



MALDIVES INDUSTRIAL FISHERIES COMPANY LTD (MIFCO)

Terms of Reference:

PROCUREMENT OF 1MW GENERATOR

BID REFERENCE NO: 134-PRO/I/2023/13



BID REFERENCE	134-PRO/I/2023/13
REQUEST FOR PROPOSALS (RFP)	15th February 2023
BID OPENING MEETING REGISTRATION	20 th February 2023 16:00 hours, Male' Time Bid submission must only be sent to: bid@mifco.mv
LAST DATE AND TIME FOR RECEIPT OF BIDS	21 st February 2023 13:00 hours, Male' Time Bid submission must only be sent to: contract@mifco.mv
TIME AND DATE OF OPENING OF BIDS	21st February 2023 14:00 hours, Male' Time
PLACE OF OPENING OF BIDS	Via Microsoft Teams Head Office, Maldives Industrial Company Ltd. Hilaalee Magu, Maafannu, Male Maldives.
ADDRESS OF COMMUNICATION	Procurement Department, Maldives Industrial Fisheries Company, Hilaalee Magu, Maafannu, Male, Maldives



1. Introduction:

Maldives Industrial Fisheries Company Ltd (MIFCO), a subsidiary of State Trading Organization Plc. is seeking to purchase a set of diesel-powered generator for one of its operating centers, Kooddoo Fisheries Complex.

2. Background of the Company

Maldives Industrial Fisheries Company Limited (MIFCO) was established on 1st November 1993 as a 100% government-owned company under the Companies Act of Maldives, Mifco is the leading company to providing vast number of services for the fisheries sector to ensure that livelihood of the sector. Mifco is also a subsidiary of State Trading Organization which has board members appointed from the parent company. Currently more than 1,700 are employed in the company.

3. Scope

Scope of the procurement work includes the following:

1. Maldives Industrial Fisheries Company now invites sealed bids from interested and eligible bidders for:
Supply of 3 Phase, 50Hz, 415V, 1250 KVA Diesel Generator set as per technical details given in section 12 of this bid document.

Type of Generator Set	Basic Power	Required for	Goods Delivery Location	Qty
Diesel powered Heat Exchanger cooled	1250 kVA, 415/220V, 50Hz	Kooddoo Fisheries Complex	Mifco Head Office Male' City	One

4. Deliverables

- 4.1 Quotation or proposal with proposed Price, Delivery Duration and Payment terms
- 4.2 Item should be available locally for immediate delivery.
- 4.3 If it is company or Sole Proprietor, a copy of the business registry.
- 4.4 Company or Business profile (including shareholders)
- 4.5 A copy of the company's annual fee payment (Only for Local Suppliers)
- 4.6 MIRA – Tax Clearance with 3 months validity (Only for Local Suppliers)
- 4.7 If an individual, a copy of both sides of the unexpired ID card

5. Marking Criteria

- 5.1 Proposed Price 80%
- 5.2 Payment Terms 20%

Marks shall be distributed on Pro-rata basis. The highest scorer would get maximum from each category.

Criteria	%
Proposed Price (80 marks)	80
<ul style="list-style-type: none"> ▪ Lowest price offered would achieve the highest. Higher Quotation will receive lesser marks in proportion to the lowest quoted. 	
Payment Terms (20 marks)	20
<ul style="list-style-type: none"> ▪ Preferred terms - If 30 Days credit – Full Marks will be awarded. ▪ Any other payment options will be awarded on pro-rata basis. 	
Total Points	100 Points

Note: Item should be available locally for immediate delivery.

6. Quotation Validity

The quotation shall remain valid for 30 (Thirty) days after the deadline for date of quotation submission.

7. Additional Information:

- 7.1 Points will be awarded based on the information contained in the submitted tender document. If the information is incomplete, you will get fewer points. The information submitted must be accurate. If the information submitted is proved to be incorrect, the bid will be rejected.
- 7.2 Due to urgency of the requirement, MIFCO reserves the right to award the bid with 1 (one) proposal.
- 7.3 Bids will be opened or accepted by the Bid Evaluation Committee at the specified time.
- 7.4 It is the responsibility of the Bidder to prepare the Bid after obtaining complete information.
- 7.5 The estimate shall be priced in United States Dollar (USD). The total price should be clearly indicated in mathematical numbers and letters.
- 7.6 A maximum of 1 (one) bid may be submitted by each bidder.
- 7.7 If the Contractor wishes to make any changes to the information sheet before the expiry of the bidding period, he may do so after extending the bidding period to a reasonable period and after notifying the bidders.

- 7.8 Bids should ONLY be submitted by email to contract@mifco.mv on the specified date.
- 7.9 Bids submitted after the closing date & time will not be accepted.
- 7.10 The Contractor may extend the period for submission of bids at their convenience.
- 7.11 Bids should be submitted to the Purchaser at the bid opening meeting on the specified date.
- 7.12 If the Purchaser finds that the price of the bids submitted by the bidders is too high compared to the specified work, the bids may be canceled and reopened for estimate.
- 7.13 The successful bidder will be notified by a letter and will be entitled to sign a works contract.
- 7.14 The successful bidder shall not subcontract the work to another party.

