



# **INFORMATION SHEET FOR PROCUREMENT OF TRANSFORMERS**

**Reference No: FNK-I/IUL/2020/268**

Issued on 30<sup>th</sup> November 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 transformers in accordance with <i>Section III, Technical Specifications</i></p> <p>1.2 It is in Fenaka Corporation Limited's discretion to cancel this bid invitation 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>	7.1 All bids should be accompanied with a bid security of USD 15,000 (Fifteen Thousand US Dollars) or its equivalent in Maldivian Rufiyaa

	<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>
<p><b>8. Technical Compliance</b></p>	<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>
<p><b>9. Documents Comprising the Bid</b></p>	<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/background</li> <li>- Company registration certificate</li> <li>- GST registration certificate (for local bidders only)</li> <li>- TAX clearance report (6 months validity)</li> </ul>

	<ul style="list-style-type: none"> <li>- Contact details (name, designation, mobile number and e-mail address)</li> </ul> <p>9.5 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> <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>
<b>10. Format of Bid</b>	<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>
<b>C. Bid Submission</b>	
<b>11. Sealing and Marking Bid Document</b>	<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/2020/268)</p>
<b>12. Bid Opening</b>	<p>12.1 The bids will be opened on 08<sup>th</sup> December 2020, 1000hrs 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>
<b>13. Bid Rejection</b>	<p>13.1 Fenaka Corporation Limited shall not consider any bidders that arrive after the deadline for submission</p> <p>13.2 Bidders that do not register for the tender are unable to participate in the bid opening</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
<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. Factory Acceptance Testing</b>	<p>15.1 The panel 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 panel shall undergo protection testing and operation testing</p> <p>15.4 The panel shall be checked for dimension and the supplier shall provide the dimensions of the panel during the 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

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

## Section III: Technical Specifications

Description	Quantity
2000kVA (STEP-UP)	2
500kVA (STEP – DOWN)	2
800kVA (STEP – DOWN)	2

### 500 kVA, STEP DOWN TRANSFORMER, WITH RMU AND LV PENAL INFORMATION

RMU, Transformer and LV Panel. Designed for extreme weather condition, salty, hot and humid environment.

- a) 1Nos x 3 Way Non Extensible Unit with 2 Nos. Isolators as Incomers and 1 No. Circuit Breaker as Outgoing to 500kVA Transformer (equivalent to TYPE Ringmaster: MerlinGerin RM6 NE-IIDI) motorized with UVT.  
3 Way, 11kV, indoor non extensible free standing metal clad SF6 insulated ring main unit comprising of two numbers 630A fault making/ load breaking switches and one number 200A tee-off circuit breakers complete with all accessories as listed below:

- IDMT RELAY for Circuit Breakers – Self Powered, Merlin Gerin type VIP35 OR Equivalent
- The Ring Switches and Tee –Off Circuit Breaker are provided with Integrated Earthing Switches with Making Capacity
- Neon cable indicator for ring switches
- Integral earthing facility for ring switches
- Shunt trip coil rated for 230V AC
- Trip push button for T-off circuit breaker
- SF6 Gas pressure indicator
- Padlocking facility

b) 1 No x Transformer 11kV/415V, 500kVA

- 3 phase 50Hz 500 kVA Dyn11, core type double wound with copper conductor oil immersed ONAN cooled, hermetically sealed distribution transformer with corrugated tank & conservator arrangement having a no load voltage ratio of 11/0.433 KV. Tappings +5% to -5% in steps of 2.5% shall be provided at line end f HV winding. Changing of taps shall be carried out by means of OFF Load Tap Changer.
- Temperature rise shall be 45/50 °C in oil/winding respectively over a maximum ambient of 50°C. The transformer shall be manufactured as per latest IEC.
- HV Insulation Level 12kV
- Power frequency 28kV. r.m.s.
- Basic Impulse Level 75kV. Peak.
- Impedance - % at 75°C 4.75%
- HV/LV Connection Delta/ Star N. pt
- With level indicator and pressure relief valve
- Insulating Liquid Type Oil to B.S. 148: 1998. Hermetically sealed.

