पूर्वी क्षेत्रीय विद्युत समिति/ Eastern Regional Power Committee
14, गोल्फ क्लब रोड , टालीगंज/ 14, Golf Club Road, Tollygunge,
कोलकाता - 700033/ Kolkata-700033

No. ERPC/Firefighting (FF)/2023-24/ 19-23 Dated- 01st May 2023.

विषय: ईआरपीसी आवासीय परिसर में अग्निशमन, आग बुझाना, डीजी, अग्निशमन की अन्य सहायक प्रणाली और पीने योग्य पानी पंपिंग प्रणाली के वार्षिक रखरखाव अनुबंध (एएमसी) के लिए कोटेशन जमा करने का अनुरोध -reg

Sub: Requesting for submission of quotation for Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex -reg

Sealed quotation(s) are invited for Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex as per 'Scope of Work' and Terms & Conditions provided in the tender documents.

This issues with the approval of Member Secretary, ERPC.

Enclo: Tender Document.

01.5.23

(Anup Das)
कार्यपालक अभियंता (TS&C)

1. ERPC website,
2. ERPC Notice Board

केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority
पूर्वी क्षेत्रीय विद्युत समिति/ Eastern Regional Power Committee
14 गोल्फ क्लब रोड, टॉलीगंज/14, Golf Club Road Tollygunge
कोलकाता/Kolkata – 700033

Tender/ ERPC/2023-24/2 dated - 01.05.2023

Notice Inviting Tender

Tender for Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex.

The office of Member Secretary, Eastern Regional power Committee (ERPC) invites Tender from the qualified firms/companies as per the below mentioned schedule: -

SCHEDULE TO TENDER		
S No	**Activity Description**	**Schedule**
1	Tender Number	Tender/ERPC Estb./2023-24/2
2	Start Date of Submission of Tender	10: 00 hrs. of 01.05.2023
3	Time and last date of submitting bid online	14: 00 hrs. of 15.05. 2023
4	Time and Date of Opening of qualifying Bid	16: 30 hrs. of 15.05.2023
5	Location for bid opening	Mini-conference room in 1st Floor.
5	Estimated cost of AMC	Rs 60,000/- (approximately) per annum

The tenderer should, in his own interest, visit the site and familiarize himself with the site conditions before tendering at any working day between 1100 hrs. and 1600 hrs from 11.05.2023 to 14.05.2023.

The quotation shall be sent in a sealed cover superscribing "Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex (1/B Golf Club Road, Tollygunge, Kolkata - 700033)" addressing to Member Secretary, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033**.** They may send their representative during bid opening.

Contract would be valid for two years from the date of issue of AMC order after due completion of bidding process. This may further be extended for any specified duration on sole discretion of Member Secretary, ERPC.

Bidders need to submit their relevant documents and credentials.

Payment shall be released on quarterly basis as 25% of the contract value through online (NEFT) mode after satisfactory completion of work and final acceptance by ERPC authority.

This Office reserves the right to amend or withdraw any of the terms and conditions contained in the Tender Document or to reject any or all tenders without giving any notice or assigning any reason. The decision of the Member Secretary, ERPC in this regard shall be final and binding on all.

Major system to be covered in the AMC Work is detailed below –

- 1 no 3 phase Electric motor driven Main Pump – 75 kW
- 1 no Diesel Engine driven Stand by pump – 105HP
- 1 no 3 phase Electric motor driven Jockey Pump – 15 kW
- 1 no Tulu Pump
- Fire Panel work
- All hydrant line, hose reel assembly, valves, switches, hose cabinet, air vessels, gauges etc for 11 storied building of ERPC Residential Complex.
- Battery system
- 1 no Fire Detection system Bosch make
- All fire detection sensors, alarms, hooter, manual button etc.
- 2 no potable electric motor driven water pump – 12.5 HP each
- Electric panel of water pump
- Other related electrical ancillary system of water pump.

Minor materials and consumables like nut, bolt, washer, grease etc would be included in the scope of vendor. However, cost for any extra work, material, spares, consumables out of the scope of this tender would be borne by ERPC with following two options – (A) as per the tax invoice & other necessary documents submitted by the vendor with the approval of the competent authority in ERPC and completion certification of Executive Engineer (TS&C) in the matter of that work, (B) material would be supplied by ERPC and installed by the vendor.

Vendor would check the healthiness of above-mentioned systems and maintain the same on monthly basis and would be available for breakdown call on 24X7 basis.

Any proposal or changes in the any plan of work need to be approved by Executive Engineer (TS&C). He will be the nodal officer for this work.

Scope of the Work:

A. Maintenance of the Wet Riser/ firefighting system -

Main objectives of the proper maintenance of the system are - -

(i) always keeping the entire system fully operational and functional.

(ii) In case full system cannot be kept functional for unavoidable reason, as much as possible, the installation shall be retained functional by isolating the defective section.

For maintaining these systems following should be taken care of: -

- To ensure availability of water in Underground tank and terrace tank all the time and to maintain the tanks in clean condition.
- To ensure that the piping system is free from leakage. Any portion found to be leaking is to be isolated, rectified and connected with healthy system in shortest possible time.
- To ensure that pump is in good running condition. Pump found to be defective is to be isolated by closing valves and attended immediately and put in to service in minimum time. All pump glands shall be maintained in efficient working condition and the packing renewed as required to maintain the efficiency. All working parts shall be kept clean and lightly oiled. Any necessary repairs shall be put in hand and carried out immediately.
- To ensure availability of power for electrical pumps, working of starters, switch gears and other electrical components should be checked and need to be kept functional.
- To ensure healthiness of diesel engine starting system, battery voltage, battery charger and availability of adequate diesel for engine operation.
- To check all landing valves of internal and external hydrants, isolating valves and replace the defective ones whenever necessary.
- To check automatic operation of entire system by opening landing valves at different locations.

Periodical Testing

Periodical testing and checking of the system are essential as per the table no-1 and atleast on monthly basis for entire system. Vendor may train the electrician or any other person assigned by the ERPC for basic monitoring of the system under the scope of this job on daily basis. However, vendor would attend the problem, call and any query on 24X7 basis.

Procedure

Operation and Maintenance instructions shall be made available in the pump room and fire control room.

Maintaining Diesel Engine is very important for the system operation since during fire, power supply is deliberately or un-deliberately switched off.

Annual Maintenance Contract (AMC) of engine is included in the scope of work.

Hydrant Mains / Ring Mains shall be tested with a pump delivering at its maximum pressure. A running test with two or more hose lines each 30m long operating shall be carried out.

If any outlet is found to be defective and replacement is not easily available the whole assembly should be removed and be replaced by blank off plate so that the system remains operational.

Hose reels shall be subjected to regular inspection to ensure that all valves are functional, outlet nozzle not choked. The same shall be subjected to operation to ensure that hose reel is in good condition and that the coupling joints are water tight. Flow should also be checked for the leakage of hose reel.

All hydrants shall be examined systematically to ensure that valves and spring catches are maintained in good condition. Spare washers shall be kept for hydrant valve seats.

Cut-off valves shall be thoroughly checked and overhauled, if required, to remove sludge and other foreign matter collected in the valve seating.

All isolating valves shall be checked for operation. The valves in closed position be opened and closed couple of times and the valves in open position be closed and opened couple of times so that when required, the valves perform their function.

All hose boxes/hose stations shall be inspected externally to ensure that the equipment installed therein is intact. Further, the hose boxes/hose stations shall be cleaned internally and externally. When the hose gets worn out at the tail end of the coupling(s), it is permissible to cut the end(s) of the hose. However, should the lengths of the hose after cutting(s) fall below 90 percent of its original, the hose shall be discarded. A hose register shall be kept showing Information such as date purchased, date brought into use, date cut (if reduced in length), is useful. Any hose becoming inefficient through use, neglect or from any other cause, shall be discarded. Fire protection hose shall not be used for purposes other than fire protection and drill. Hose pipes and their couplings shall be checked to ensure that there is no leakage during their use. The female coupling cam tooth mechanism be operated and lubricated for ensuring ease of operation.

It must be ensured that there are no obstructions in front of the hydrants impending accessibility.
Performance of pump like volume, pressure at level of the building would be checked as per the required standard.

Vendor will check all safety circuits, sensors, pump/engine gland packing, battery charger with power circuit. Servicing of all electric panel would be done by the vendor.

Table No -1.

