

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

AMC for 4x750 KVA DGs [Local Tender]

Enquiry or Tender No: IISc/AMC/SERC/2024/DGs/1 Date: May 28, 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.

This tender calls for providing AMC services for 4x750 KVA DGs in SERC for a period of one year. The AMC 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 DG systems of at least 250 KVA 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

AMC FOR 4*750KVA DG SETs

The details of the components are as under:

	Technical				
Sl.No	specifications	DG #1	DG #2	DG #3	DG #4
1	Capacity	750 KVA	750 KVA	750 KVA	750 KVA
		Cummins India	Cummins India	Cummins India	Cummins India
2	Make	Ltd.	Ltd.	Ltd.	Ltd.
3	Engine Sl. No	25387397	25385963	25387396	25465874
4	ENGINE MODEL	KTA38-G2-I	KTA38-G2-I	KTA38-G2-I	KTA38-G12
5	gen/equp model	HCI634W1	HCI634W1	HCI634W1	HCI634W1
6	Alternator Sl.No	N13C113794	N13C113787	N13C113880	N21A010294

SCOPE OF WORK

The preventive maintenance will be done compulsorily "ONCE" every month. This inspection is carried out to ensure that the engine performs in an optimum manner which would endure high equipment uptime.

Preventive maintenance should include the following.

- 1. **Regular checking/inspections** of all the parts of the DG sets required for normal functioning including deep cleaning of all filters, change in engine oil, coolant, radiator cap/raw water Strainer batteries, startup items, etc. to identify and address potential issues proactively.
- 2. **Preventive Maintenance:** The service engineer is required to check both electrical and mechanical parts of Diesel Generator Sets i.e., filters, hose pipe, pump, nozzle, radiator, bearing, automatic voltage regulator, Alternator, rotter key, switches, wires, batteries, vacuum Indicator, Rain Caps etc and must intimate to the office immediately and corrective action should be taken.
- 3. Checking for proper functioning of sensors and safety controls in terms of checking the connections and terminals and visual inspections.
- 4. Parts will be provided by IISc from Cummins Authorized distributor.
- 5. Only Cummins recommended Valvoline oil.
- 6. **Emergency Support:** Round-the-clock support for unforeseen issues, ensuring the systems are operational again promptly. To attend services calls other than mandatory monthly service call, as and when required must be attended within same day from the time of call registered.

WORKS COVERED UNDER AMC OF 750KVA CUMMINS DG SETS (3NOS)

I. MECHANICAL WORKS (MONTHLY BASIS):

- 1. Checking the engine for its smooth running, unusual noise and colour of the smoke from the exhaust.
- 2. Checking and adjusting the Fan Belt tensions, changing them if required.
- 3. Cleaning of Air filters to increase their life as well as proper inflow of Air. Also changing them, if required.
- 4. Carrying out valve tappet settings as and when required.
- 5. End play checking of crank shaft, Accessory Drive and Turbo Charger whenever required.
- 6. Checking the alignment of Engine and Alternator, whenever required.
- 7. Advance notification should be provided for carrying out periodical maintenance checks B/C/D Checks, whenever they are DUE. These checks will be performed separately and will not be covered under AMC.
- 8. Checking of proper functioning of various instruments of Dashboard Instrument Panel.

II. FUEL SYSTEM:

- 1. Checking and Maintenance of Fuel line System including fuel Tank, Fuel Piping and Fuel Valve etc.,
- 2. Drain water and sediment from water separator if necessary

- 3. Check tightness of all fuel line connectors and if any leakage of fuel from the fuel line system needs to be repaired.
- 4. Any smoke leakage from the Exhaust system should be immediately addressed.

III. COOLING SYSTEM:

- 1. Check visual inspection of belts for slippage to confirm the working of shock absorber and check leakages.
- 2. The coolant level and conditioning of the coolant shall be checked for any signs of leaks around the coolant hoses, connections, or the radiator and refilled when required.
- 3. Visual inspection of cooling fan is required. Check for cracks, bent or loose blades.

IV. ELECTRICAL WORKS: (Monthly Basis)

- 1. Checking and fault findings in the electrical systems associated with the Engine.
- 2. General cleaning of alternator from inside with hand blower.
- 3. Cleaning battery terminal for sulphation and checking its status for ensuring its terminal tightness.
- 4. Maintenance of instruments, relays and connectors fitted inside Gen Set Control Panel.
- 5. Checking of wiring system for its loose connection / dry Connections.
- 6. Checking Rotating Rectifier Assembly in Brushless alternator.
- 7. Checking of mounting Bolts.
- 8. Diagnosis of various faults and their rectification at site.
- 9. The digital display of DG sets should be maintained functional all the time.
- 10. Testing of Alternator, once in Six months only for LT.
- 11. Greasing of Alternator Bearing as per the Manufacturers recommendation.

