



F. No. 9-83/23-24/NIHSAD (P&S)

Dated: - 22.09.2023

**NOTICE INVITING TENDER THROUGH E-PROCUREMENT**

**Supply, Installation, Testing and Commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System**

Online Bids are invited from interested bidders under two bid systems for **Supply, Installation, Testing and Commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System** at ICAR-NIHSAD, Bhopal (M.P.). Manual bids shall not be entertained. Tender documents may be downloaded from e-Procurement website of CPPP <https://eprocure.gov.in> as per the schedule as given in CRITICAL DATE SHEET as under: -

**CRITICAL DATE SHEET**

Tender ID	<b>2023 DARE 773050 1</b>
Tender No.	No. F. 9-83/23-24/NIHSAD (P&S)
Name of Organization	ICAR-National Institute of High Security Animal Diseases, Hathai Kheda Dam Road, Anand Nagar, Bhopal – 462022 (M.P.)
Date and time for Issue/Publishing	22.09.2023 on 06:00 PM
Document Download/Sale Start Date and Time	23.09.2023 on 11:00 AM
<b>Pre Bid Meeting Date &amp; Time</b>	<b>04.10.2023 on 11:30 AM</b>
Bid Submission Start Date and Time	23.09.2023 on 11:30 AM
Bid Submission End Date and Time	18.10.2023 on 05:00 PM
Date and Time for Opening of Bids (Technical)	20.10.2023 on 11:00 AM
Price Bid/BOQ Opening Date and Time	Will be intimated through CPP portal after scrutiny of technical bid
Address for Communication	<b>Director, ICAR-NIHSAD,</b> Hathai Kheda Dam Road, Anand Nagar, Bhopal – 462022 (M.P.)

**Administrative Officer**  
**ICAR-NIHSAD**  
**Anand Nagar, Bhopal – 462022 (M.P.)**  
**Phone No.: - 0755-2754672**

**INSTRUCTIONS FOR BIDDER**

1. The tender bidder documents may be downloaded from the website: <https://eprocure.gov.in>. Online submission of Bids through Central Public Procurement Portal (<https://eprocure.gov.in>) is mandatory. Manual/Offline bids shall not be accepted under any circumstances.
2. Bidders are requested to visit the website <https://eprocure.gov.in> regularly during the tender process. Any changes/modifications in tender enquiry will be intimated by corrigendum through this website only.
3. In case, any holiday is declared by the Government on the day of opening, the tenders will be opened on the next working day at the same time. The Director, ICAR-NIHSAD reserves the right to accept or reject any or all the tenders.
4. The participating bidders are required to deposit (in original) the Earnest Money Deposit (EMD) of the amount mentioned against item in the form of Account Payee Demand Draft/FDR from any of the Scheduled Commercial Banks in favor of **ICAR Unit, NIHSAD, Bhopal** payable at Bhopal may be addressed to Director, ICAR-NIHSAD, Bhopal – 462022. The EMD can also be deposited online in an acceptable form on or before bid opening date and time as mentioned in the Critical Date Sheet. In case of depositing the EMD through online mode, proof of EMD (UTR No or any other) must be submitted along with tender. No bids shall be considered without the earnest money deposit. The earnest money will be refunded only after the finalization of the procurement and no interest will be paid on earnest money.
5. Bidder need not to come at the time of Technical as well as Financial bid opening at ICAR-NIHSAD. They can obtain updates in respect to the tender after login on CPPP e-procurement Portal at their remote end. If bidder wants to join bid opening event at ICAR-NIHSAD then they have to come with bid acknowledgement slip that generates after successful submission of online bid.
6. The bidders are also required to upload copies of the following document: -

**Technical Bid**

- a) Scanned copy of Earnest money Deposit (EMD) in favor of **ICAR Unit, NIHSAD, Bhopal**.
- b) Exemption, if any, for submission of EMD (in case of MSME, NSIC bidders) will be provided as per government norms.
- c) Scanned copy of Bidder's registration, PAN Card, GST Registration (GSTIN), Tender Acceptance Letter (**Annexure – V**) and other documents as requested in the tender.

- d) The bidder shall provide the proof of a minimum average annual turnover of Rs.250 lakhs during last three years (2020-2023).
- e) Scanned copy of **Annexure – II** and **Annexure – IV** duly signed and stamped by the bidder.
- f) Scanned copy of technical literature/brochure/catalogue of the 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System should be uploaded in CPP portal along with all the requisite proofs/papers as desired in the tender documents.