8. Invitation to Bid and Clarification of Information:

- 8.1 Information sheet along with other required information is attached to the public announcement.
- 8.2 Suppliers are to e-mail their queries if any to the mentioned address below, before 12:00 hrs on 20th February 2023. Queries after the set time will not be responded. All responses will be sent to all vendors who request any query.
- 8.3 Replies to the queries will be sent to registered parties before 16:00 hrs on 20th February 2023.

9. Optional Documents:

- 9.1 Power of Attorney (Document of authority to sign in the name of the company).
- 9.2 Experience documents or purchase orders of similar nature.
- 9.3 Supplier may be required to submit documents so that purchaser can verify the capacity of the supplier.

10. Date of submission of bids:

The deadline for submission of bids is **21st February 2023 at 13:00Hrs**. Bids submitted after the deadline and incomplete bids will not be accepted. Bids should be submitted to contract@mifco.mv email.

11. Email Address

contract@mifco.mv

12. Technical Specifications

TECHNICAL SPECIFICATIONS

(Specification are not limited to what is specified)

1. Specification of Generator

1.1. Cummins Diesel Generator Set KTA 50 Series with standard equipment and accessories.

a. Generator set Specification.

Prime Power	1250 kVA
Output Voltage & Frequency	415 V, 50 Hz
Power Factor	0.8 (lag)
No. of Phases	3 Phase

b. Engine Specification

Make	Cummins
Model	KTA 50 G3
No. of Cylinders	16 'Vee'
Aspiration	Turbocharged – After cooled
Bore& Stroke	159 mm x 159 mm
Displacement	50.3 ltrs.
Output – Prime	1470 bhp (1097 kWe)
Method of Cooling	Liquid to Liquid shell & Tube Heat Exchanger type (Water/sea water)
Medium of Cooling	Sea water
Governor / Class	Electronics / A1
Coolant Capacity (engine + Heat Exchanger)	> 440 Ltrs
Sea water flow across Heat Exchanger	Should be adequate to cool the engine at generator full load.
Exhaust Temperature	529 Degree Celcius

c. Alternator Specifications

Make:	Stamford
Frame size / Model No.	HCK6Z
Voltage regulation	±0.5%
Insulation	Class H
Standard Enclosure	IP 23
Winding Pitch	2 / 3 Pitch
Stator winding	Double layer lap
Rotor	Dynamically balanced
Wave form Distortion	No load <1.8%, no distortion
Telephone interference factor	Better than 50
Total harmonic Factor	Better than 2%

d. Conformance Standards:

IS/IEC 60034-1, IS 1460, ISO 8528, ISO 3046, IS 13018, ISO 9001

e. Accessories:

Silencer suitably optimized to reduce noise Sturdy base rail

- 4 Nos. 12V dry uncharged batteries with connecting leads and terminals. Heavy duty air cleaner.

2) Control Panel

a. Control Instruments

1. The generator governor controller, voltage regulator, sensors and switches should be fixed, equivalent to connect Deep Sea module.
2. Standard generator control system to provide voltage regulation, engine protection, alternator protection, operator interface and isochronous governing.
3. Automatic engine battery charger of charging current 5A/24VDC for offline charging, and additional 10A/24VDC charger for online charging with charging amperemeter. Relays and contactors shall be used with proper ampererating.

b. Panel cubicle

1. Existing cubicle of generator No 1 will be used as the panel board cubicle for this generator.
2. Components such as isolators, bus bars relays, switches, earth fault protectors and instruments to be from reputable manufactures and shall meet relevant international standards.
3. Main Breaker in the panel board is to be replaced by a new ACB draw out type 2500 Amps.
4. Synchronize panel to be fixed with Deep Sea module Model: DSE 8610 MKII and other protective modules including earth fault protection, for load sharing and controls.
5. Copper Bus bar suitably braced to cater for 4.8 MW electric power. 2 number busbars for each phase of sizes 1200 mm long x 120mm wide x 10 mm thick to be added to main bus bar for this 1250 kVA gen set.
6. Adequate ventilation is to be provided to the panel board.

3) Exhaust Piping

1. Size of the piping to be standard for the generator set with muffler.
2. Exhaust to vent out of the powerhouse over the roof. The muffler should be installed outside the powerhouse building.
3. Fixing structure of the exhaust to be permanent and sturdy, duly painted and protected against harsh weather.
4. Exhaust and silencer piping inside the powerhouse should be properly insulated with rock wool and wound with net and then followed by cladding all around with SUS 304 sheets of thickness 1.5 mm.

4) Heat Exchanger

1. Shell and Tube Heat exchanger to use running sea water as medium of cooling.
2. Size, brand, model, designed water circulation rate and material of construction are to be given by the bidder

5) Cables and Cable tray

1. Main cables and cable tray should be fixed 5000 mm above the ground level; to give space inside powerhouse for the movements for repair and maintenance works of existing generators.

6) Fuel line

1. Fuel line is to be directly laid from fuel day-tank which installed outside the powerhouse and fuel return line is to be connected to the same tank.