

CORRIGENDUM-1 TO TENDER NO : CGI5647P21.

PLEASE IGNORE THE SCOPE OF WORK AS PUBLISHED IN TENDER CGI5647P21 UNDER ***SPECIAL CONDITIONS OF CONTRACT PART-IV*** .

The **SCOPE OF WORK** to be read as under:

SCOPE OF SERVICES FOR NON - COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (AMC) FOR FIRE ALARM & CONTROL SYSTEM AND CLEAN AGENT SYSTEM

LOCATION: PS-03, PS-01 & PS-02

1.0 GENERAL DESCRIPTION OF FIRE ALARM AND DETECTION SYSTEM

1.1 Location Details of Fire Alarm and Detection system:

Pump Stations	Make	Description
PS-01, Duliajan	Honeywell	Notifier model, Addressable (Microprocessor based) Master Control Panel common for Substation building & PS1 Admin Building
PS-02, Moran	Honeywell	Notifier model, Addressable (Microprocessor based) Master Control Panel common for substation building
PS-03, Jorhat	Honeywell	Notifier model, Addressable (Microprocessor based) Master Control Panel common for Control room buildings, CEG Building & Substation building.

1.2 Addressable Fire Alarm system installed at OIL's various Pump Stations basically comprises of the following components and accessories:-

S. No	Description of Item	Location	Make/Model no./Type
1	Fire Panel with 2 loop card, NCM Card, Modbus Card, AMP24 Power supply, operating panel	Control room Buildings at PS-01 & PS-03	NOTIFIER/NFS2-640
2	Analogue Addressable Photo electric smoke Detector	Control Room Building, Substation Building, CEG	NOTIFIER / FSP-851

		Building, Admin Building	
4	Weather Proof Manual Call Points	Control Room Building, Substation Building, CEG Building	NOTIFIER
5	Hooter & Hooter Acknowledgement Box	Control Room Building, Substation Building, CEG Building	NOTIFIER
6	Addressable Monitor module	Control Room Building, Substation Building, CEG Building	NOTIFIER / FMM-101
7	Addressable Control module	Control Room Building, Substation Building, CEG Building	NOTIFIER / FCM-1
8	Strobe cum sounder	Control Room Building, Substation Building, CEG Building	SYSTEM SENSOR/SY-HS

1.4 The Multi sensor detectors, Manual call points, fault isolator, Hooters, Hooter acknowledgement Box, Fire Exit sign Boards are located throughout the Control Room buildings & Substation buildings, and they are connected to the control panel from where all the signals are received and transmitted. The detectors, manual call points are connected by way of 2C x 1.5 sq.mm PVC insulated Copper cables laid inside the concealed conduits.

2.0 GENERAL DESCRIPTION OF CLEAN AGENT SYSTEM

2.1 Location Details of Clean Agent system:

Pump Stations	Make	Description
PS-03, Jorhat	Nohmi Bosai	NN-100 cylinders, 48 nos, Main + 48 nos standby cylinders along with 2 pilot cylinders along with accessories common to Console room, Rack room & UPS room. 1 no Gas release panel along with manual release switch, gas abort switch, Hooter & Strobe.

2.2 The clean agent (Inert Gas NN100) system at PS-03 consists of following components:

S.NO.	Item Details	PS-05 (Qty)
1	Integlex Multicrest S508 Gas Release Control panel	1
2	Horn	4
3	Horn with Strobes	5
4	N2 Storage Cylinder	96
5	N2 Pilot Cylinder	2
6	Actuating cylinders	6
7	Cylinder valve solenoid (24 DC, 1.2A)	6
8	Selector valve	3
9	Pressure Switch	3
10	Pressure Relief Damper	3
11	Manual Release Switch	5
12	Abort Switch	5
13	Miniature Contact module	4
14	Single Contact module	3
15	Dual Contact module	6
16	Monitored Output module	12

The integlex multi crest S508 is a microprocessor based addressable fire control/releasing panel, with a simple and compact design concept. The S508 supports up to 508 addressable devices in styles 4, 6 and 7 of the signal line circuit, making it suitable for a range of small to medium sized applications.

The system features intelligent anti tamper protection. The panel front operation is protected against tampering by intelligent methods such as software passwords and a hardware key switch.

The S508 panel is equipped with address setting functionality, which allows users to set the address numbers of addressable devices connected to the panel, thus eliminating the need for a dedicated address setting device.