**Financial Bid**

- Price Bid as BOQ\_XXXX.xls

**Administrative Officer**  
**ICAR-NIHSAD**  
**Anand Nagar, Bhopal – 462022 (M.P.)**

**Most Important Terms & Conditions**

1. The bidder shall quote rates, which will include the delivery & other incidental charges. Taxes etc. should be indicated separately.
2. The rates should be quoted as per the BOQ uploaded on the CPP Portal (reference may be obtained from **Annexure – III**). Taxes, if any, should be indicated separately. It must be noted that the contract shall be awarded to the bidder which fulfills all the required terms and conditions and remains L-1 for any particular items.
3. The bidder must also possess valid PAN No., GST Registration and a copy of the same must also be enclosed with the tender documents.
4. The Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System quoted should be of latest technology (including the latest software support). The spare parts of the Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System quoted should be available for next 10 years at a reasonable price from the date of installation.
5. The successful bidder shall confirm its acceptance to the receipt of supply order (through fax, email, post, by hand etc.) preferably within 72 hrs. In case of no response to the confirmed supply order within 07 days of the receipt of the supply order the competent authority may consider the withdrawal of the offer from the successful bidder and EMD shall be forfeited.
6. The successful bidder shall have to initiate the process of Supply, Installation, Testing and Commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System within 15 days from the date of confirmed supply order under intimation to the office.
7. The entire process of Supply, Installation, Testing and Commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System should be completed positively on or before 60 days of initiation of the work failing which LD charges would be applicable as per standard terms and conditions.
8. **The rates shall be quoted in INR and shall be valid for One Hundred & Eighty days (180) from the date of opening of tender.**
9. Only the bidder or his authorized representative shall contact the office through email: [ao.nihsad@icar.gov.in](mailto:ao.nihsad@icar.gov.in)/ [purchasesectionnihsad@gmail.com](mailto:purchasesectionnihsad@gmail.com) for any further clarification during the tendering process.
10. Queries of unauthorized personnel/ bidders shall not be entertained.

11. No variation in terms of quality of the items shall be entertained or else EMD/Security deposit shall be forfeited and the tender may be considered for termination by the competent authority.
12. The Director, ICAR-NIHSAD shall have the right to reject all or any of the offers, accept more than one offer, and assign part of the job.
13. **Method of evaluation of bids:-**  
The technical bid shall be evaluated by NIHSAD as per the check list (Technical Bid) provided (**Annexure – IX**). The substantially responsive & qualified technical bids only shall be consider for the evaluation of price bids.
14. Merely quoting of lowest rates does not mean that contract order shall be given to that bidder. The competent authority will decide to award the contract based on the basis of quality, performance, past performances/experiences and/or any attribute/ information that may be of importance during/after the tendering process.
15. Rates once finalized will not be enhanced during the currency of the contract.
16. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honor the contract, the earnest money/performance security deposited would be forfeited and necessary action may be initiated against the bidder as the competent authority deems fit.
17. The Director, ICAR-NIHSAD reserves the right to cancel the contract at any time during the currency period of the contract without giving any reasons.
18. The successful bidder only after the deposit of Performance security in the acceptable form shall be granted permission to initiate the work at ICAR-NIHSAD, Bhopal.
19. The successful bidder is bound to intimate (through authorized means) about the initiation and completion of each stage of work and total work overall completion work to the Director, ICAR-NIHSAD, Bhopal.
20. The successful bidder is bound to reply to any comments/ concerns/ queries of the competent authority or any person so authorized by him during the execution of work within 2 days failing which LD charges will be applicable as per standard terms and conditions.
21. The successful bidder shall have to deposit the Performance Security equal to 5% (in the form of DD, Bank Guarantee, FDR etc.) of the total amount of the bid (inclusive all) before Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System. If the services are not found to be satisfactory at any stage, the performance security will be liable to be forfeited. No interest will be paid on performance security.