V. The service engineer must do the following work during servicing of Generator Set.

- 1. During the AMC Period, the Supplier should undertake routine checkups for preventive maintenance and periodical checkups like A Checks. All breakdown calls along with regular maintenance should be carried out free of cost in the warranty period.
- 2. The Annual Maintenance contract will be inclusive of all the Items/components of the DG sets.
- 3. The scope covers maintaining engine, alternator, synchronizing panel board and its accessories.
- 4. Any other essential services for the smooth functioning of the DG sets must be ensured.

NOTE:

- 1. **Replacement of defective parts** should be made with spares/parts of the same specification i.e, Only OEM (Original Equipment Manufacturer) parts are to be used as replacements.
- 2. Site Visit
- a. Visits Required: No of Preventive Maintenance: Monthly basis
- b. Breakdown visits: On every breakdown.

- 3. **Written Report:** A report should be provided at the end of each inspection on every month/ every breakdown call with recommendations of necessary repairs and maintenance procedures.
- 4. **Emergency Service:** Shall include emergency calls between inspections as required for diagnosis of trouble, adjustment, minor repair, or resetting of controls.
- 5. **Minor Repair Labour**: Any number of minor breakdown calls or maintenance call should be attended free of cost. No separate labour charge would be billed during AMC period

TECHNICAL TERMS AND CONDITIONS:

- 1. The contractor agrees to execute the entire job pertaining to service, maintenance and changing of parts/repairs.
- 2. Contractor should provide us with 24x7 support and timely preventive maintenance, ensure the smooth functioning of the engine in an optimum manner.
- 3. This contract encompasses routine inspections, preventive maintenance, repairs, and the replacement of components when necessary. The primary goal is to identify potential issues before they escalate, thereby minimizing the risk of unexpected downtime.
- 4. AMC and repair of 4*750kVA DG Sets includes carrying out routine checking, monthly preventive maintenance and unlimited number of services calls in case of breakdown, replacement of spares.
- 5. The maintenance service would be available during normal working hours from 0.00 hours to 18.00 hours on all normal working days excluding the second Saturday, Sunday and holidays while the breakdown services would be available on 24*7 support.
- 6. The service engineer will be made available by the contractor immediately as and when required against the request call or phone or otherwise during the period of annual maintenance contract.

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. Undertaking as in Annexure A.
- 6. Terms and conditions of the offer.
- 7. 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. Offer must be submitted under ONE-BID system consisting of both Technical and Price (Financial) bids as hard copies in a single sealed envelope superscribed as "Bid Submission for AMC for 4x750 KVA DGs" within the stipulated period to the indicated mailing address. In addition, soft copy of the bid must be sent by email to tender.serc@iisc.ac.in within the stipulated time.
- 2. Delayed and/or incomplete tenders are liable to be rejected.
- 3. The Bid should be duly signed by the authorized representative of the bidder.
- 4. 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.
- 5. A tender, not complying with any of the above conditions is liable to be rejected.
- 6. IISc reserves the right to cancel the tender at any time without assigning any reason whatsoever.

6. 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. The technical evaluations will be made only based on the technical bids and the shortfall responses submitted by the bidder.
- 1. Price bids of only technically qualified vendors will be considered.
- 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 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 organization. Prices should be quoted only in INR (Indian Rupees) and will be with GST only.
- 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.

7. Payment Terms

- 1. Purchase Orders will be raised at the beginning of the AMC period.
- 2. Payments against the PO 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.

8. Important Dates

- 1. Release of tender: May 28, 2024.
- 2. Start date for submission of the bid: May 29, 2024, 10 AM IST.
- 3. Last date for submission of the bid: June 18, 2024, 5 PM IST.
 - a. Hard copy submission: The bid in the form of an envelope containing the hard copies of the bids, in a sealed envelope, should be submitted and reach the below-mentioned mailing address by the same date, 6 PM IST. Note that the hard copy of the bid should exactly match with the soft copy submitted.
 - b. Soft copy submission: Soft copy of the bid must be sent by email to tender.serc@iisc.ac.in by the above-mentioned time.

Mailing address:

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

9. 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: