



INFORMATION SHEET FOR PROCUREMENT OF GENERATOR SYNCHRONIZING PANEL BOARD

Reference No.: FNK-I/IUL/2021/210

Issued on: 03rd May 2021

Issued by:

Fenaka Corporation Limited

Male', Republic of Maldives

Section I: Instruction to Bidders

A. General	
1. Scope of Bid	1.1 Fenaka Corporation Limited requests quotations for Generator Synchronizing Panel Board in accordance with <i>Section III, Technical Specifications</i>
2. Eligible Participants	2.1 Local companies registered in Maldives are eligible to participate in the tender 2.2 Foreign companies are eligible to participate in the tender only if the total bid value is above 2,500,000 Maldivian Rufiyaa.
B. Preparation of the Bid	
3. Bid Prices	3.1 The unit price of each item and the total price shall be clearly indicated in the quotation 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) 3.3 Quotation shall separately indicate the additional charges such as freight charges, insurance, etc. 3.4 The bidder shall submit quotation on CIF basis to Male' port
4. Currency	4.1 The bidder shall quote entirely in Maldivian Rufiyaa
5. Alternative Bids	5.1 Bidders can submit a maximum of two (2) options
6. Validity of Bids	6.1 Quotation shall remain valid for minimum sixty (60) days from the date of bid opening
7. Bid Security	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 7.2 The bid security should be:

	<ul style="list-style-type: none"> - Original bank guarantee letter (or) - Bank guaranteed and stamped check (or) - An insurance policy from Maldives Monetary Authority (MMA) registered insurance company <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>
8. Technical Compliance	<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>
9. Documents Comprising the Bid	<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</p> <p>9.4 Details of the company</p> <ul style="list-style-type: none"> - Company profile/background - Company registration certificate - GST registration certificate (for local bidders only) - TAX clearance report (6 months validity)

	<ul style="list-style-type: none"> - Contact details (name, designation, mobile number and e-mail address) <p>9.5 Experience letters, if available</p> <ul style="list-style-type: none"> - Letters within past five (5) years - Relevant experience letters - Letters with project name and value <p>9.6 One (1) compact disc with original bid document scanned and written</p> <p>9.7 Bids lacking the documents above are subjected to be rejected during the bid opening</p>
10. Format of Bid	<p>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</p> <p>10.2 All pages of the bid document shall be stamped and bound properly (excluding the bid security)</p>
C. Bid Submission	
11. Sealing and Marking Bid Document	<p>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/2021/210)</p>
12. Bid Opening	<p>12.1 The bids will be opened on 20th May 2021, 1200hrs in the presence of bidders</p> <p>12.2 Bids will be opened at: Fenaka Corporation Limited Hilaalee Magu, K. Male', Republic of Maldives</p> <p>12.3 Bids received electronically will not be accepted</p>
13. Bid Rejection	<p>13.1 Bidders that arrive after bid submission deadline shall not be able to participate in the bid</p>

	<p>13.2 Bidders that do not register for the tender are unable to participate in the bid opening</p> <p>13.3 Bids lacking the documents mentioned in 9. <i>Documents Comprising the Bid</i> (except 9.5 <i>Experience letters</i>) and that do not comply with 10. <i>Format of Bid</i> are subjected to be rejected</p>
D. Awarding of Contract	
14. Payment Terms	14.1 An advance payment will not be released for this project
15. Factory Acceptance Testing	<p>15.1 Supplied items shall be fully tested at the manufacturer workshop in the presence of Client's appointees via video conferencing</p> <p>15.2 The testing shall be conducted at internationally accepted testing standards</p> <p>15.3 The items shall undergo protection testing and operation testing</p> <p>15.4 The items shall be checked for dimension and the supplier shall provide the dimensions of the panel during the virtual factory acceptance testing.</p> <p>15.5 Video recorded while operating the units will not be accepted as virtual factory acceptance testing.</p>

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

- $(\text{Proposed credit period} / \text{longest credit period}) \times 10$

Section III: Technical Specifications

Supply of Generator Synchronizing Panel Board

Technical Specification

Free Standing Synchronizing Panel with Tin/Zinc Coated Busbar rated at 8000 A complete with the following.