22. The performance security shall be valid for a period of 30 months from the date of issue of completion certificate by the competent authority ICAR-NIHSAD, Bhopal.
23. If any dispute(s) arises between ICAR-NIHSAD and the bidder with reference to the contract, ICAR-NIHSAD will decide it and its decision will be binding on the bidders.
24. Any arbitration/dispute would be subjected to Bhopal jurisdiction.
25. No official of a procuring entity or a bidder shall act in contravention of the codes which includes:
  - Making offer, solicitation or acceptance of bribe, rewards or gift or any material benefits, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
26. Man/material loss arising due to any mishap during warranty under the scope of bidder and will be considered under the guidelines of the Govt. of India as issued from time to time.
27. **ICAR-NIHSAD is registered with DSIR and is exempted from Excise Duty & Custom Duty. Hence, CDEC/DSIR will be provided to the bidder, if demanded. Rate should be quoted accordingly.**
28. Successful bidder will have to enter into a detailed contract agreement with ICAR-NIHSAD on non-judicial stamp paper of Rs. 500/-(Five Hundred Only) for the award of contract.
29. **SAFETY OF THE WORKERS:-**
  - I. The bidder shall be responsible for and shall pay any compensation to his workmen in any situation that may arise during and due to the execution of work as per the guidelines issued by the Government of India from time to time.
  - II. The bidder shall be responsible for and shall pay the expenses or providing any medical aid to any workman who may suffer bodily injury as a result of an accident.
  - III. The bidder shall provide all necessary personal safety equipment and first aid apparatus available for the use of workers employed on the site and shall maintain the same in condition suitable for immediate use at any time and shall comply with following regulations in connection therewith.
    - a) The workers shall be required to use the equipment so provided by the bidder and the bidder shall take adequate steps to ensure proper use of the equipment by those concerned.
    - b) When installation & commissioning is carried on in proximity to any place where there is risk or drawing all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for prompt rescue of any person in danger.

- c) Adequate provisions shall be made for first aid treatment of all injuries likely to be sustained during the course of work.
30. **Additional Specifications:-**
- I. The bidder shall execute the whole and every part of the work in the most substantial and workman like manner, and both as regards material and every other respect in strict accordance with specifications as mentioned in the tender document against each job under intimation to the Director, NIHSAD or any person authorized by him.
  - II. In general, all the installation and commissioning should be carried out conforming to ISI test standards and specifications. All the materials used in construction shall conform to the requirement of latest IS specifications.
  - III. The successful bidder should make own arrangement to obtain all materials required for the civil and electrical work like cement, sand, water, electricity, crane , welding machines, tools and tackles etc.
31. **UNSATISFACTORY AND DEFECTIVE WORKS:-**
- Defective equipment or parts thereof is liable to be rejected at any stage. The Bidder on no account can refuse to rectify the defects merely on reasons that the further work has been carried out. No extra payment shall be made for rectification/replacement of the original item quoted.
32. **DAMAGE TO GOVT. PROPERTY:-**
- I. Compensation for all damages done intentionally or unintentionally by bidder/labour whether in or beyond the limits of Govt. property including any damage caused by any reason, shall be estimated by the concerned in-charge subject to the decision of the Director, ICAR-NIHSAD, Bhopal on appeal shall be final and the bidder shall bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the bill of the bidder.
  - II. Any damage to the office property of any type during the execution of contract will suo moto deemed to be considered within the scope of work of the bidder at the quoted rate.
33. **Payment -**
- PAYMENT TERMS:** Payment will be made within reasonable time say within 30 days from the date of acknowledgement of successful work completion by the office. **Since the mode of payment will be electronic, hence Bank Account Number, name of bank with location and IFSC Code Number of Bank may be furnished on the body of the bill.**
34. **Supply, Installation, Testing and Commissioning:-** Within 60 days from the date of issue of purchase order.
35. **Liquidated Damage clause:** - Liquidated Damage clause shall be applicable @ 0.5% (half per cent) of the base price (excluding taxes) of the delayed

goods for each week of delay subject to maximum 10% further which the competent authority may consider the termination of the contract.

36. **Warranty:** -Comprehensive on-site Warranty for 2 Years should be **as per Annexure VII** (Technical Specifications) or at least two years from the completion date of Installation & Commissioning whichever is more.

**‘Terms & conditions are acceptable’**

Date:-

**(Authorized Signatory of the bidder)**



### ANNEXURE – III

(Reference for BOQ) (To be quoted in format provided on CPP Portal)

Price bid for the Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System at ICAR-NIHSAD, Bhopal

Sr. No.	Name of the item	Qty	Price (In figure/words) (as per BOQ)
1.	Cost of Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System at NIHSAD, Bhopal	01 No.	Price should only be quoted in BOQ format provided in CPPP

- \* Items should be of reputed make and suitable for high end elite users.
- \* Tax extra as applicable should be indicated separately in the column provided.

**Note:-** The above mentioned Financial Proposal/Commercial bid format is provided asBoQ\_XXXX.xls along with this tender document at <https://eprocure.gov.in>. Bidder's are advised to download this BoQ\_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the financial bid. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and EMD would be forfeited and bidder is liable to be banned from doing business with ICAR-NIHSAD.