S No	System Component	Activity	Duration
1	Water Tank	Check	Monthly
2	Pump	Test Flow	In the first quarter of AMC
		Lubrication	Monthly
		Gland packing check	Monthly
		Bearing grease cup/ alignment checking	Monthly
3	Engine	Lubrication	Monthly
		Battery Status	Monthly
		Servicing	Monthly
4	Motor	Starter Contact Checking/ alignment checking	Monthly
		Insulation Resistance	Half Yearly
5	Hydrant Mains/ Ring mains	Testing	Monthly
6	Piping	Pressure	Monthly
		Flushing	In the first quarter of AMC
7	Valves (Landing, Cutoff & Isolation)	Operation and oiling if necessary	Monthly
		Overhauling of all cut-off valves	Annually
8	Valves (Suction and delivery)	Examination	Half yearly
9	Electrical Panels and Control System	Operation	Monthly
		Connection and system components	Monthly
10	Hose boxes	External Inspection	Monthly
		Internal and External cleaning	Monthly
11	Hose Reel and Hose Pipes	Physical check	Monthly
		Operation check	Annually
		Replacement	Depending upon physical condition
12	Fire Brigade Connections/ Inlet	Physical check	Monthly
		Operation check	Annually
13	Instantaneous Coupling	Physical check	Monthly
		Lubrication	Once in Six months.

B. Maintenance of Fire alarm system

Scope: This section covers the inspection and maintenance schedule for Fire Alarm installation. Regular inspections and scheduled preventive maintenance are critical and should include all the components of the system.

Maintenance Schedule: -Monthly check and maintenance for fire detection system including all panels, sensors, hooters, manual switches etc need to be done by vendor.

Trigger devices or end of line switch on the circuit should be checked and operated to test the ability of the control and indicating equipment to receive a signal and to sound the alarm and operate other warning devices. It is preferable that each time a particular zone is tested, a different trigger device is used. An entry should be made in the log book quoting the trigger device that has been used to initiate the test. If the operation of the alarm sounder and/or the transmission of the alarm signal has been prevented by disconnection, a further test should be carried out to prove the final reinstatement to the sounders, and if permissible, the alarm transmission circuits.

Entries in the log book since the previous inspection and any necessary action taken should be checked. Batteries and their connections should be examined and tested to ensure that they are in good serviceable condition. Check the Batteries for their proper functioning. The alarm function of control and indicating equipment should be checked by the operation of a trigger device in each zone as described. The operation of alarm sounders and any link to a remote manned centre should be tested. All ancillary functions of the control panel should also be tested where practicable. All fault indicator and their circuits should be checked preferable by situation of fault conditions. Any defect should be recorded in the log book and reported to the Executive Engineer (TS&C), and action should be taken to correct it.

Detectors require periodic cleaning to remove dust or dirt that has accumulated in quarterly basis. For each detector, the cleaning, checking, operating and sensitivity adjustment should be attempted only as per manufacturer's instructions. These instructions should be as per the detailed method such as creating vacuum to remove loose dust and insects, and cleaning heavy greasy deposits, etc.

Each detector and sensors should be checked for correct operation using specified test equipment and method. Visual inspection should be made to confirm that all cable fittings and equipment are secure, undamaged, and adequately protected.

Care should be taken to minimize the disruption of the normal use of the building by alarm sounding during detector testing. If detectors are removed

for testing or servicing, replacement detectors should be provided. It shall be the responsibility of the contractor to get the installation inspected and passed by the local authorities concerned; as may be required by the local bylaws, payment of necessary inspection fee shall be paid by Department

C. Maintenance of Potable water pumping system-

Pumps and its related electrical circuits to be checked and maintained on monthly basis in respect of the potable water system in the ERPC Residential Complex following the standards as given above in the firefighting system.

D. Fire Drill

For making the users familiar with the system, Fire Drills shall be conducted for ERPC Residential Complex, in accordance with the fire safety plan, once every 3 months. All occupants of the building shall participate in the fire drill. A written record of such drill shall be kept on the premises. Local fire service and nodal officer-in-charge of various parts of the building may be involved in conducting fire drill. Operation of the system shall be demonstrated by the vendor so that all users are confident of the system and aware of their duties and responsibilities during fire.