The S508 panel also has the ability to control fire suppression system. This functionality consists of auto and manual mode. Under the auto mode either multiple fire detector signals or a manual release signal activates the devices in the suppression zone via user configuration. The manual mode accepts only the manual release signals to activates the devices in the suppression zone.

A. SCOPE OF WORK

- 1.0 The services envisaged from contractor through this AMC envisages scheduled and on demand visit of service maintenance personnel. Maintenance personnel shall carry all required diagnosis tools/instruments and carryout periodic recording of performance data of complete system for predictive maintenance requirement.
- 2.0 While on site, maintenance personnel shall carry out fault identification of the problem, rectification of fault, repair/ replacement of faulty parts etc., analyzing the cause of problem and suggesting appropriate measures, for avoiding recurrence of such problems in future. Once suggested measures are approved by the owner, implement the same. All such events shall be logged properly and records maintained in log register as back up to the computerized historical data.
- 3.0 Maintenance spares list along with price list should be submitted by successful Bidder after one week after award of contract. Validity of the price list should be valid for entire AMC period. In order to ensure the availability of spares, the contractor shall recommend the necessary spare parts and consumables with approved quantity. In addition to above, if any maintenance/ repair demand any unanticipated spares, contractor shall assist in all the possible way to Owner to arrange them at the earliest to reduce the downtime. The replaced item to be deposited to the respective Station - Incharge.
- 4.0 The AMC services provided by the contractor shall be through maintenance personnel supported by skilled technicians & helpers, etc under the supervision of senior maintenance personnel. All the deployed contractor personnel shall be always in identifiable prescribed uniform and necessary safety equipment.
- 5.0 The scope of AMC works includes the following but not limited to:
 - 5.1 Predictive, preventive, scheduled and major maintenance in every quarter which shall include the following but not limited to:
 - 5.1.1 Inspect, Maintenance & Troubleshooting of Master Fire Alarm Control Panels, Repeater Fire Alarm Panel & TSW Graphics System
 - 5.1.2 Inspect, maintenance & Troubleshooting of power supply modules of all panels.
 - 5.1.3 Inspect, maintenance & Troubleshooting of associated field devices like- Detectors, BGU, Control Relay Module, Hooter , etc.
 - 5.1.4 Cleaning of minimum 25% Detectors in every quarter. So 100% will be achieved within a year.
 - 5.1.5 Cleaning & Dressing of all Control Panels

- 5.1.6 Random functional testing of associated field devices.
 - 5.1.7 Inspect & keeping log record of all cylinder pressures of Clean Agent system
 - 5.1.8 Inspect, Maintenance & Troubleshooting of Master Control Panels, and its associated devices of Clean Agent system
 - 5.1.9 Inspect, maintenance & Troubleshooting of associated field devices like-Manual Gas Release, Gas Abort Switch, Hooter & Flashers.
 - 5.1.10 Random functional testing of associated field devices without gas releasing gas (disconnecting actuators from cylinders)
 - 5.1.11 Preparing and submitting the detail report in a specified format after each maintenance.
 - 5.1.12 Unplanned Breakdown Maintenance.
 - 5.1.13 Submit and assist owner in Procurement and supply of spares and the consumables for maintenance.
 - 5.1.14 Yearly assessment of spares/consumable requirement.
 - 5.1.15 The contractor shall carry out maintenance works in presence of OIL's representative
 - 5.1.16 **The contractor shall impart training to OIL's personnel regularly on their visit during schedule maintenance**
- 6.0 The contractor will coordinate with all the OEMs of the installed systems/ subsystems of complete Fire Alarm and clean agent system for resolving any technical issues and also to ensure uninterrupted supply of spares/ services etc.
- 7.0 Contractor will have to arrange specialized maintenance tools for the use by his Maintenance personnel. These tools shall be carried by the contractor personnel while reporting for maintenance.
- 8.0 Contractor shall perform the work in accordance with good and safe practices prevailing in the industry taking precautions necessary to protect the equipment, contractor's personnel, Owner and their employees and any third party at the site, and shall comply with all safety requirements.
- 9.0 The scope of maintenance of the contractor includes complete Fire alarm and detection system and Centralised Clean Agent Fire Extinguishing System for Fire Protection of various risks including Electrical, Instrumentation works and all other accessories/ auxiliaries for the pump stations as listed above and any other items not mentioned herein but as detailed out elsewhere in this tender document (enquiry) or as applicable to the complete system.
- 10.0 The contractor shall designate an AMC coordinator who shall be single point of contact for total services envisaged under this document. The details including contact information of the coordinator shall be informed to M/s OIL well in advance and time to time, if there is any change. The AMC coordinator shall report to designated representatives of M/s OIL for further directions.

