



**Indian Institute of Science (IISc)
Bangalore - 560012**

Department of Computational and Data Sciences (CDS)
IISc

Notice Inviting Tender (NIT) under
Two-Cover Bid System

for

**Comprehensive AMC for Drycooler and PACs
for 3 Years in SERC
[Local Tender]**

**Enquiry or Tender No: [IISc/CAMC/SERC/2024/Dry Cooler_PACs/1](#)
Date: [April 4, 2024](#)**

Chair

Supercomputer Education and Research Centre (SERC)

Indian Institute of Science (IISc)

Bangalore – 560012, India

Email: tender.serc@iisc.ac.in

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1. Preamble and Schedule of Requirements

The Supercomputer Education and Research Centre (SERC) in Indian Institute of Science (IISc) is a leading supercomputing centre in the country, possessing state-of-the art computing facilities, catering to the ever-increasing demands of high performance computing for scientific and engineering research. The supercomputer systems in SERC are used for large-scale simulations in various scientific domains.

A data center was set up in SERC under National Supercomputing Mission (NSM) in January 2022. As part of the data center, the following components were installed.

1. 1 No. of Schneider Drycooler
2. 6 Nos. of Schneider PACs

for providing comprehensive AMC (CAMC) services for the above-mentioned items for 3 years.

The CAMC should cover labour/maintenance visits, replacement of failed components, consumables including refrigerant gas for refilling, oil etc., any licensing fee for firmware updates, The CAMC period will start 5 days from the date of the PO.

2. Bidder’s Eligibility Criteria

The bidder must have provided AMC services for similar cooling systems from Schneider Electric of at least 200 TR in at least one site during the period January 1, 2021 – December 31, 2023. **Supporting Document Needed:** A copy of the P.O. or payment proof and contact information of the person-in-charge at the sites.

3. Technical Details

Sub Head: Operation and comprehensive annual maintenance of Dry Cooler capacity of 1000KW and Precision Air condition (PAC) with water cooler condenser units, 11TR X 6 no’s the details are as under.

SL NO	Description	Model No/Part code	Serial No	Make	Qty
1	Dry Cooler (1000KW)	DSAF0800A/ WADVULTRA-UF-63B	SRF 032129	Schnieder Electric	1
2	Precision Air Conditioner (PAC) 11TR X 6 [with water cooled condenser units]	DAV1311AN-CPD/ WADVULTRA-UF-32	JK2101001967,	Schnieder Electric	1
3			JK2101001968	Schnieder Electric	1
4			JK2101001969	Schnieder Electric	1
5			JK2102002674	Schnieder Electric	1
6			JK2111001106	Schnieder Electric	1
7			JK2102002672	Schnieder Electric	1

Please note that the above-mentioned units are customized products for our site, customized by the OEM, and the software of the controllers are available only with the OEM. The bidders should assess the feasibility of providing the AMC service in view of the above.

If the bidder is not the OEM, the bidder should provide authorization from the OEM for the bidder to provide the CAMC services.

Following services are required as part of the CAMC.

1. **Annual Maintenance:** This service should be performed at the start of the maintenance service term. All manufacturers recommended yearly maintenance procedures on the unit(s) should be conducted. The inspection shall be conducted on a mutually agreeable date (1 visit)

Annual Maintenance once a year involving complete maintenance procedure should be performed including the following:

A. Check unit thoroughly for refrigerant leaks for PACs.

- Inspect for leaks and report leak check result.
- Repair minor leaks as required. (e.g. valve packing, flare nuts).
- Check the condenser fans for clearances and free operation.
- Check tightness of condenser/ fan motor mounting brackets etc.
- Check the set screws on the fan shafts.
- Visually inspect the condenser/evaporative coil for cleanliness.

- Verify the performance of the fan control inverter VFD, if applicable.
- Only OEM (Original Equipment Manufacturer) parts are to be used as replacements.

