



**INFORMATION SHEET FOR  
PROCUREMENT OF 800kVA STEP-  
DOWN TRANSFORMER WITH  
SEPARATE LV PANEL & 3WAY RMU**

**Reference No: FNK-I/IUL/2023/271**

Issued on: 20<sup>th</sup> September 2023

Issued by:

Fenaka Corporation Limited

Male', Republic of Maldives

## Section I: Instruction to Bidders

| A. General                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Scope of Bid</b>          | <p>1.1 Fenaka Corporation Limited requests quotations for transformer(s) 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. Preparation of the Bid       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <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 and Insurance.</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 2,000 (Two 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> |

|                                        |      |                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | 7.4  | The bid security must be valid for a minimum of twenty (20) additional days beyond the validity of quotation                                                                                                                                                                                                                                            |
| <b>8. Technical Compliance</b>         | 8.1  | All relevant information including the brand shall be given to enable technical evaluation of quoted items                                                                                                                                                                                                                                              |
|                                        | 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 item to the bidder is required                                                                                                                                                                              |
|                                        | 8.3  | Manufacturer's Authorization letter will be required to enable technical evaluation                                                                                                                                                                                                                                                                     |
|                                        | 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.                                                                                                                                                                                                |
| <b>9. Documents Comprising the Bid</b> | 9.1  | Quotation (inclusive of the delivery period and payment terms)                                                                                                                                                                                                                                                                                          |
|                                        | 9.2  | Specifications of the offered product                                                                                                                                                                                                                                                                                                                   |
|                                        | 9.3  | Single-line diagram of offered product                                                                                                                                                                                                                                                                                                                  |
|                                        | 9.4  | Details of the company <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> <li>- Contact details (name, designation, mobile number and e-mail address)</li> </ul> |
|                                        | 9.5  | Experience letters, if available <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/2023/271)                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>12. Bid Opening</b>                      | 12.1 The bids will be opened on 25 <sup>th</sup> September 2023, 1300hrs in the presence of bidders<br>12.2 Bids will be opened at:<br>Fenaka Corporation Limited<br>Hilaalee Magu, K. Male', Republic of Maldives<br>12.3 Bids received electronically will not be accepted                                                                                                                                                                                                                                                                                                                                    |
| <b>13. Bid Rejection</b>                    | 13.1 Fenaka Corporation Limited shall not consider any bidders that arrive after the deadline for submission<br>13.2 Bidders that do not register for the tender are unable to participate in the bid opening<br>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<br>14.2 Proposed payment terms should not be tied with submission of Bill of Lading.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>15. Factory Acceptance Testing</b>       | 15.1 The transformer(s) shall be fully tested at the manufacturer workshop in the presence of Client's appointees via video conferencing<br>15.2 The testing shall be conducted at internationally accepted testing standards<br>15.3 The transformer(s) shall undergo protection testing and operation testing<br>15.4 The transformer(s) shall be checked for dimension and the supplier shall provide the dimensions of the transformer(s) during the virtual factory acceptance testing.<br>15.5 Recorded video clips while operating the units will not be accepted as 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

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

**Note:** Any discrepancy in technical details specified in quotation with technical specification document, the specification shall prevail.

## Section III: Technical Specifications



ފެނަކާ ޕްރޮޖެކްޓްސް ޕްރައިވެޓް ލިމިޓެޑް  
މާލެ، ދިވެހިރާއްޖެ

### 800 kVA Step-Down Transformer with Separate LV panel & 3 Way RMU

#### Climatic Conditions

Materials supplied shall be suitable for operating under the following climatic conditions

- Climate : Typical tropical coast line.  
 Atmosphere : Saliferous, corrosive and dusty.  
 Altitude : 2 meter above mean sea water level.  
 Temperature : 32 °C (mean maximum) 25 °C (mean minimum).  
 Barometric air pressure: 1010 millibars.  
 Relative humidity : 90%.  
 Average rainfall : 145 days/year.  
 Average sunshine : 24 days/month.  
 Mean wind speed : 10.8 knots.  
 Maximum wind speed : 15.1 knots.

#### A) Step-Down Transformer 11kV/415V. 800kVA

3 phase 50Hz 800kVA Dyn11, core type double wound with copper conductor, mineral oil immersed ONAN cooled distribution transformer with corrugated tank with oil 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 50/60 °C in oil/winding respectively over a maximum ambient of 40°C. The transformer shall be manufactured as per latest IEC.

- HV Insulation Level 12kV
- Power frequency 28kV. r.m.s.
- Basic impulse level 75 Kv – Peak.
- HV/LV Connection Delta/ Star N. pt
- Dial type thermometer with contacts and control box for relays.
- Oil Level indicator and pressure relief valve and oil drain valve.
- Hermetically sealed without gas cushion.
- Terminal Box cover for LV and HV connection
- Paint class: Marine grade (C5 standard). Powder coated with epoxy resin to withstand high saline and high temperature weather and humid environment
- Connecting Bolts and Nuts and other accessories included
- Insulating Liquid Type Oil to B.S. 148: 1998. Hermetically sealed
- Relevant testing standards : IEC / BS standards.



ފެނަކާ ޕްރޮޕްޔަޓީޕްރިވެޓްޕްރިލިމިޓެޑް  
މާލެ، ދިވެހިރާއްޖެ

#### TESTS

The transformer shall be subjected to the following routine tests at the manufacturer's works before dispatch.

- a) Measurement of winding resistance.
- b) Voltage ratio, polarity and phase relationship.
- c) Measurement of impedance voltage.
- d) Load losses.
- e) No load losses and no load current.
- f) Induced over voltage withstand.
- g) Separate source voltage withstands.
- i) Vector group.
- j) DV/DF Test
- k) Magnetic Balance Test
- l) High Voltage Test.
- m) Insulation Resistance Test
- n) All other test as specified in relevant BS Code.

#### B) Separate LV Panel for Transformer

Free standing LV Panel with 1600A, PVC sleeved Cu busbar, complete with measuring, indication and protection (ELR).

##### Incoming

1 Nos x 1200A ACB motorized - main circuit breaker

##### Outgoing

1 Nos x Outgoing feeder with 630A MCCB

3 Nos x Outgoing feeder with 400A MCCB

4 Nos x Outgoing feeder with 300A MCCB

- (Rated current shall be adjustable from 50 to 100%); with Adjustable ELR with trip level from 30mA to 30A, Amp meter & selector switch.
- Bottom entry Cable Termination arrangement.
- Complete with nuts and bolts to connect LV cables.



ފަނަކާ ޕްރޮޖެކްޓްސް ޕްރައިވަޓް ލިމިޓެޑް  
މާލެ، ދިވެހިރާއްޖެ

C) 1Nos x 3 Way Non Extensible Unit with 2 Nos. Isolators as Incomers and 1 No. Circuit Breaker as Outgoing to 800kVA Transformer ( (TYPE Ringmaster : Merlin Gerin RM6 NE-IDI or equivalent)

3 Way, 11kV, indoor extensible free standing metal clad SF6 insulated ring main unit comprising of three numbers 630A fault making/ load breaking switches and one number 200A tee-off circuit breakers complete with all necessary measurement and protection devices and remote terminal unit for automation.

- 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
- Powder coated with paint shade RAL 7012 and thickness greater than 80 micron