भाकृअनुप-राष्ट्रीय उच्चसुरक्षापशुरोगसंस्थान  
ICAR-National Institute of High Security Animal Diseases

(एवियनइन्फ्लूएंजाओ.आई.ई. संदर्भप्रयोगशाला)  
(OIE Reference Laboratory for Avian Influenza)

आनंदनगर, भोपाल- ४६२०२२ (म.प्र.), भारत  
Anand Nagar, Bhopal - 462022 (M.P.), India



EPABX Tel. No. 0755-2757542, 2750647, FAX: 0755-2758842, Website: www.nihsad.nic.in

Name of the Bidder \_\_\_\_\_

Registered/Postal Address \_\_\_\_\_

1.	Permanent Account Number (PAN)	
2.	GST Registration No.	
3.	<b>BANK DETAILS: -</b>	
a)	Bank Name	
b)	Branch Address	
c)	Account No.	
d)	Type of Account (Current/Savings)	
e)	MICR No.	
f)	RTGS/NEFT Code	

Date: - .....

Name of the Authorized Signatory

Stamp & Signature

Place: - .....

**TENDER ACCEPTANCE LETTER**  
(To be given on Company Letter Head)

Date:- .....

To,

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Sub:- Acceptance of Terms & Conditions of Tender.

Tender Reference No.: .....

Name of Tender / Work: -

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Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

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as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_ to \_\_\_\_\_ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein
3. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Bidder has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by the our Bidder is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully,

**(Signature of the Bidder, with Official Seal)**

## ANNEXURE – VI

### **Details of Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System& EMD**

Details of Item	Qty	Earnest Money in INR
Cost of Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System at ICAR-NIHSAD, Bhopal	01 No.	Rs. 1,71,000/-(One Lakh & Seventy One Thousand Only) in favor of ICAR Unit, NIHSAD, Bhopal (DD/FDR)

**Technical Specifications****Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System**

<b>Name of the Item: -</b>	Supply, installation, testing & commissioning of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories.
<b>Quantity: -</b>	One Number.

**1. General Description:-**

The central air-conditioning plant at NIHSAD comprises of 80 TR x 3 nos. refrigeration reciprocating water chillers with 3 nos. chilled water pumps, each having capacity of 317 USGPM (20 LPS) at 32 Meter Head, 20 HP motor, 3 nos. of condenser water pumps, each having capacity of 317 USGPM (20 LPS) at 32 Meter Head, 20 HP motor and 3 nos. of forced draft cooling towers (BELL make, model no. – FD2060) having capacity of 100 TR each. Existing condenser pipe line diameter is 150 mm (Mild Steel) and chiller pipe line diameter is 100 mm (Mild Steel). The new 120 TR capacity screw chiller shall be installed in the central AC plant and the necessary 150 TR cooling tower shall be installed and commissioned adjoining to current cooling tower.

**2. Technical specifications of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories:-**

<b>Sr. no.</b>	<b>Description</b>	<b>Qty.</b>	<b>Make and Model number To be filled by bidder</b>
<b>1.</b>	Supply, installation, testing and commissioning of <b>AHRI certified Water Cooled Energy Efficient Variable Speed Screw Chiller of 120 TR capacity (VOLTAS/BLUESTAR/DAIKIN/CARRIER/TRANE/YORK/DUNHAM-BUSH)</b> with screw compressors at NIHSAD site conditions at specified design condition, complete with R134a refrigerant compressor, first charge of refrigerant gas & oil etc. motor suitable for 415±10% 50 cycles. 3 phase AC supply, starter panel, water cooled condenser, insulated chiller, flow switch at chiller and condenser, spring loaded vibration isolators, flexible bellows, pressure gauge, thermometer, integral refrigerant piping and wiring, automatic and safety controls mounted in central console microprocessor based panel with display and all mounted on frame complete as per specifications. Flanged coupling connection for inlet and outlet etc. as required. Chilled water Leaving Temp: 6-7°C	<b>1set</b>	