B. Control and safety for Dry Cooler and PACs

- Inspect the control panels for cleanliness.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Verify the working condition of all indicator/alarm lights and LED/LCD displays.
- Test oil pressure safety device (as required). Calibrate and record setting.
- Check the firmware version of the machine and upgrade to the newer version as required.
- Only OEM (Original Equipment Manufacturer) parts are to be used as replacements.

C. Motor and Starter in Dry Cooler and PACs

- Clean the starter cabinets and starter components.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Check the condition of the contacts for wear and pitting.
- Check contactors for free and smooth operation.
- Check all mechanical linkages for wear, security, and clearances.
- Verify tightness of the motor terminal connections.
- Meg the motor and record readings.
- Verify the operation of the electrical interlocks.
- Measure voltage & amps and record: Voltage should be nominal voltage.
- Only OEM (Original Equipment Manufacturer) parts are to be used as replacements.

2. **Preventive Maintenance (PACs):** This service should provide regular scheduled preventive maintenance inspections. There should be at least four preventive maintenance visits per year, on a quarterly basis.

Regularly scheduled preventative maintenance inspection will include the following.

- Check the general operation of the unit, including compressors.
- Check the water-cooled condenser and performance.
- During each PM visit, check for any refrigerant gas leakage and refill if in case of any leakage or low pressure alarm.
- Cleaning of Indoor Filters, Cooling coils & Drain points. (Use Pressure Washer)
- Check the firmware version of the machine and upgrade to the newer version as required.
- Ensure drain is not clogged.
- Monitoring of Unit in operation to check for any unusual noise or vibration.
- During each PM visit, Certified Field Service Representative (FSR) should run tests to verify the system functioning correctly in all operational modes.
- Log the operating temperatures, pressures, voltages, and amperages.

- Check the operation of the control board, resolve the alarm, and fix any issues if present.
 - Check the operation of the lubrication system.
 - Check the operation of the motor and starter.
 - Analyze the recorded data. Compare the data to the original design conditions.
 - Review operating procedures with operating personnel.
 - Provide a written report of completed work, operation log and indicate any uncorrected deficiencies detected.
3. **Preventive Maintenance (Dry Cooler):** This service should provide regular scheduled preventive maintenance inspections. There should be at least four preventive maintenance visits per year, on a quarterly basis.

Regularly scheduled preventative maintenance inspection will include the following.

- Check the general operation of the unit, including compressors.
 - Check Incoming Cable terminal Tightness and monitor and repair any cable blackening,
 - Check the Contractor In/Out all terminal tightness,
 - Cleaning of Air-cooled condenser fins & fans (Use Pressure Washer)
 - Cleaning of Filters & Drain points. (Use Pressure Washer)
 - Clean and verify fan & fan motor of Condenser unit,
 - Log the operating temperatures, pressures, voltages, and amperages.
 - Check the firmware version of the machine and upgrade to the newer version as required.
 - Check the operation of the control board, resolve the alarm, and fix any issues if present.
 - Check the operation of the motor and starter.
 - Monitoring of Unit in operation to check for any unusual noise or vibration.
 - Analyze the recorded data. Compare the data to the original design conditions.
 - Review operating procedures with operating personnel.
 - During each PM visit, Certified Field Service Representative (FSR) will run tests to verify the system functioning correctly in all operational modes.
 - Provide a written report of completed work, operation log and indicate any uncorrected deficiencies detected.
 - Regular dry cooler servicing should be carried out without the need of the shutdown of the system as much as possible.
4. **Written Report:** A report should be provided at the end of each inspection with recommendations of necessary repairs and maintenance procedures.
5. **Emergency Service:** Shall include emergency calls between inspections as required for the purpose of diagnosis of trouble, adjustment, minor repair, or resetting of controls.
6. **Major Repair Labor:** Shall include all spares and labor to diagnose, repair, or replace failed components of the equipment.

Service calls have to be attended within the same day. Replacement of major defective items has to be made within three working days from the time the issue is raised. All visits should be accompanied by authorized employee of the bidder.

