



# **INFORMATION SHEET FOR PROCUREMENT AND ASSEMBLING OF GENERATOR SYNCHRONIZING PANEL BOARD**

**Reference No.: FNK-I/IUL/2020/158**

Issued on 17<sup>th</sup> September 2020

Issued by:

Fenaka Corporation Limited

Male', Republic of Maldives

## Section I: Instruction to Bidders

<b>A. General</b>	
<b>1. Scope of Bid</b>	<p>1.1 Fenaka Corporation Limited requests quotations for supply and assembling of generator synchronizing panel board in accordance to <i>Section III, Technical Specifications</i></p> <p>1.2 It is in Fenaka Corporation Limited's discretion to cancel the bid invitation mentioned in 1.1 at any time.</p>
<b>2. Eligible Participants</b>	<p>2.1 Local companies registered in Maldives are eligible to participate in the tender</p> <p>2.2 Foreign companies are eligible to participate in the tender only if the total bid value is above 2,500,000 Maldivian Rufiyaa.</p>
<b>B. Preparation of the Bid</b>	
<b>3. Bid Prices</b>	<p>3.1 The unit price of each item and the total price shall be clearly indicated in the quotation</p> <p>3.2 All items shall be quoted in the bid (please refer to <i>Section III, Technical Specifications</i> for the details of required items)</p> <p>3.3 Quotation shall separately indicate the additional charges such as freight charges, insurance, etc.</p> <p>3.4 The bidder shall submit quotation on CIF basis to Male' port</p>
<b>4. Currency</b>	4.1 The bidder shall quote entirely in Maldivian Rufiyaa
<b>5. Alternative Bids</b>	5.1 Bidders can submit a maximum of two (2) options
<b>6. Validity of Bids</b>	6.1 Quotation shall remain valid for minimum sixty (60) days from the date of bid opening

<b>7. Bid Security</b>	<p>7.1 All bids should be accompanied with a bid security of USD 5,000 (Five Thousand US Dollars) or its equivalent in Maldivian Rufiyaa</p> <p>7.2 The bid security should be:</p> <ul style="list-style-type: none"> <li>- Original bank guarantee letter (or)</li> <li>- Bank guaranteed and stamped check (or)</li> <li>- An insurance policy from Maldives Monetary Authority (MMA) registered insurance company</li> </ul> <p>7.3 Any bid not accompanied by a Bid Security shall be rejected during bid opening</p> <p>7.4 The bid security must be valid for a minimum of twenty (20) additional days beyond the validity of quotation</p>
<b>8. Technical Compliance</b>	<p>8.1 All relevant information including the brand shall be given to enable technical evaluation of quoted items</p> <p>8.2 If the manufacturer or assembler is not the same as the bidder, a document indicating that manufacturer or assembler is willing to sell the generator set to the bidder is required</p> <p>8.3 Technical compliance letter will be required to enable technical evaluation</p> <p>8.4 If the goods do not comply with the requirements mentioned in <i>Section III, Technical Specifications</i>, the bid will be rejected during evaluation.</p>
<b>9. Documents Comprising the Bid</b>	<p>9.1 Quotation (inclusive of the delivery period and payment terms)</p> <p>9.2 Specifications of the offered product</p> <p>9.3 Single-line diagram of engine panel system</p> <p>9.4 Details of the company</p> <ul style="list-style-type: none"> <li>- Company profile</li> <li>- Company registration certificate</li> </ul>

		<ul style="list-style-type: none"> <li>- GST registration certificate (for local bidders only)</li> <li>- Tax clearance report (6 months validity is advised)</li> <li>- Contact details (name, designation, mobile number and e-mail address)</li> </ul>
	9.5	<p>Experience letters, if available</p> <ul style="list-style-type: none"> <li>- Letters within past five (5) years</li> <li>- Relevant experience letters</li> <li>- Letters with project name and value</li> </ul>
	9.6	One (1) compact disc with original bid document scanned and written
	9.7	Bids lacking the documents above are subjected to be rejected during the bid opening
<b>10. Format of Bid</b>	10.1	The Bidder shall submit two (2) sets of the bid document (1 original and 1 copy), enclosed separately in two envelopes and sealed with company stamp
	10.2	All pages of the bid document shall be stamped and bound properly (excluding the bid security)
<b>C. Bid Submission</b>		
<b>11. Sealing and Marking Bid Document</b>	11.1	The bid document shall be sealed properly in an envelope clearly marked 'ORIGINAL' or 'COPY', with the name of the company and the tender reference number (FNK-I/IUL/2020/158)
<b>12. Bid Opening</b>	12.1	The bids will be opened on 29 <sup>th</sup> September 2020, 10:00am in the presence of bidders
	12.2	Bids will be opened at: Fenaka Corporation Limited Hilaalee Magu, K. Male', Republic of Maldives
	12.3	Bids received electronically will not be accepted
<b>13. Bid Rejection</b>	13.1	Bidders who arrive after bid submission deadline shall not be able to participate in the bid

	13.2	Bidders who do not register for the tender are unable to participate in the bid opening
	13.3	Bids lacking the documents mentioned in <i>9. Documents Comprising the Bid</i> (except <i>9.5 Experience letters</i> ) and that do not comply with <i>10. Format of Bid</i> are subjected to be rejected
<b>D. Awarding of Contract</b>		
<b>14. Payment Terms</b>	14.1	An advance payment will not be released for this project
<b>15. Virtual Factory Acceptance Testing</b>	15.1	The panel shall be fully tested at the manufacturer workshop in the presence of Client's appointees via video conferencing.
	15.2	The testing shall be conducted at internationally accepted testing standards
	15.3	The panel shall undergo protection testing and operation testing.
	15.4	The panel shall be checked for dimension, the supplier shall provide that dimensions of the panel during the virtual factory acceptance testing.