	<p>Chilled water Entry Temp: 11-12°C          Condenser Water IN and OUT Temperature difference range: Minimum 4.2°C          Evaporator Fouling Factor: 0.0000170 - 0.0000200 M<sup>2</sup> °K/W          Condenser Fouling Factor (FPS) : 0.0000440 M<sup>2</sup> °K/W          Minimum COP (At ARI conditions) : 5.0          1 No: Matching shell and tube water cooled condenser of M.S. shell and integrally finned copper tubes. U stamp for pressure vessels in compliance with ASME boiler and pressure rules.          1No: Matching shell and tube flooded type chiller of MS shell and copper tubes. U stamp for pressure vessels in compliance with ASME boiler and pressure rules.          1 No: Suitable capacity squirrel cage induction motor with class-F insulation suitable for operation on 415±10% volts, 50 Hz, A.C. supply.          1No: Automatic starter suitable for compressor motor complete with ammeter with over load protection, under voltage protection, against phase reversal &amp; Independent single phase preventers etc. complete as required.          1 Lot- Refrigerant piping fittings, valves and accessories to inter connect compressor, condenser, chiller and expansion valve.          1 Lot- Water flow switches at outlet &amp; inlet of condenser &amp; chiller, water drain valve &amp; air purge valves wherever required, balancing valve PN16, NRV PN16, butterfly valves PN16, pressure gauges, bends, elbows ,tee, reducers, sockets, MS Heavy Class pipe IS 1239 etc. If required in chiller /condenser/pump pipe line is in bidder scope.          1Lot- Suction line and chiller insulation with minimum 19mm thick polyvinyl nitrite rubber insulation.</p>		
2.	<p><b>Cooling Tower (Forced Draught Type, CTI certified, Capacity-150TR):-</b>          Supply, Installation, testing and commissioning of <b>Forced Draught Cooling Towers</b>, Galvanized hardware complete with sump and drain connection with suitable valve, PVC fill, louvers, drift eliminator complete with spray nozzle having , steel ladder, isolating switch and other accessories to make it fully operational and maintainable &amp; positioning of cooling tower at existing AC plant. Fans are direct driven by standard make IE 3 class motors as per IS 12615 with IP-55 weather protection &amp; Motor Stator as per IS:1822.          Interconnection with existing condenser piping with material including minor civil work is in bidder's scope. Installation on MS girders fixed in masonry foundation with 6 mm Neoprene Pad for vibration isolation.</p> <p><b>STANDARD MAKE- BELL / DELTA /ADVANCED /PAHARPUR</b></p>	1 no.	
3.	<p><b>SITC of Condenser Water Pump Centrifugal Split Case Horizontal Type :-</b>          Mounting frame with Anti vibration pads, Suitable HP , TEFC squirrel cage induction motor with class 'F' insulations &amp; efficiency class IE-3, synchronous speed, operating on 415 +/-10% AC volts 3 phase, 50 Hz A.C. supply. Min. pump efficiency at duty conditions shall not be less than 75%, The noise level shall not exceed 75 dB at 2 meter from the source.</p> <p><b>Technical Specification:-</b>          Type – Centrifugal Pump, Horizontal Suction &amp; Discharge, Single stage.          Body- Cast Iron.</p>	1no.	

	Impeller – Bronze. Pump Shaft- Mild Steel. Stuffing Box- Cast Iron. Open Type – Top Open. Shaft Seal- Factory Fitted Mechanical Seal. Liquid Handled- Water. Casing Pressure- Up to 16 bar. RPM- 1450 Head –32 meter or above.		
4.	<b>SITC of Chiller Water Pump Horizontal type:-</b> Mounting frame with Anti vibration pads, Suitable HP , TEFC squirrel cage induction motor with class ‘F’ insulations & efficiency class IE-3, synchronous speed, Operating on 415 +/-10% volts, 3 phase, 50 Hz A.C. supply. Min. pump efficiency at duty conditions shall not be less than 75%, The noise level shall not exceed 75 dB at 2 meter from the source.  <b>Technical Specification :-</b> Type – Centrifugal Pump, Horizontal Suction & Discharge, Single stage. Body- Cast Iron. Impeller – Bronze. Pump Shaft- Mild Steel. Stuffing Box- Cast Iron. Open Type – Top Open. Shaft Seal- Factory Fitted Mechanical Seal. Liquid Handled- Water. Casing Pressure- Up to 16 bar. RPM- 1450 Head – 32 meter or above	1 no.	
5.	<b>DISPLAY INFORMATION:-</b> leaving chilled water temperature, discharge pressure, suction pressure, compressor current, oil level fault indication, compressor, % loading, system voltage, compressor elapsed run time, compressor on off status.	YES	
6.	<b>SYSTEM PROTECTION:-</b> low suction pressure, high discharge pressure, high oil temperature, freeze protection, low oil level, low chilled water flow, compressor over current, high winding temperature, high refrigerant level, sensor error, over/under current unbalance, preventative maintenance due to trip, over/under voltage and voltage unbalance.	YES	
7.	<b>Piping MS ‘C’ class SCH-80, Valves, Flanges, Flow Switch’s, NRV, Strainers, Balancing Valve, LT switch gear as per suitable capacity.</b>	As per requirement	

