INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER) MOHALI NOTICE INVITING TENDER(NIT) FOR

"ANNUAL MAINTENANCE CONTRACT OF ELECTRICAL TRANSFORMERS/ PANELS/ CIRCUIT BREAKERS ETC OF SUBSTATIONS AT IISER MOHALI, SEC 81, SAS NAGAR

1. Sealed two stage bids are invited on the behalf of Director IISER Mohali for the work of "Annual maintenance contract of Electrical Transformers/ Panels/ Circuit Breakers etc of Substations at IISER Mohali".

Earnest Money: Rs.17,500/- favoring Registrar, IISER Mohali and payable at Chandigarh.

2. The details of AMC can be downloaded from web site www.eprocure.gov.in & 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: 19/12/2016 at 1500 Hrs.

SCOPE OF WORK:

UNDER CONTRACTOR:

(A) Transformer :-

- 1.Testing and operation checking of HT and LT circuit breakers which ever required has to be carried out every month.
- 2.Transformer should be cleaned and checked for oil leakage, oil level, loose connection, dirt, flash-over etc or any other abnormality as necessary.

(B) Circuit Breaker :-

Following inspection has to be carried out in HT/LT circuit breaker, only malfunctioning LT circuit breakers to be checked, check items as follows:

- 1. Visual inspection of component ACB to assess condition.
- 2.Cleaning of ACB with cleaner.
- 3.Removal of old grease and re-greasing the same with special grease.
- 4.Check the condition of arcing contact and gap b/w fixed and moving contacts.
- 5. Checking tripping of ACB through Protection release.
- 6.Checking presence and proper tightening of hardware
- 7. Checking presence of all Cir Clips.
- 8. Checking condition of ACB wiring.
- 9. Checking proper closing of all poles by taking impression etc.
- 10. Checking condition of Arc Chutes.
- 11. Checking ACB opening through Y/U coil.
- 12. Checking ACB opening through Y/O coil.
- 13. Checking ACB opening through Y/C coil.
- 14. Setting of release as per the load.

- 15.Checking main operating mechanism and replacing it in case of any failure (spares to be provided by IISER).
- 16.Does not include removing the breaker cradle or fixed breaker from the panel i.e. dismantling the ACB from bus-bars / fixed breakers, the same will be in your scope.
- 17.Testing through proper testing instrument i.e. PR010/T, which is available with the ABB Approved Service centers only. With this kit only it is possible to check the correct healthiness of ACB resale.
- 18. Servicing of ACB make ABB at site.
- 19. Providing test reports of the breakers from OEM approved testing kits for LT breakers.

(C)<u>Panels :-</u>

- 1.Health check-up of electrical panel, wiring and control panel, inspect for any black marks and loose connections of contacts.
- 2.Inspect the proper setting of all meters, CT's and PT's based on customer requirement in electrical panel.
- 3. Check the fastening of all switch gears in electrical panel.
- 4.Checking and re-tighten any loose bolts and nuts in proper sequence in case of bus-bar & cable inside the panel only in electrical panel
- 5. Checking of the breaker tripping mechanism / function manually in electrical panel.
- 6.Check the earth links to the panels for loose connection in electrical panel.
- 7.All breakers to be cleaned thoroughly and the contacts to be free from carbon deposits / dust etc. in electrical panel.
- 8.Check for adequacy of ventilation and clean the intake and exhaust filters / louvers as required in electrical panel.
- 9. Check for proper operation of power factor correction equipment if installed in electrical panel.

SCOPE OF WORK UNDER IISER

- **1.** Transformer oil replacement/topping up of oil, filtration, dehydration, silica gel replacement etc. will be provided by the agency on chargeable basis.
- 2. Replacement of defective component (spares to be provided by IISER) or on payment basis if provided by agency.
- 3. Minimum quantity of spares (like release, pole assembly, Mechanism, trip coils) to be maintained at our end.
- 4. In case any shortage of equipment or need of additional equipment's is felt by the firm then the same should be brought to the notice of the engineer in charge and can be installed after obtaining the necessary permission, on chargeable basis.
- 5. In case, a fault is found in some power cable supplying power to the panel, the same can be repaired by the firm or subletted to some other firm by the contracting firm, on chargeable basis.

6. Any equipment or quantity outside the scope of BOQ to be checked/repaired on chargeable basis.

General Terms & Conditions:-

- 1. The contractor must have original equipment testing kit of OEM like ABB,L&T, CG etc. of which equipment are installed in the substation.
- 2. The contractor must have suitable experience of undertaking similar work in educational Institutions etc of same or larger size than IISER.
- 3. All sundry materials like PVC insulation tape, HT tape, Paper insulation, adhesive etc will be provided by the agency free of cost.
- 4. All damaged/worn out parts replaced during AMC should be returned to the Engineer in charge.
- 5. No equipment should be unmounted from the panel and taken out from the Institute without a proper Gate Pass issued by the Engineer In charge.
- 6. In case of any damage due to mishandling of the installation, recovery shall be made from the bill/performance guarantee.
- 7. EMD amounting to Rs.17,500/- in favour of :Registrar IISER Mohali, payable at Chandigarh.
- 8. The contractor/firm must be HT licenced contractor/firm from any Govt department
- 9. Contractors/firms should have successfully completed during last 7 years ending last day of the month previous to the one in which the bidding are invited, either two similar works costing not less than 60% and one similar work costing not less than 80% of the estimated cost of the work out of which at least one should have been executed in Govt departments. Similar work means AMC of Sub Stations/maintennce of HT Sub Stations.
- 10. In case of unsatisfactory performance, the AMC can be terminated without assigning any reason.
- 11. The contractor must intimate the addresses of his office along with contact numbers of persons to be contacted in case of emergency.
- 12. 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.
- 13. The contractor or his workers shall not misuse the premises allotted to them for any purpose other than for which the contract is awarded.
- 14. Cleaning of the premises, floor etc after work completion will be the responsibility of the agency.
- 15. All electrical works should comply with Indian Electricity Act 2003 and Indian Electricity Rules 1956.
- 16. The contractor 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.

- 17. Measurement of earth resistance for all earthing points along with checking of earth pits, earthing strips have to be carried out at least every six months.
- 18. 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.
- 19. Any displacement, relocation of the substation equipment should be avoided by the firm.
- 20. All necessary drawings, SLDs, Manuals etc will be provided to the firm on demand.
- 21. Minor painting work will be free of cost and under the scope of AMC, however major painting work will be on chargeable basis.
- 22. 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.
- 23. 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.
- 24. The annual maintenance contract rates will be same for one year which can be extended for a further period of one year on satisfactory performance by the agency as mutually agreed.
- 25. The contractor shall comply with all statutory requirements in respect of said work.
- 26. The quantities as mentioned in the RFQ can be increased or decreased as per the equirement of work.
- 27. All material to be used in the work will have to be approved by the Engineer -in- Charge or his authorized representative.
- 28. All urgent calls and complaints should be attended within 1 hour, round the clock.
- 29. The company's attending technicians should be well trained to handle all HT/LT works. The Institute will not be responsible for any physical or personal damage to the company's technician while carrying out the AMC work.
- 30. All the company's 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.
- 31. Carrying out liasoning 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.