

**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER) MOHALI**  
**REQUEST FOR QUOTATION( RFQ) FOR**  
**“ANNUAL MAINTENANCE CONTRACT FOR 2 NOS OF CHILLERS AT IISER MOHALI,**  
**SEC 81, SAS NAGAR**

1. Sealed two stage quotations are invited on the behalf of Director IISER Mohali for the work of “Annual Maintenance Contract for 2 Nos of Chillers at IISER Mohali”.

Earnest Money: Rs.15,000/- favoring Registrar, IISER Mohali and payable at Chandigarh.

2. The details of AMC can be downloaded from web site [www.eprocure.gov.in](http://www.eprocure.gov.in) & [www.iisermohali.ac.in](http://www.iisermohali.ac.in). Bidder who download the documents from web site are required to submit separately Demand Draft of Rs.500/- favoring Registrar, IISER Mohali and payable at Chandigarh.

Last Date & Time of Submission: 18/11/ 2016 at 1500 Hrs.

**SCOPE OF WORK**

1. The OEM/OES shall check and render preventive maintenance service to all the equipment (Chillers) every 3 months i.e., four times in a year during the currency of the contract.
2. To check the VFD (Variable Frequency Drive) once in every three months.
3. Checking of BMS (Building Management System) once in every three months or as desire.
4. To attend all emergency calls during the contract period.

**A). Each service will include the following:**

1. Checking the functioning of Chiller unit.
2. Descaling of condensers/chemical cleaning of evaporator coils/replacement of pre filters based on our assessment and working parameters of the plant.
3. Checking of compressor for its proper working.
4. Checking oil levels in Compressor/motor starter/gear boxes and oil charging. Cleaning of all filters.
5. Refrigerant leakage testing and top up of refrigerant.
6. Labour for overhauling and descaling (Once in a year) of condenser as per need.
7. Annual pumping-down and restarting as and when required.
8. Checking of Microprocessor control panel, control boards, transducers of packaged chiller along with VFD. Repair of VFD.
9. Repair of main breaker, electrical contractor and repairing of electrical fault.
10. Replenishing refrigerant gas .
11. To check the operation of actuators and other sensors so as to integrate with the control and working BMS.
12. Repairing the primary and secondary water pumps.
13. Checking of parameters on display and rectification of related errors.
14. Checking the pressure and temperature controls related to the chilling machine.
15. Checking of BMS as and when required. Checking the connection of control wiring of BMS panel with the Sensors, Controller, Actuators, Differential Switches etc. Connecting all the loose connections and end terminals.
16. Refergent leakage testing of each chiller.
17. Refergent top up.
18. Condenser fan bearing greasing.
19. Electrical fault checking and rectify the same.

**B). EXCLUSIONS**

1. Day to day operation and Cleaning / maintenance of the machine/plant or additional service during the year. Additional services shall be offered on chargeable basis.
2. Cleaning of equipment external (like drain piping) to the equipment.

3. Repair / Replacement of compressor , any part associated to compressor .
4. Repair / Replacement of controller or any part associated to controller.
5. Any part required to be changed or repair.
6. Repairs and/or replacement of any spare or equipment due to ageing and damage due to external factors to the equipment. All requirements arising out of normal wear and tear and/or normal break-downs shall be covered under the contract.
7. Repairs or replacement of AHU coils and bottom trays.
8. Replacement of entire equipment like Cooler, Condenser Compressor, Electrical Panel, AHU, Pump, Cooling Tower, Humidifier, Hot Water Generator etc.
9. Replacement in case the spare part/equipment is obsolete.
10. Installing new Software for BMS and other allied associated work.
11. Repairs or replacement of any equipment other than that mentioned in the list of equipment. Any additional equipment not listed in the equipment list shall be covered at an additional premium. Repairs or replacement of water piping/gate valve/globe valve, modulating and mixing valve, make up water and expansion tank, insulation, ducting, sheet metal, outdoor condenser coils, refrigerant piping, back cover, front grille, dampers, grills, diffusers, false ceiling, micro and HEPA filters, doors, locks, gasket, heating elements, auto defrost system, hinges, doorbell, light fixtures and bulbs.
12. Any kind of masonry, structural and carpentry works.
13. Cooling tower structural, fills, louvers and air washer internals.
14. Painting of plant and associated equipment.
15. Main electrical panel for the system with all components.
16. Replacement of, electrical installation like cabling, switch boards, isolators, panels, strip heaters, ammeters, voltmeters and other such instruments external to the equipment.
17. Any other item not specifically mentioned nor supplied by OEM/OES
18. Failure or deterioration of any equipment or parts due to atmospheric condition/corrosive atmosphere.
19. Providing unskilled labour.
20. Transportation of equipment.
21. Anything not specified within "Scope of Contract" above.
22. Some of the above referred exclusion of supplies/services can be arranged by OEM/OES at extra cost.

**C). General Terms & Conditions:-**

1. The OEM/OES must have original equipment testing kit.
2. All damaged/worn out parts replaced during AMC should be returned to the Engineer in charge.
3. No equipment should be unmounted and taken out from the Institute without a proper Gate Pass issued by the Engineer In charge.
4. In case of any damage due to mishandling of the installation, recovery shall be made from the bill/performance guarantee.
5. In case of unsatisfactory performance, the AMC can be terminated without assigning any reason.
6. The OEM/OES must intimate the addresses of his office along with contact numbers of persons to be contacted in case of emergency.
7. The attending technician should be in possession of all tools and equipments to be used during the maintenance work and the same would be provided by the agency.
8. The agency or his workers shall not misuse the premises allotted to them for any purpose other than for which the contract is awarded.

9. The agency has to deploy more manpower, if required, for attending breakdown and completing breakdown work in minimum possible time for which no extra payment would be made.
10. The OEM/OES shall liaison with the BMS agency for the smooth operation and control of BMS.
11. In case any shutdown is required for carrying out the AMC work, then the same should be informed to the Engineer in charge well before hand and a shutdown should be carried out only after obtaining the necessary approval.
12. Any displacement, relocation of the equipment should be avoided by the agency.
13. All necessary drawings, Manuals etc will be provided to the firm on demand.
14. The firm should finish the work in stipulated time. Any extra labour incurred in meeting the work deadlines shall not be chargeable and will be the firm's liability.
15. AMC charges will be payable quarterly after satisfactory completion of work and certification by Engineer in Charge with deduction of 5% amount as security deposit from each running bill which will be released after successful completion of AMC period and payment of final bill.
16. The annual maintenance contract rates will be for period of two years, 1<sup>st</sup> one year and 2<sup>nd</sup> year based on the rate quoted. However, the AMC can be extended for 2<sup>nd</sup> year only on satisfactory performance by the agency.
17. The contractor shall comply with all statutory requirements in respect of said work.
18. All material to be used in the AMC will have to be approved by the Engineer -in- Charge or his authorized representative.
19. All urgent calls and complaints should be attended within 2 hours.
20. The agency attending technicians should be well trained to handle the required work. The Institute will not be responsible for any physical or personal damage to the company's technician while carrying out the AMC work.
21. All the agency attending technicians should take all necessary precautions while carrying out the AMC work. All protective gear and equipment should be used and should be in good condition. No compromise on safety should be allowed.
22. Carrying out liaisoning with OEMs of individual equipments will be the sole responsibility of the agency. However, in case of any delay in repair etc. by the OEM, the agency should keep the Engineer in charge well informed from time to time.