*20/1/19*



### 800 kVA, STEP DOWN TRANSFORMER, WITH RMU AND LV PENAL INFORMATION

RMU, Transformer and LV Panel. Designed for extreme weather condition, salty, hot and humid environment.

**a) 1Nos x 3 Way Non Extensible Unit with 2 Nos. Isolators as Incomers and 1 No. Circuit Breaker as Outgoing to 800kVA Transformer (equivalent to TYPE Ringmaster:**

MerlinGerin RM6 NE-II(DI) motorized with UVT.

3 Way, 11kV, indoor non extensible free standing metal clad SF6 insulated ring main unit comprising of two numbers 630A fault making/ load breaking switches and one number 200A tee-off circuit breakers complete with all accessories as listed below:

- IDMT RELAY for Circuit Breakers – Self Powered, Merlin Gerin type VIP35 OR Equivalent
- The Ring Switches and Tee –Off Circuit Breaker are provided with Integrated Earthing Switches with Making Capacity
- Neon cable indicator for ring switches
- Integral earthing facility for ring switches
- Shunt trip coil rated for 230V AC
- Trip push button for T-off circuit breaker
- SF6 Gas pressure indicator
- Padlocking facility

**b) 1 No x Transformer 11kV/415V, 800kVA**

- 3 phase 50Hz 800 kVA Dyn11, core type double wound with copper conductor oil immersed ONAN cooled, hermetically sealed distribution transformer with corrugated tank & conservator arrangement having a no load voltage ratio of 11/0.433 KV. Tappings +5% to -5% in steps of 2.5% shall be provided at line end of HV winding. Changing of taps shall be carried out by means of OFF Load Tap Changer.
- Temperature rise shall be 45/50 °C in oil/winding respectively over a maximum ambient of 50°C. The transformer shall be manufactured as per latest IEC.
- HV Insulation Level 12kV
- Power frequency 28kV. r.m.s.
- Basic Impulse Level 75kV. Peak.
- Impedance - % at 75°C 4.75%
- HV/LV Connection Delta/ Star N. pt
- With level indicator and pressure relief valve
- Insulating Liquid Type Oil to B.S. 148: 1998. Hermetically sealed.



c) LV Panel, 1 set of 415V, 1200A PVC sleeved Cu bus bars.

- With measuring, indication and protection.

**Incoming**

- 1000A ACB main circuit breaker

**Outgoing**

- 2Nos x Outgoing feeder with 250A MCCB
- 2Nos x Outgoing feeder with 400A MCCB
- 2Nos x Outgoing feeder with 600A MCCB

(Rated current shall be adjustable from 50 to 100%); with ELR, Amp meter & selector switch.

- Bottom entry Cable Termination arrangement.
- Complete with nuts and bolts to connect LV cables.

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### 2000 kVA Power Transformer (Step-up)

3 Phase 50 Hz 2000 kVA Ynd1, core type double wound with copper conductor oil immersed ONAN cooled power transformer with the corrugated tank and conservator arrangement having a no load voltage ratio of 0.415/11 KV. Tapings +5% to -5% in steps of 2.5% shall be provided at line end of HV winding. Changing of taps shall be carried out by means of OFF load Tap Changer. Temperature rise shall be 50/60 °C in oil / winding respectively over a maximum ambient of 40°C.

Transformer shall have metal cover for termination area with lifting eye.

The transformer shall be manufactured as per latest IEC, conforming to following parameters:

- HV Insulation level 12 Kv.
- Power Frequency 28 Kv r.m.s
- Basic impulse level 75 Kv – Peak.
- Hermetically sealed, without gas cushion.
- Insulating Liquid Type Oil to B.S. 148: 1998. Hermetically sealed

Dial Type thermometer with contacts and control box for relays.

Oil level indicator and pressure relief valve and oil drain valve.

Paint class: for extreme weather conditions, salty, hot and humid environment.

Relevant testing standards: IEC / BS Standards.

Terminal Box cover LV n HV connection

All the terminal should be mark in color code

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