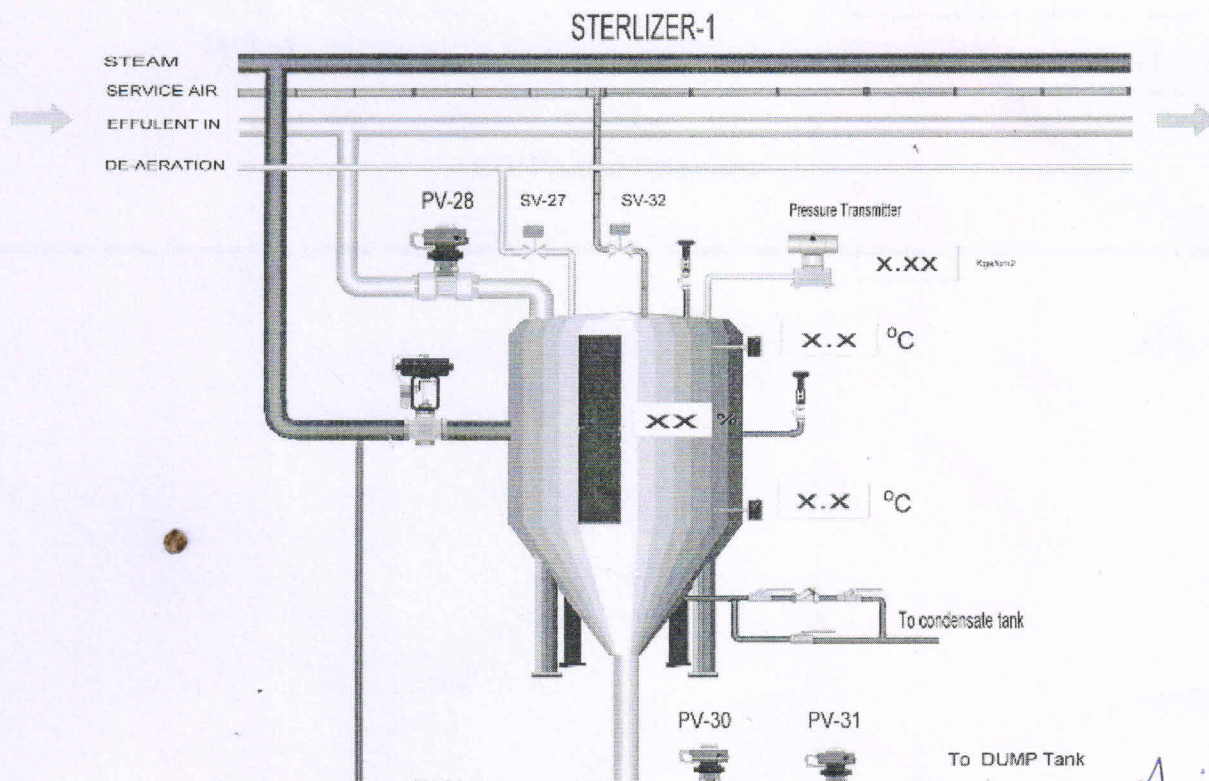
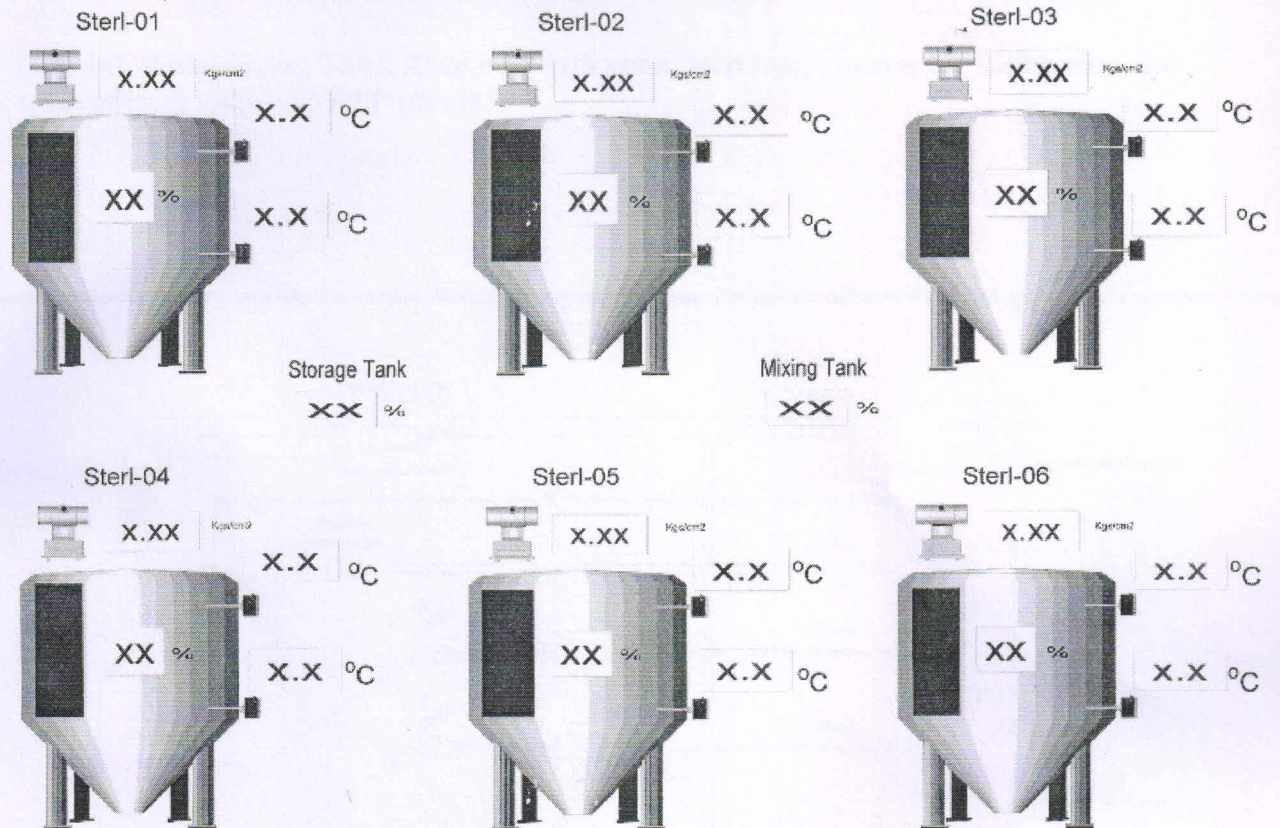
Other Technical Terms and Conditions:

1. **Warranty shall be offered for minimum 01 year.**
2. Computer will be provided by NIHSAD, however minimum configuration of computer required for operation of software shall be informed by the bidder.
3. Bidders shall visit the site at own cost and familiarize with the existing system. Any type of civil and mechanical work is in bidder's scope.
4. Two sets of tutorial literature/drawing/programming of PLC/SCADA have to be submitted by firm. The training to operate SCADA software free of cost is in bidder scope.
5. Length of cables and conduits are tentative and the actual may vary depending on routing of conduit and cable at site.
6. The system is located in containment area in basement. Any equipments tools etc. taken inside basement can be taken out after decontamination only.



ANNEXURE-I

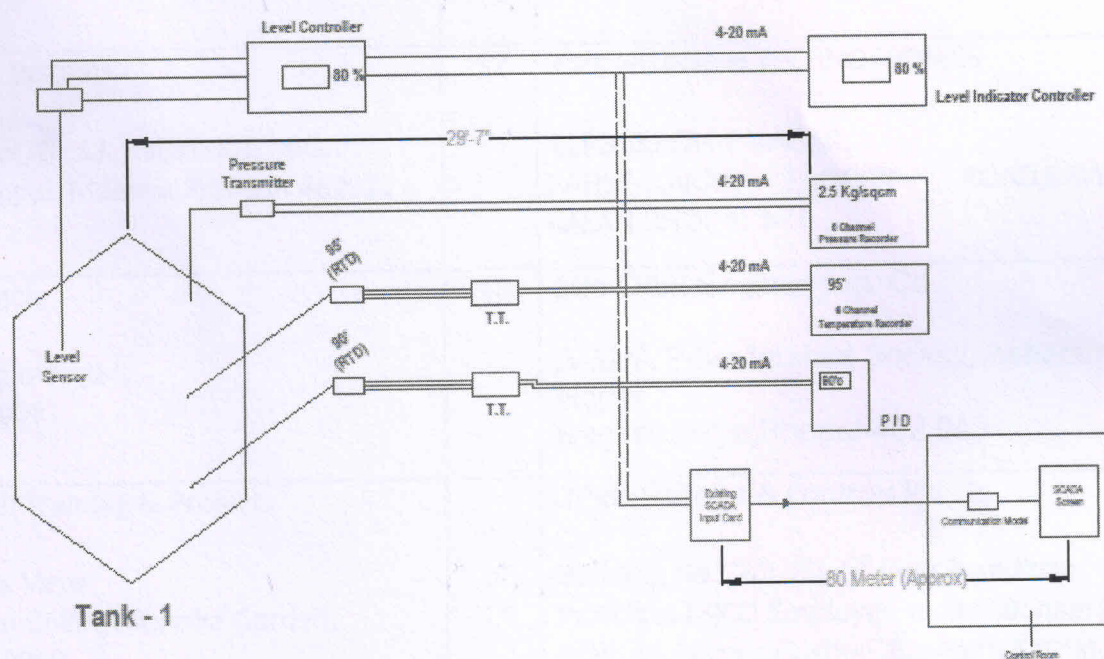
(SCADA Screen of existing sterilizing process at ETP plant)



Signature

ANNEXURE-II

(Layout of Sterilizing Tank (One no.) with connected instruments for measuring and transmitting values at ETP plant)



ETP Plant at Basement

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