## 2.1 General Design Aspects:-

- a) Design, fabrication, supply, installation, testing and commissioning (including performance test) of Water Cooled VFD Screw Chiller 120 TR compressors at specified design condition at NIHSAD site complete with R134a refrigerant compressor, first charge of refrigerant gas & oil etc. motor suitable for 415±10% 50 Hz. 3 phase AC supply, starter



panel , water cooled condenser, insulated chiller, flow switch at chiller and condenser, spring loaded vibration isolators, flexible bellows, pressure gauge, thermometer, integral refrigerant piping and wiring, automatic and safety controls mounted in central console panel with necessary all mounted on frame complete as per specifications. Flanged coupling connection for inlet and outlet etc. as required. Expansion device, complete interconnected refrigerant piping, oil cooler, oil separator, Microcomputer/Microprocessor control center, VFD fully wired electrical panel and protective devices etc. mounted on a common structural frame. The water Chilling unit shall be completely factory assembled, charged and tested with full quantity of CFC free Refrigerant and oil.

- b) Supply and termination of suitable rating power armoured copper cable from MCC panel to compressor motor (**Approx.25meter**) of chiller shall be in bidder's scope.
- c) Supply and termination of suitable rating power armoured copper cable from MCC panel to condenser and chiller pump motor (**Approx. 40 meter**) and LT switchgear star delta starter shall be in bidder's scope.
- d) Supply and termination of suitable rating power armoured copper cable from MCC panel to cooling tower motor (**Approx. 40 meter**) and LT switchgear DOL starter shall be in bidder's scope
- e) The CFC free refrigerant gas and compressor oil required shall be provided by bidder, during the 2years of warranty period.
- f) Interconnecting pipeline with material for connecting condenser pump to condenser water line header and chiller pump to chiller water line header with all valves etc. shall be in bidder's scope.
- g) Interconnecting pipeline with material for connecting cooling tower head to cooling tower water line header with all valve etc. shall be in bidder's scope.

### **3. Installation & Commissioning:-**

- a) Installation & Commissioning of the 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories has to be carried out at the designated location at NIHSAD, central AC plant.
- b) All commissioning work should be as per BOQ & should be compatible with over existing HVAC system and with minimum modification if required complete in all respect with all materials and labors etc. including dismantling and repairing of civil parts and minor modification if any.
- c) The installation and commissioning of the 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories has to be carried out in phased manner without disturbing the functioning of HVAC system & working of Bio-containment Facility lab as per the bio-safety norms of NIHSAD under the supervision of NIHSAD staff.
- d) Necessary training /instructions on operation of the system shall be provided by the bidder (within one month of installation, by the authorized engineer) to NIHSAD technical staff at free of cost after completion of the installation.

### **4. Criteria of Technical Bid Eligibility:-**

- (a) Scanned copy of duly signed and stamped Authorization certificate from OEM, if the bidder is an authorized distributor otherwise, scanned copy of OEM Certificate.
- (b) Experience in design, fabrication, supply, installation, testing and commissioning of 120 TR

capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories or higher of screw chiller capacity in AC Plant with at least 3 works executed in last 6 years in GOVT./PSU/Autonomous bodies/reputed private industries. **(Scanned copies of proof of completion certificate and satisfactory performance certificate from at least 3 clients must be submitted along with the complete address of clients and verifiable in all respect, list of clients with complete postal address, mobile number and e-mail address must be enclosed, only purchase order /supply order shall not be considered).**

- (c) 2 year comprehensive onsite warranty of the 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories& consumables/refrigerant etc. from the date of commissioning. (Undertaking must be submitted in letter head).
- (d) The bidder shall be either OEM of screw chiller or its authorized dealer.
- (e) The bidder shall have a minimum average annual turnover of Rs.250 lakhs during last three years (2020-2023).
- (f) Breakdown complaint should be attend within 72 hours with his own cost by the bidder. To place the complaint, it is compulsory that the bidder shall provide an authorized email (acknowledgment of the complaint within hour), Operational Telephone/Landline number on 24 X 7 basis (Besides customer care number).