B. SCHEDULE OF VISITS FOR MAINTENANCE

- 1.0 Contractor shall provide the detailed schedule for planned preventive and major maintenance along with his quote for AMC. The above schedule shall be prepared based on the recommendation of the OEM of all the items. Contractor shall provide such recommendation of the OEM in support of the offered schedule.
- 2.0 The contractor shall ensure that the adequate number of trained and skilled manpower is mobilized to site within 48 hours on receipt of intimation from M/s OIL.

C. VISITS FOR UNPLANNED BREAKDOWN MAINTENANCE (ON NEED CALL BASIS)

- 1.0 In addition to above scheduled visits, the contractor shall deploy adequate number of trained and skilled manpower as notified by M/s OIL on fixed charge to be paid per visit per Pump stations basis to carry out the breakdown maintenance. The contractor shall ensure that the above manpower is mobilized to site immediately within 48 hours upon receipt of such call from M/s OIL. Contractor shall ensure that adequately qualified and relevantly trained manpower having experience for all the items of the system shall be deployed on the site.
- 2.0 All works shall be carried out in day time only. However, if technical requirement exists for carrying out the job in night time, prior permission may be obtained.
- 3.0 All works will be carried out between Monday and Friday. To work on Saturdays, Sundays and holidays, prior confirmation may be obtained from concerned Station-In-charge.

D. MAINTENANCE PROCEDURE/ REQUIREMENTS

- 1.0 The maintenance service personnel will carry out preventive maintenance, as per OEM recommendation and also based on contractor's past experience, with required manpower & tools.
- 2.0 The standard preventive maintenance schedule for the above shall be submitted by the contractor and approved by M/s OIL before the commencement of the contract.
- 3.0 The contractor shall carry out unlimited emergency breakdown services as demanded by M/s OIL. There shall be no restriction on number of breakdown maintenance per month/year.
- 4.0 After all planned preventive/ major maintenance and breakdown maintenance of complete system, the service engineer of the contractor shall submit the detailed report on the repair carried out on the system/ equipments. The engineer shall give details of the repaired/ replaced equipments along with fault analysis for making the history sheets of faults/ problems of each equipment. M/s OIL would also like to know the reasons of failure and remedial actions taken by the contractor to avoid such problem in future.

E. PENALTY CLAUSE

Failure to maintain Fire Alarm system, Fire Detection system and Clean Agent system in smooth running condition along with carrying out the scheduled maintenance and breakdown maintenance **penalty will be imposed as per SL no. F and G.**

F. Loss or Damage of OIL'S EQUIPMENT/PROPERTY: Contractor shall assume the risk of and shall be solely responsible for, damage to and loss or destruction of materials and equipment or supplies furnished by OIL. In case there is a loss or damage to OIL's equipment/property for causes attributable to Contractor, the Contractor shall compensate OIL adequately. Contractor shall assume all responsibility and liability for cleaning up and removal of pollution or contamination which originates above the surface.

G. LIQUIDATED DAMAGES & PENALTY

1. The Contractor shall submit their Annual Maintenance Plan within 15 (Fifteen) days from the Date of issue of LOA (Letter of Award) of the Contract to OIL. If the Contractor fails to submit their Plan within 15 days from the issue of LOA, the Company reserves the right to cancel the Contract without any compensation whatsoever. The contractor shall mobilize their representative as per the plan agreed by OIL.
2. For Breakdown maintenance, contractor shall mobilize their technical personnel within 48 hrs of receiving formal information from OIL. In case of failure to do so, OIL may take alternate measures at risk and cost of the contractor.
3. For default in timely mobilization, the Contractor shall pay to the Company liquidated damages at the rate of ½% of the Annualized Contract value per week or part thereof of delay subject to maximum of 7.5% of the Contract value. Liquidated Damages will be reckoned from the date after expiry of the scheduled mobilization period till the date of actual completion of the mobilization as defined in 1.0 & 2.0 above.
- 4 In case of inordinate delays attributable to the Contractor at any stage of contract period the Company also reserves the right to discontinue the contract in which case no charge shall be payable to Contractor. Company's decision in such matters shall be final and binding on the Contractor.

ALL OTHER TERMS AND CONDITIONS SHALL REMAIN UNCHANGED IN THE ABOVE TENDER.