## Section II: Evaluation Criteria

**Proposal Cost:** 70 points for the lowest price

- $(\text{Lowest price} / \text{proposed price}) \times 70$

**Delivery:** 20 points for the lowest delivery period

- $(\text{Lowest delivery period} / \text{proposed delivery period}) \times 20$
- If the delivery period indicates 'ex-stock', it shall be taken same as the party offering the longest delivery period.

**Credit Period:** 10 points for the maximum credit period

- $(\text{Proposed credit period} / \text{longest credit period}) \times 10$
- No points will be given for payment terms if the supplier requests for Letter of Credit (LC)

### Section III: Technical Specifications

## Supply and Site Assemble of Generator Synchronizing Panel Board

## Technical Specification of Panel Board

Free Standing Synchronizing Panel complete with the following

A) 4 Nos x Generator cubicles (size: minimum 2100 x 660 x 900 mm) powder coated, anti-corrosive enclosure with cable bottom entry type. Each complete with;

- 1 Nos x 2500A, 3Pole, ACB, motorized with UVT 220Vac Coil
- Tin coated copper bus bar, 8000A
- Synchronizing and load share module; DEEP SEA 8810
- Analog Amp meter, volt meter, frequency meter, power factor meter, kW meter and kWh meter
- Over-current and Earth fault protection
- RPM, Run hour, Lub oil pressure, water temperature readings
- ACB ON/OFF indicator lights and generator incoming lights
- Battery Charger, 24V, 5A
- Protection and measuring CTs, set of Relays, fuses and terminations.
- Internal wiring, termination and labelling

B) 1 Nos x Feeder Cubicle (size: minimum 2100 x 650 x 900 mm) powder coated anti-corrosive enclosure with cable bottom entry type, complete with:

- 4 Nos x 600A, 3Pole, MCCB with shunt trip-coil, volt: 220V
- 4 Nos x 300A, 3Pole, MCCB with shunt trip-coil, volt: 220V
- 2 Nos x 400A, 3Pole, MCCB with shunt trip-coil, volt: 220V
- 10 Nos x Earth leakage relays
- 10 Nos x Amp meter with selector switch
- 10 Nos x 4Pole Terminal Block
- 1 Lot protection and measuring CTs
- 1 Lot flexible power cables with terminations
- 1 Lot Control cable, Internal wiring, termination and labelling
- All MCCBs make: Schneider, ABB , Terasaki or equivalent

C) 2 Nos, Transformer Feeder Cubicle (size: minimum 2100 x 660 x 900 mm) powder coated anti-corrosive enclosure with cable bottom entry, complete with:

- ACB, 3Pole, 4000A, motorized. Make: Schneider or Equivalent
- Bus bar rating, 8000A, Copper, tin coated
- Breaker ON/OFF control with push button, with indicating lights
- Analog Amp meter for R, Y, B and digital multifunction power meter
- Over current protection relay and earth fault protection relay
- 1 Lot flexible power cable with termination
- 1 lot control cable with internal wiring, termination and labelling



1. The panel dimensions shall meet the given minimum dimensions for each cubicle (2100 X 660 X 900 mm) to allow same panel to be upgraded to larger size generator in future.
2. Bus bar shall be arranged to fit the full length of the panel board including the feeder panel.
3. Panel shall be designed in such a way that it could be transported to the islands in separate cubicles as there won't be any lifting mechanism if the whole panel set is sent to the island as a single object.
4. The generator controller DSE8610 MK11 cannot be replaced with any other model. The supplier shall provide the manufacturer's authorisation to confirm the origin of the controller.
5. The panel shall be manufactured using high quality electro galvanized MS plates, treated and powder coated upto 80 micron or higher.
6. The thickness of the metal sheet shall be at least 1.2 mm, and other plates shall be 1 mm. The thickness of the main frame shall not be less than 1.5 mm.
7. Bus bar to breaker connections shall use tin plated copper bus bars.
8. Main bus bar shall be tin plated, and rated 8000 amps, and copper content shall meet the relevant IEC and BS standards.
9. The panel internal wiring shall be wired using 2.5sqmm thick flexible copper cables. All the wires shall be properly labelled and terminated with suitable terminal.
10. The relays, battery chargers, and meters shall be from reputable brands and the drawings and technical specification must be provided with the bid documents.
11. Free technical support shall be provided during installation, and training for engineers must be given to install the panels.
12. A single line diagram must be provided with the technical specification of the materials used in the panels.
13. Feeder panel breakers must be labelled on both ends.
14. Stainless Steel Bolts and nuts must be provided to connect the outgoing feeder cables.
15. The cubicles must be arranged as the drawing given.
16. The ACB'S must be draw out type.
17. One computer system must be provided with all necessary items to install and monitor engine by using DSE module 8810.
18. A battery charger must be installed for every engine, inside the engine control panel.
19. The panel rate shall include commissioning charges.