A1) 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 (adjustable 40% to 100%), 3Pole, ACB, motorized with UVT 220Vac Coil, Brand:Merlin Gerin/Schenider/ABB or equivalent)
- 1 Nos x Synchronizing and load share module; DEEP SEA 8810 (or later version)
- 3 Nos x Amp Meter (0-3000A), Analog (Rudold or equivalent)
- 1 Nos x Voltmeter c/w selector switch, Analog (Rudold or equivalent)
- 1 Nos x Frequency Meter (0-55Hz), Analog (Rudold or equivalent)
- 1 Nos x kW Meter (Rudold or equivalent)
- 1 Nos x kWh Meter (Rudold or equivalent)
- 1 Nos x Over current Relay
- 1 Nos x Over Earth Falut Relay
- 1 Nos x Reverse Power Relay
- 1 Nos x Power Meter PM1000
- 1 Lot x Protection and metering CTs, sets of relays, fuses. 3-CT 2000/5A CL5P5 for metering and 4-CT 2000/5A CL5P5 for protection
- 1 Lot x RPM meter, Run hour meter, DC Voltmeter and DC Ammeter
- 1 set x ACB ON/OFF indicator lights and generator incoming lights
- 1 No x Battery Charger, 24V, 5A
- 1 Lot x Flexible cable Internal wiring, to wire relays, timers and control circuitry, c/w labelling.
- 1 Lot x Fuel Deference meter (Kral or equivalent)

B) 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, TPN, 5000A, motorized. Make: Schneider, ABB or Terasaki or equivalent
- Busbar rating, 8000A, Copper, tin/zinc coated
- Breaker ON/OFF control with push button, with indicating lights
- Amp meter (0-5000A) for R, Y, B
- 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

- C) 1 Nos x Feeder Cubicle (size: minimum 2100 x 660 x 900 mm) powder coated anti-corrosive enclosure with cable bottom entry type, complete with:
- 12 Nos x 300A, TPN, MCCB with shunt trip-coil, volt: 220V
 - 12 Nos x Earth leakage relays
 - 12 Nos x Ammeter (0 - 800A) with selector switch
 - 12 Nos x Digital Power Analyzer (V/A/kW/kWh/F)
 - 12 Nos x 4Pole Terminal Block
 - 1 Lot x Protection and measuring CTs (Z-CT and 3-CT 400/5A to CL5P5)
 - 1 Lot x Flexible power cable with termination and labelling
 - 1 Lot x Control Cable, internal wiring
 - Note: All MCCBs make: Schneider, ABB, Terasaki or equivalent
- D) 1 Nos x BESS Cubicle (size: minimum 2100 x 660 x 900 mm) powder coated anti-corrosive enclosure with cable bottom entry type, complete with:
- 1 Nos x 600A, TPN, MCCB, motorized with UVT 220Vac Coil, Brand : Merlin Gerin/Schenider/ABB or equivalent)
 - 3 Nos x Amp Meter (0-3000A), Analog (Rudold or equivalent)
 - 1 Nos x Voltmeter c/w selector switch, Analog (Rudold or equivalent)
 - 1 Nos x Frequency Meter (0-55Hz), Analog (Rudold or equivalent)
 - 1 Nos x kW Meter (Rudold or equivalent)
 - 1 Nos x kWh Meter (Rudold or equivalent)
 - 1 Nos x Over current Relay
 - 1 Nos x Over Earth Falut Relay
 - 1 Nos x Power Meter PM1000
 - 1 Lot x Protection and metering CTs, sets of relays, fuses. 3-CT 1000/5A CL5P5 for metering and 4-CT 1000/5A CL5P5 for protection
 - 1 set x ACB ON/OFF indicator lights and generator incoming lights
 - 1 Lot x Flexible cable Internal wiring, to wire relays, timers and control circuitry, c/w labelling.
1. The panel dimensions shall meet or be similar to the given minimum dimensions for each cubicle (**2100 X 660 X 900mm**) 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 shall be DEESEA brand and model **DSE8810** can be replaced with a superior model only. The supplier shall provide the manufacturer's authorization to confirm the origin of the controller.
 5. The panel shall be manufactured using high quality electro galvanized MS plates, treated and powder coated up to 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/zinc 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 together with technical specification of the main components of the panel
13. Stainless Steel Bolts and nuts must be provided to connect the outgoing feeder cables.
14. The ACB'S must be draw out type.
15. A battery charger must be installed for every engine, inside the engine control panel.