E. Other conditions –

Safety Codes and Labour Regulations-

- All electrical works shall be carried out in accordance with the provisions of Indian Electricity Act, 2003 and Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010, NEC 2011 amended to date. They shall also conform to CPWD General Specifications for Electrical Works, Part-I (Internal)-2013, Part-II (External)- 1994, Part IV (Sub-station) 2013 and Part-VII (D G Sets)-2013 amended to date.
- In respect of all labour employed directly or indirectly on the work for the performance of the firefighting contractor's part of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provisions including "Safety, Health and Environment Handbook 2019" published by CPWD, B.I.S recommendations, Factory Act, Workman's Compensation Act, CPWD Code and instructions issued from time to time. Failure to provide such safety requirements would make the tenderer liable for penalty to be decided by Executive Engineer (TS &C). In addition, the Executive Engineer (TS &C)., shall be at liberty to decide and provide facilities as aforesaid and recover the cost incurred thereon from the contractor.
- The contractor shall provide necessary barriers, warning signals and other safety measures while laying pipelines, cables etc. or wherever necessary to avoid accident. He shall also indemnify ERPC against claims for compensation arising out of negligence in this respect.

Contractor shall be liable, in accordance with the Indian Law and Regulations, for any accident occurring due to any cause. ERPC shall not be responsible for any accident occurred or damage incurred or claims arising therefrom during the execution of work. The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

- Maintenance and testing shall be carried out in a planned and systematic manner and records to be kept. Only trained personnel shall be engaged in the work. All equipment shall incorporate suitable safety provisions to ensure safety of the operating personnel always.

Quality Of Materials and Workmanship

- The components of the installation shall be of such design so as to satisfactorily function under all conditions of operation.
- The entire work of manufacture/fabrication, assembly, installation, rectification, repair etc shall conform to sound engineering practice.
- All equipment and materials to be used in work shall be manufactured in factories of good repute having excellent track record of quality manufacturing, performance and proper after sales service.

Care of the Building

Care shall be taken by the contractor during execution of the work to avoid damage to the building. He shall be responsible for repairing all such damages and restoring the same to the original finish at his cost. He shall also remove all unwanted and waste materials arising out of the installation from the site of work from time to time.

Inspection and Testing

Inspection and testing of all work, installation, repair etc would be done by competent authority in ERPC or any other local authority like Officer-In-charge of state fire department, as per the government rules.

Penalty Clause-

In case, any poor workmanship and quality of material supplied by the vendor causes any damage to any property, person, body etc, vendor would be liable to pay compensation for the same as decided by appropriate authority in ERPC. However, vendor would be given a chance to represent them to establish their views on such incident and Member Secretary would be the final authority to decide upon it.

Right to Terminate the contract-

ERPC has the right to cancel the contract without assigning any reason at any point of time giving a notice period of 2 months to the vendor.

Jurisdiction-

The Courts of Kolkata shall alone have jurisdiction to decide any dispute arising out or in respect of this AMC.

Following document to be enclosed in the tender document-

To
The member Secretary,
ERPC, 14 Golf Club Road,
Tollygunge Kolkata- 700033,

Sub: NIT for Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex.

Ref Tenders No.: Tender/ERPC Estab./2023/2024/2

Sir,

I/we, the undersigned certify that I/we have carefully gone through and clearly understood the terms & conditions of the tender document, the work requirements and undertake to comply with them. I/we further undertake to execute and complete the works as per tender's terms and conditions and the bids submitted by us.

We have signed and sealed every page of the tender document as token of our acceptance of all the terms and conditions of the tender.

I/we also undertake to abide by all the labour laws/acts including minimum wages etc and to deposit due amounts to Provident Fund authorities and pay ESI contributions and applicable service tax etc. for the workers to be employed by me/us.

I/we will be responsible for death and injury, if any, caused to the workers while working and for the behaviour & conduct of the workers. I/we certify that no criminal/income tax/service tax /black listing case are pending against my/our firm/company.

All the statutory payments along with service tax will be paid by me/us to concerned authorities on due dates/time.

My/our offer shall be valid for a period of 60 days from the date of opening of the Tender.

Thanking you,

Yours faithfully,
Signature _____
For M/s._____
Date _____
Name _____
Address _____
Seal of Contractor/Tenderer

Financial bid to be submitted as given below-

S.No.	Description	Quantity	Unit	Rate in Rs	Total Amount in Rs.
1.	Annual Maintenance Contract (AMC) of Fire detection, firefighting, DG, other ancillary system of firefighting and potable water pumping system at ERPC Residential Complex at- 1/B Golf Club Road, Tollygunge Kolkata – 700033 As per the Tender No – Tender/ERPC Estab. /2023/2024/2	12 Months	Months		

Amount in words Rs. .....

Date: ..... Signature/Seal of the Contractor

-End-