#### **5. Other Terms and Conditions:-**

- 1. Manufacturers Authorization Form (MAF)/certificate with OEM details such as name, designation, address, e-mail and contact number required to be furnished along with the bid.
- 2. Bidders should submit complete specification/details/brand/Make and Model number of the it offered along with the bid.
- 3. **The bidder shall quote rates with warranty as specified in tender documents, which will include the supply, installation, testing & commissioning of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories and to her incidental charges, taxes etc. FOR to ICAR- NIHSAD, Bhopal.**
- 4. The Equipment (120 TR capacity y water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories) quoted should be of latest technology. The guarantee of the availability of spare parts of the Equipment (120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories) and software validity should be before next 10 years.
- 5. The successful bidder shall supply 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories within 60 days from the date of confirmed supply order. **The rates quoted shall be valid for One Hundred & Eighty days (180) from the date of opening of tender/technical bid.**
- 6. Supply includes successful installation, testing and commissioning of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories at ICAR-NIHSAD, Bhopal.
- 7. Interested bidders are advised to visit the site before quoting the price for the work involved for Supply, Installation, Testing & Commissioning of 120 TR Capacity VFD Screw Chiller with (1) 150 TR Cooling Tower and all Associated Accessories to understand actual requirement and space constraint.
- 8. All items covered in the specifications shall be manufactured from the best materials under

- first class work man ship suitable for 24x7x365 days operation.
9. The Bidder shall install the Chiller at existing foundation at site and do necessary modification of existing foundation for installing the chiller and all civil works, if required.
  10. Bidder shall do civil work, painting (Dual Coat) and insulation of all related parts (like Evaporator, Pipes, valves etc.).
  11. The Water cooled VFD screw chiller compressor & allied HVAC system shall conform to the latest edition of following standards. **(AHRI/ASME/ ASTM/TEMA/ASHARE).**
  12. All required tools tackles, ladders, scaffolding, safety devices etc. For execution/completion of works shall be provided by the bidder.
  13. **For any item if no detail/specification is mentioned then the make shall be as per EPI/EIL approved make.**
  14. All testing, warranty and calibration certificates shall be provided for all the equipment's/gauges/indicators by the bidder.
  15. NIHSAD will provide 3 phase electrical connection, water connection and air connection (in plant area) at one point.
  16. Any material/item/work not mentioned in the tender document but is essential for completion/commissioning of work shall be in bidder's scope only.
  17. The bidder shall provide free servicing/maintenance twice in a year during the warranty period.
  18. All the Tools & Tackles, Consumables and man power required for installation and commissioning of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories is in the bidder scope.
  19. If there is any mismatch between the specifications given in the Tender and Indian standards, then decision of the ICAR-NIHSAD, Bhopal is final and party has to accept the same without any cost implication.
  20. Check list shall be enclosed on the front page of the tender documents and also mentioned reference page number of supporting documents.
  21. It is advisable that do not upload the irrelevant tender documents.

**UNDERTAKING**

I/We have read and understood General Terms and Conditions contained in the ICAR-NIHSAD's application form for contract. I/We do hereby declare that all the details provided in this application form are true to the best of my/our knowledge and belief and any misrepresentation of facts will render me/us liable to any action as may be deemed fit by ICAR-National Institute of High Security Animal Diseases, Bhopal.

I/We do hereby also accept ICAR-NIHSAD have the right to accept or reject this application and not to issue invitation to Tender to me/us.

I/We undertake to communicate promptly to ICAR-NIHSAD any changes in the condition or working of the bidder. It is certified that we have not been blacklisted by any organization of Government of India including Central Vigilance commission (CVC) in the last three years. The undersigned is fully authorized to sign and submit this application form on behalf of the organization, he/she represent. We authorize ICAR-NIHSAD to approach Individuals, employees, bidders and corporations to verify our competence and general, reputation.

Signature: - .....  
Name: - .....  
Designation: - .....  
Address: - .....

Place: - .....  
Dated: - .....