Note:

- Vendors should visit the site before sending the quote.
- Only OEM (Original Equipment Manufacturer) parts are to be used as replacements (includes all parts of Dry cooler and PAC's during replacements if any).
- For any breakdown, service should be available 24X7.
- All calls should be attended to within 2 hours of the time of the call made.

Visits Required:

- No of Preventive Maintenance: 4 Nos visits per year
- No of Breakdown visits: "N" Number of visits per year.

Failure to meet the above requirements in timely rectification of issues will result in extension of the r CAMC services as follows: If problem is not fixed in first 24 hours after reporting, 5 days of CAMC extension (penalty) for each day of delay from days 1-3, until data center is fully functional. If problem is not fixed by 3 days, 10 days of CAMC extension (penalty) for every day of delay from days 4 onwards, until data center is fully functional.

4. Organization of the Technical Bid

The technical bid should strictly be organized in the following sequence only.

Note: IISc reserves the right to disqualify any bid that does not provide all the required data and not following the organization given below.

1. A cover letter from the bidder. Among other things, the cover letter should certify that all the requirements of the tender are provided, and the offered solutions meet and comply with the technical and other specifications of the tender. The cover letter should certify agreeing to all the terms and conditions mentioned in the tender.
2. The bidder must not be blacklisted by any Central / State Govt. Organizations of India as on date of submission of the bids. A certificate or undertaking to this effect must be submitted.
3. Proofs for Bidder's Eligibility Criteria as given in Section 2 of this tender.
4. Authorization form from the OEM, if the bidder is not the OEM.
5. A copy of the masked Commercial bid has to be given in the technical offer (unpriced Bill of Material (BoM)).
6. Undertaking as in **Annexure A**.
7. Terms and conditions of the offer.
8. Appendix
 - a. Company Profile Documents, if desired by the bidder (Maximum 2 pages).
 - b. Supporting technical materials including brochures.
 - c. Any other information or documents that the bidder deem necessary.

5. General Terms and Conditions

1. Local tender purchase preference.
 - a. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
 - b. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.

- c. The quotations should be on FOR-IISc Bangalore basis in INR only.
 - d. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
 - e. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to the Class-1 supplier.
 - f. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.
2. Offer must be submitted under TWO-BID system i.e., “Technical bid” and “Price (Financial) bid” as hard copies in two separate sealed envelopes. These two bids must be enclosed in a larger envelope superscribed as “Bid Submission for UPS Panels and Cables” within the stipulated period to the indicated mailing address. In addition, **soft copy of only the technical bid** must be sent by email to tender.serc@iisc.ac.in within the stipulated time.
 3. Delayed and/or incomplete tenders are liable to be rejected.
 4. The Technical Bid and the Commercial Bid should be duly signed by the authorized representative of the bidder.
 5. The bidders are requested to go through the Terms and Conditions detailed in this document, before filling out the tender. Agreeing to the terms and conditions of the tender document (by signing all pages of the copy of a tender document) is a mandatory requirement.
 6. A tender, not complying with any of the above conditions is liable to be rejected.
 7. IISc reserves the right to cancel the tender at any time without assigning any reason whatsoever.

6. Technical Bid – Terms and Conditions

1. The technical bid should contain all the information and should have the organization as given in Section 4. Bids without the specific information and organization as in Section 4 will be automatically disqualified.
2. No price information must be mentioned in the technical bid. Bids which include price information in the technical bids will be automatically disqualified.
3. Technical bids will be opened first. IISc may seek clarifications after opening of technical bids.
4. The technical evaluations will be made only based on the technical bids and the shortfall responses submitted by the bidder.

