

TERMS OF REFERENCE

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| Project Name | COMPLETE FIRE RENOVATION WORKS AT MALDIVE GAS THILAFUSHI FACILITY | |
| Reference | MGPL-I/PD/2021/25 | Date: 25 October 2021 |
| Bid Information | 02 nd November 2021, 10:00 | |
| Bid Submission Date | 09 th November 2021 | Time: 10:00 |

1 - BACKGROUND

Maldives Gas Private Limited, a subsidiary of State Trading Organization (STO), is in the natural gas distribution market since 1999, catering to a customer base of over 40,000. Over the years we have emerged as the market leader in providing Liquefied Petroleum Gas throughout the Maldives. In addition to LPG, we also provide a wide range of related appliances and industrial gases such as Acetylene, Argon, Nitrogen, and Helium. We are also the sole producer and supplier of medical oxygen catering to more than 95% of hospitals throughout the country.

2 - OBJECTIVE

Bidder shall be responsible for renovating the existing fire handling infrastructure as given in the scope below.

3 - SCOPE OF WORK

1. Recommend to replace all existing 8" GI pipelines with SCH40 HDGI pipeline.
 - a. Pipeline needs to be in and out hot-dip galvanized SCH40 heavy class(C) pipe
 - b. All the fittings need to be UL FM approved groove fittings with SS304 bolts
 - c. Cannot carry any heat-intensive work on site
 - d. Need to install water flow sensors
2. Install deluge system to activate LPG's cooling system as two zones
 - a. Divide the existing system into two zones
 - b. Each zone has to be independent and can do both automatic and manual activation.
 - c. The deluge valves have to be of SS316 grade material
 - d. All the components have to be UL or EN standard components
3. Recommend to replace the outdated standpipe landing valves in the pressurized hydrant system with wet barrel pillar hydrants with HDPE underground piping network at the whole site.
 - a. Hydrant pipeline has to be HDPE PN16 PE100 pipe
 - b. -All the hydrants have to be BS or EN standard wet barrel pillar hydrants with duck foot bend

- c. Below each hydrant, there has to be a service gate valve with a ductile iron service pit
 - d. Main pipeline has to be a 6" in diameter
 - e. Each pillar hydrant with 1x 30m fire hose and 1x diffuser branch
 - f. All the firehose cabinets and pillar hydrant should be on a concrete base
4. Install water and foam monitor at the front of the loading/unloading jetty area.
Recommend to install EX-Proof UV-IR flame detector system at the LPG storage tank area/filling station.
 - a. Tower monitor need to be of SS316 material
 - b. 2000LPM tower monitor required with 2000L foam tank with connection
 - c. Tower monitor need to be on top of at least a 4m height stand
 - d. Tower monitor should be able to discharge water and foam
5. Recommend to install EX-Proof UV-IR flame detector system at the LPG storage tank area/filling station.
 - a. Flame detector needs to be UL listed EX-Proof UV-IR flame detector
 - b. Detector control panel needs to be UL listed extinguisher control panel
 - c. Control panel should be able to automatically and manually activate tank cooling zone 1 and 2 independently
 - d. All the connection cables for the system needs to be fire retardant cable and 2.5 armored cable
 - e. This system needs to be both automatic and manually operational
6. Manual release station and abort switches need to be IP65 or higher products
Recommend to replace the existing fire pump system, which is currently not functioning, with a standard system.
 - a. System needs to be 750GPM at 10 bar pressure
 - b. 1 electric pump 750GPM at 10 bar pressure, one jockey pump 200LPM at 10 bar pressure, and one diesel engine pump 750GPM at 10 bar pressure
 - c. System needs to be NFPA standard
 - d. Electric main pump must be fixed with EFD soft starter
 - e. Fire pump system needs a 4" overpressure relief valve
 - f. Fire pump system needs two suction lines for source water storage or direct sea
 - g. System needs to be functional both automatically and manually with a deluge system, tower monitor system, and pillar hydrants
 - h. Need a fire alarm for when the fire pump system goes off
7. Recommend to install manual fire evacuation systems at the whole site.

- a. Need standard evacuation alarm system which covers the entire site
- b. System components need to be IP65 or higher products
- c. All the connection cables for the system needs to be fire retardant cable and 2.5 armored cable
- d. The system components need to be UL listed or EN standard

3. ELIGIBILITY

- a) The party must have a minimum 5-7 years of experience in fire-related activities and its components.
- b) One engineer must possess a minimum 5 years of experience in the field of fire redesign and fire renovation work, as well as its associated considerations.
- c) The firm must have minimum 5 related projects completed
- d) The party must be capable of providing extensive training and awareness initiatives for the site's employees for one month.

4 - PROPOSAL

Supplier should submit quotations together with the following documents.

- Copy of Company Registration
- GST registration.
- GST clearance certificate from MIRA for last three months
- Engineer CV for clarifying 3(b).
- Proposed work schedule of the project
- Related project completion reference letters from previous clients for. Marks will be given up to five letters.
- Letter for conducting one-month training & awareness

5 - EVALUATION CRITERIA

Proposal will be evaluated following the areas given below:

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| PRICE | 60% |
| - Quoted price | |
| DELIVERY | 10% |
| - Project duration | |
| Related Experience | 30% |
| - Referral letters (5 letters) | |
| TOTAL | 100% |

6 - CLIENT'S RIGHT TO ACCEPT AND REJECT ANY PROPOSALS

The Client reserves the right to accept or reject any proposal, and to cancel the tendering

process and reject all proposals, at any time prior supplier to the award of contract, without thereby incurring any liability to the affected Supplier or Suppliers or any obligation to inform the affected Supplier or Suppliers of the grounds for the Client's action.

7 - PERIOD OF VALIDITY

Proposals shall remain valid for a period of **45 days** after the specified deadline for proposal submission, or any other date that is the subject of a Proposal amendment.

In exceptional circumstances, the client may request that the supplier extend the period of validity for a specified additional period. The request and the supplier's responses shall be made in writing, fax, or email. A supplier agreeing to the request will not be required or permitted to otherwise modify the Proposal.

Contract Awarding: within 15 days following the Letter of the Acceptance Date.