**CHECK LIST (TECHNICAL BID)**  
**SUMMARY OF COMPLIANCE TO REQUIREMENT OF TENDER**

Sr. No.	Description of requirement	Yes/No	Page No.
1.	Scanned copy of Earnest money Deposit (EMD) in favour of <b>ICAR Unit, NIHSAD, Bhopal</b> /its exemption, (MSME, NSIC/. bidders etc. as per Govt. rules) if any.		
2.	Scanned copy of Bidder's registration, PAN card, GST Registration, Tender Acceptance Letter (Annexure – V).		
3.	Scanned copy of Annexure – II and IV duly signed and stamped by the bidder.		
4.	Scanned copy of Technical literature/brochure/catalogue of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System.		
5.	Scanned copy of duly signed and stamped Authorization certificate from OEM, if the bidder is an authorized distributor otherwise, scanned copy of OEM Certificate.		
6.	Scanned copies of Experience in design, fabrication, supply, installation, testing and commissioning of 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories or higher of screw chiller capacity in AC Plant with at least 3 works executed in last 6 years in GOVT./PSU/Autonomous bodies/reputed private industries. <b>(Scanned copies of proof of completion certificate and satisfactory performance certificate from at least 3 clients must be submitted along with the complete address of clients and verifiable in all respect, list of clients with complete postal address, mobile number and e-mail address must be enclosed, only purchase order /supply order shall not be considered).</b>		
7.	2 year comprehensive onsite warranty of the 120 TR capacity water cooled VFD screw chiller (1 no.) with 150 TR cooling tower & all associated accessories& consumables/refrigerant etc. from the date of commissioning. (Undertaking must be submitted in letter head).		
8.	The bidder shall be either OEM of screw chiller or its authorized dealer.		
9.	The bidder shall have a minimum average annual turnover of Rs.250 lakhs during last three years (2020-2023). <b>(Scanned copies of documents certified by chartered accountant must be submitted).</b>		
10.	Scanned copy of undertaking as per attached Format <b>(Annexure – VIII)</b> duly attested by Notary on a non-judicial stamp paper of value of Rs. 500/- (Rupees Five Hundred Only) regarding their non-blacklisting by any of the Government Departments, Public Sector Undertakings and/or by Central Vigilance commission during the last 3 years. <b>Original undertaking should be submitted alongwith EMD.</b>		
	Financial bid (BOQ) should be uploaded separately.		

**Declaration by the Bidder:**

This is to certify that I/We signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself ourselves to abide by them.

**Signature of bidder**

**Financial Bid (BOQ) should be filled & uploaded separately**

To

**The Director,**  
NIHSAD,  
Bhopal – 462021 (M.P.)

Sir,

I/We submit our tender with respect to financial bid for the Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System at NIHSAD, Bhopal and my/our rate is as follows which may be read with reference to Schedule – II: -

<b>Financial Bid (BOQ)</b> <b>(For reference purpose only and not to be filled with technical bid)</b>				
Tender Inviting Authority: Director, ICAR-NIHSAD, Bhopal Name of Item: Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System at ICAR-NIHSAD, Bhopal Contract No: 9-83/23-24/NIHSAD (P&S)				
Name of the Bidder/ Bidding Bidder / Company:				
<b>PRICE SCHEDULE</b>				
NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	BASIC RATE In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5
1	Item			
1.01	Cost of Supply, Installation, testing and commissioning of 120 TR Screw Chiller with 150 TR Cooling Tower and all associated accessories at HVAC System(as per Annexure – VII)(Amount in INR)		0.00	INR Zero Only
1.02	Applicable GST % (Amount in INR)		0.00	INR Zero Only
Total in Figures			0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only		

I/We agree to forfeiture of the EMD deposited by me/us in connection with tender if we fail to comply with any of the terms and conditions in whole or in part as paid down in the tender documents. We have carefully read the terms and conditions of the tender and agree to abide by these in letter and spirit.

In other terms and conditions that the tender would like to specify, it will form a part of the schedule.

Note:- The National Institute of High Security Animal Diseases, Indian Council of Agricultural Research under the Deptt. Of Agriculture Research and Education (DARE), Govt. of India is engaged in Research and Development activities in the field of Animal Sciences. This Institute is 100% funded by the Govt. of India and has been exempted from the payment of Excise Duty under Notification No. 51/96-Gustoms dated 23.July, 1996 and amended by Notification No. 43/2017 dated 30.06.2017, Notification No. 47/2017- Ontergrated Tax (Rule) dated 14.11.2017 and Notification No. 45/2017-Central Tax (Rate) dated 14.11.2017, Notification No. 45/2017-Union Territory Tax (Rule) dated 14.11.2017 and is registered under the Ministry of Science & Technology, Deptt. Of Scientific and Industrial Research vide Regd. No. TU/V/RG-CDE (1235)/2019 dated 01.09.2019. Hence, GST may be applicable accordingly.

**Signature**  
**Name and address of the bidder with phone number**