7. Commercial Bid – Terms and Conditions

1. Price bids of only technically qualified vendors will be considered. Commercial bid shall be opened for the technically qualified bidders after the technical evaluation.
2. The hardcopy commercial bid of the successful bidder, after the commercial bid opening stage, should contain among other things, unit prices, AMC prices for each of the 3 years for each of the systems mentioned in Section 3, payment terms, installation, commissioning etc. as per requirements of IISc mentioned in the tender document. All such conditions must be in line with the tender. In case of any deviation or conditional offer, the bid may be treated as non-responsive and not be considered for evaluation. Bundling of the prices is not acceptable.
3. This is a **local tender**. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. Prices should be quoted only in INR (Indian Rupees) and will be with GST only. The order must be on FOR-IISc Bangalore basis.

4. The component of tax, and any other statutory levies should be shown separately and not included in the total amount, to enable IISc to avail any exemption.
5. Proposals should contain the name and contact details, viz., phone, fax, and email of the designated person to whom all future communication will be addressed. The contact details should also be mentioned on the overall envelope.
6. Prices should be quoted in detail, for all the subsystems given in the Technical Specifications part of the tender. Further, bid and **price validity should be for six months** from the date of opening of the technical bids.
7. IISc will place the purchase order only on the successful bidder as per the decision of IISc. In this regard, decision of IISc will be final and binding.

8. Payment Terms

1. Purchase Orders will be raised annually at the beginning of each AMC year for AMC for the corresponding year. The first PO for the first year, in addition to specifying the AMC prices for the first year, will also mention the AMC prices for the subsequent years as quoted by the winning bidder. This PO will then be binding on the winning bidder to offer the AMC for all the three years as per the final prices agreed upon at the end of the tendering process.
2. Payments against the annual POs will be made on quarterly basis after satisfactory service at the end of every service quarter.
3. Payment will be subject to deduction of TDS as per rules / laws and any other deduction as per PO terms.

9. Important Dates

1. Release of tender: April 4, 2024.
2. Last date for sending queries: April 11, 2024, 5 PM IST. Queries may be sent to tender.serc@iisc.ac.in.
3. Release of corrigendum to the tender based on the queries, if necessary: April 12, 2024, 5 PM IST.
4. Start date for submission of the bid: April 13, 2024, 10 AM IST.
5. Last date for submission of the bid: April 26, 2024, 5PM IST.
 - a. Hard copy submission: The bid in the form of an envelope containing the hard copies of both the technical and commercial bids, in two sealed envelopes, should be submitted and reach the below-mentioned mailing address by the same date, 6 PM IST. Note that the hard copy of the technical bid should exactly match with the soft copy submitted.
 - b. Soft copy submission: **Soft copy of only the technical bid** must be sent by email to tender.serc@iisc.ac.in by the above-mentioned time. **No soft copy of commercial bid should be submitted.** Soft copy submission of commercial bid at any stage before the opening of the hard copy commercial bid will lead to disqualification of the bid.

Mailing address:

Chair
Supercomputer Education and Research Centre (SERC)
Indian Institute of Science (IISc)
Bangalore – 560012
India

10. Annexure A - Undertaking

Date:

To:
The Chair
Supercomputer Education and Research Centre
Indian Institute of Science
Bangalore – 560012, India

Subject: Undertaking as per GFR – 2017, Rule 170(iii)

Dear Sir,

We, the undersigned, offer to carry out the project including Products/items, components etc. as per tender at IISc, Bangalore, in response to your Tender No **IISc/CAMC/SERC/2024/UPS_Batteries/1**. We are hereby submitting our proposal for the same, which includes Technical bid and the Financial Bid. As a part of the eligibility requirement stipulated in the said tender document, we hereby submit a declaration as given below:

1. We will not withdraw or amend or modify or impair or derogate our bid partly or fully or any condition of it after tender opening, during the period of tender validity (six months from the date of opening of the technical bid),
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case of failure on our part to deliver/provide the item/installation/service as per the order's terms and conditions within the stipulated period, we are aware that we shall be declared as ineligible for the said tender and /or debarred from any future bidding process of IISc or any Government entity for a period of minimum one year.
4. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No: