

Energy Fiji Limited



Tender No.: MR 409/2023 Supply of 1 x ELTEK Brand Rectifierter and Spares

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1.0 INSTRUCTIONS TO BIDDERS

1.1 GENERAL

1.1.1 SCOPE OF BID

The Energy Fiji Limited (hereinafter referred to as “the Employer”), wishes to receive bids for the Supply of;

- a. **SCOPE - Supply of**
1 x ELTEK BRAND RECTIFIERTER POWER CORE RV01 1x230V-10K 110V-14.4K SPD
BD WB
9 x Rectifierter 230/1500 110/1200
1x Dynamic RU Server cabinet 700mm Deep Black (600x700x1008)
- b. **SCOPE – Supply of spares**
2xSmartpack2 Touch Part No. 242100.510 Touch screen
2xSP2 Basic Industrial Part No. 242100.601
2xIO Monitor Type 2 Part No. 242100.502

1.1.2 TYPE OF TENDER

- 1.1.2.1 The Tenderer shall submit a fixed price tender. This requirement shall apply equally to the conforming tender only

1.1.3 COMPLIANCE WITH INSTRUCTIONS

- 1.1.3.1 The Tender shall be submitted in accordance with these Instructions and the letter of Invitation to tender. All the necessary forms and schedules need to be completed and submitted with the tender.

1.1.4 ADDENDA TO TENDER

- 1.1.4.1 Where Energy Fiji Limited finds it necessary to make amendments to or clarify the requirements of the tender documents during the period of tendering copies of Addendum will be forwarded. In the Appendix to tender shall state the reference number and description of each of the aforesaid Addenda which has been considered during preparation of the Tender.

1.1.5 COMPLIANCE WITH SPECIFICATIONS

- 1.1.5.1 The tender shall be based on the equipment and tools specified and shall be in accordance with the Technical Specification. It should be noted that unless departures from specifications are detailed in the Technical Specification, the tender would be taken as conforming to the Specification in its entirety. The Tenderer shall tender for the whole of the Works included in the Specification.

1.1.6 DELIVERY PERIODS

- 1.1.6.1 The Tenderer shall submit their tender Bids on the basis which will permit the Scope of Supply to be completed under normal circumstances by the dates stated in “**clause 1.1.15.1 of tender submission.**

Scope - 2.1 SCOPE Supply of 1 x ELTEK Brand Rectiverter with Spares, should be supplied CFR Lautoka port, Fiji.

1.1.7 CURRENCY AND CURRENCY EQUIVALENT

- 1.1.7.1 The tenders shall be in the currency of the Tenderer's home country. For Tender comparison purposes the currency or currencies in which the tender is offered will be valued in terms of Fijian dollars at the exchange rate quoted for the sale of the foreign currency for Fijian dollars quoted by the Reserve Bank of Fiji on the day the tenders are opened. All local companies registered in Fiji shall bid in VIP and Duty inclusive.

1.1.8 SIGNATURE OF TENDERER

- 1.1.8.1 A tender submitted by a Partnership shall be signed by one of the members of the Partnership and shall be accompanied by a certified authorization of all the partners authorizing the individual partner to sign on behalf of the Partnership. A tender submitted by a Corporation to the Contract and shall be accompanied by a certified resolution of the Board of Directors authorizing the individual to sign on behalf of the Corporation.

1.1.9 INFORMATION FORMING PART OF THE TENDER

- 1.1.9.1 The Tenderer shall supply with each set of the tender copies of the technical, price and information schedules of the Tender Documents duly completed with all missing information and shall also supply any requisite drawings. A copy of the Tenderer's covering letter (if any) shall be submitted with each tender and each tender shall be accompanied by a full set of supporting matter which the Tenderer wishes to have considered by the Company as supporting information for his tender. It is a mandatory requirement to submit the following documents as part of the tender proposal:

1. Tender Covering Letter with signature/seal of EFL signatory
2. Price and Payment schedules
3. List of Experience
4. Confirmation of Insurance Policies

1.1.10 CONFORMING AND ALTERNATIVE TENDERS

- 1.1.10.1 No alternative bids shall be accepted

1.1.11 NON CONFORMING TENDERS

- 1.1.11.1 A tender which does not comply with the Conditions of Tendering or in which the technical price information schedules requiring information to be inserted by the Tenderer have not been completed in all respects may be considered informal will be rejected for these reasons.

1.1.12 VALIDITY PERIOD OF TENDERS

- 1.1.12.1 Tenders shall remain valid for acceptance within 90 days from the date of opening of tenders and a Tenderer shall not withdraw or amend his tender prior to the expiration of the Validity Period. In exceptional circumstances prior to expiry of the original tender validity period, the Company may request the Tenderer for an extension in the period of validity. The request and the response there to shall be in writing. A tenderer agreeing to the request will not be permitted to amend his tender price.

1.1.13 EXTENTION OF CLOSING TIME FOR TENDERS

- 1.1.13.1 The right is reserved to amend the date set for the opening of tenders to any late date. If it is decided to extend the time for submission of tenders all prospective Tenderers to whom tender documents have been issued will be promptly notified.

1.1.14 SITE VISIT

- 1.1.14.1 Site visit is **NOT** compulsory for Bidders

1.1.15 TENDER SUBMISSION

- 1.1.15.1 **Only Electronic Tender Bids will be accepted and should be uploaded in the EFL Tender Site** as per below tender link. It is mandatory for Bidders to upload their bid in the TENDER LINK Electronic Tender Box no later than **4:00pm, on Wednesday 27th December, 2023**

- 1.1.15.2 To register your interest and tender a response, view "Current Tenders" at <https://www.tenderlink.com/efl>

- 1.1.15.3 For further information contact The Secretary Tender Committee, by email JReddy@efl.com.fj. Tenders received after **4:00pm** on the closing date of **Wednesday 27th December, 2023**

1. Will not be considered
2. Lowest bid will not necessarily be accepted as successful bid.

1.1.16 TENDER EVALUATION

- 1.1.16.1 After a preliminary analysis to ascertain whether or not the tender is in accordance with the requirements of the tender documents each tender will be considered with particular reference to its eligibility as being a manufacturer, offer testing facilities in its workshop, price, completion date, design capability, evidence of past performance on contracts of a similar nature, supply of reliable quality equipment and all other matters affecting the Tenderers ability to complete the Contract in accordance with the Company's requirements.

1.1.17 ADJUSTMENT OF ERRORS

- 1.1.17.1 The Company reserves the right to adjust arithmetical or other errors in the Tender. Any adjustments made by the Company to a Tender will be stated to the Tenderer prior to acceptance of the Tender. In the event of discrepancies appearing between words and figures in the Tender, the words shall prevail.

1.1.18 ACCEPTANCE OF TENDERS

- 1.1.18.1 The Company shall not be bound to accept the lowest or any tender not to assign any reason for the rejection of a tender and reserves the right to waive any informality in a tender. No tender shall be deemed to have been accepted unless such acceptance is notified to the Tenderer by notice in writing either by handing such notice to the representative of the successful Tenderer or by sending such notice by e-mail, facsimile or airmail post. Such notice shall include any essential identifying details of the tender. The date of acceptance of Tender shall be the date on which the above mentioned notice is given or posted or e-mailed.

1.1.19 LANGUAGE OF TENDER

- 1.1.19.1 All Tenders together with any documents submitted by the Tenderer as part of any Tender shall be written in the English language.

1.1.20 PAYMENT SCHEDULE

- 1.1.20.1 The contract shall be on a lump sum fixed price basis and as per attached payment "2.4 Price Schedule".

1.1.21 CONDITIONS OF CONTRACT

- 1.1.21.1 The Conditions of Contract shall be the FIDIC - General Conditions of Contract for the Supply of Equipment without installation.

1.1.22 INSURANCE

- 1.1.22.1 The Contractor is to confirm that they have in effect the insurance policies below:
1. Public and Products Liability Insurance
 2. Industrial Special Risk Insurance

2.0 SPECIFICATION

2.1 SCOPE SUPPLY OF 1 X ELTEK BRAND RECTIVERTER with spares

a. SCOPE - Supply of

1 x ELTEK BRAND RECTIVERTER POWER CORE RV01 1x230V-10K 110V-14.4K SPD BD WB

9 x Rectiverter 230/1500 110/1200 Power Modules

1x Dynamic RU Server cabinet 700mm Deep Black (600x700x1008)

b. SCOPE – Supply of (spares)

2xSmartpack2 Touch Part No. 242100.510 Touch screen

2xSP2 Basic Industrial Part No. 242100.601

2x IO Monitor Type 2 Part No. 242100.502

Wailoa Power Station currently has two of this Rectiverter operational. One supplying 240VAC power to Station server & UPS outlets while the other supplies 240VAC to Unit 1-4 Motor control Centres. This Rectiverter will be backup to the existing setup and spares are critical spares.

2.1.1 SPECIFICATION TECHNICALS FOR ELTEK Brand Rectiverter

No.	Rectiverter	Data/Units
1	Brand	ELTEK
2	Type	RV01 1x230V-10K 110V-14.4K SPD BD
3	AC Input	100 – 250V 138Amax L+N+E
4	Frequency	45 – 66HZ
5	DC Output	97 – 145Vdc/138Amax
6	AC Output	200 – 240V 50Hz/78Amax

2.1.2 SPECIFICATION TECHNICALS FOR Rectiverter Power Modules

No.	Module	Data/Units
1	Brand	ELTEK
2	Type	230/1500 110/1200
3	Op. Temp	-40C - +55C
4	AC input	220 - 240V 50/60Hz 12A
5	DC Input	102 -145V 14A
6	DC OUTPUT	122.5V 9.8A 1200W
7	AC OUTPUT	230V 50/60Hz 6.5A 1200W/1500VA
8	MAX OUTPUT	TOTAL 2000W

2.1.3 PIC OF EXISTING RECTIVERTER PANEL



2.1.4 SPECIFICATION TECHNICALS OF SPARES

2.1.4.1 Smartpack2 Touch Part No. 242100.510 Touch screen

Smartpack2 Touch



SPECIFICATIONS	
TOUCH	
Part number	242100.510
System Compatibility	12Vdc to 380Vdc, Positive / Negative / Floating Distribution, Panel Mount
Power consumption	Max 5.4W, Typical 2.4W
Display	Graphical 4.4 inches LCD display - Capacitive touch interface - 480 x RGB x 272 resolution
Ethernet Ports	2 x 10/100 BASE-T, Wi-Fi support w/ USB dongle
Serial Ports	RS-232 & RS-485
USB	2 x USB Type A Host
Removable media	uSD card, USB Flash Drive support
SNMP	v1, v2c, v3 w/ GET, SET & TRAPs – Eltek Enterprise MIB Branch 10
Web Interface	Responsive HTML5, java script, encrypted w/TLS
Other network	SMTP Client, NTP Client, FTP/FTPS file transfer, MODBUS TCP
Buzzer	75dB at 1m
IP Grade	22
Dimensions (WxHxD)	174 x 78 x 41 mm (Cut-out: 153 x 68 mm)

2.1.4.2 SP2 Basic Industrial Part No. 242100.601

BASIC INDUSTRIAL	
Part number	242100.601
Operating temperature	-20 to +70°C (-4 to 158°F)
Storage temperature	-40 to +85°C (-40 to 185°F)
Power consumption	Max 1,6A
Electric isolation	7 different isolated sections
Customer connections:	3x, "digital", temperature / voltage / current measurements.
• Configurable Inputs	- NO/NC, Pull Up/Dn, Diode Matrix: -10V> +10V (2mV full range) - Current measurements: 4-20mA (ext. sense resistor 100-500Ω) - Temperature measurements: NTC probe
Specifications are subject to change without prior notice	

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Smartpack2 Touch



BASIC INDUSTRIAL - CONTINUED	
• Relay outputs	3x, NO-C-NO, 0-220V, 30W (max. 1A), configurable
• Serial communication	RS232C port and RS485 port
System connections:	
• Voltage sense inputs	3x, Max. 420VDC, Symmetry & battery monitoring
• Current sense inputs	2x, for 20mV to 60mV current shunts
• Battery fuse sense inputs	1x, NO/NC, Pull Up/Dn, Diode Matrix: -10V> +10V (2mV full range)
• Load fuse sense inputs	1x, NO/NC, Pull Up/Dn, Diode Matrix: -10V> +10V (2mV full range)
• LVD contactor outputs	3x, 10-420V, 1A, Configurable as latching or non-latching LVD Supply input: 10-420V, 1A
• CAN interface	2 x, CAN bus systems (separated and isolated)
• Earth fault detection	1x, internal Isolation input
Power system compatibility	Industrial & Telecom, Positive, negative and floating DC distributions
Max number of controller nodes	10 on a single CAN-bus, in addition to Smartpack2 Master controller
Controller configuration	Front keys in the Smartpack2 Master controller, via CWUI in an standard web browser (Controller's Web-based User Interface) and via PowerSuite application
Dimensions	(WxHxD) 146,0 x 146,0 x 45,6 mm / (5,7 x 5,7 x 1,8")

2.1.4.3 IO Monitor Type 2 Part No. 242100.502

I/O MONITOR (TYPE 2)	
Configurable Inputs	6x NO/NC/Analog Voltage [0-75V]
Alarm Outputs	6x Relay-Dry/Form C [Max 75V/2A/60W]
Max I/O Monitors	14 units on a single CAN-bus
Power Consumption	Max 3,6W
Dimensions (WxHxD)	135,1 x 23,5 x 59mm / 5,3 x 0,9 x 2,3"

CONTROL DEVICES/CAN NODES	
Part no:	Description
242100.502	I/O Monitor – Type 2

2.1.5 TECHNICAL LITERATURE

Bidders shall furnish all technical literature, including catalogues, test certificate etc. in support of plant and equipment offered by him with the tender.

Successful contractor shall forward 2 (two) sets of bounded hard copies of all operations and maintenance manuals, spare parts catalogues, detailed schematic and wiring and all other documents required for satisfactory operation and maintenance of plant. Electronic copies are also to be provided.

2.1.6 QUALITY OF MATERIALS AND WORKMANSHIP

All equipment supplied by the company under this contract shall be new and of the high quality class and most suitable for working under the conditions specified and shall withstand the variations of temperature, atmospheric conditions arising under working conditions without distortion or deterioration or the setting up of undue stresses in any part and also without affecting the strength and suitability of the various parts of the work which they have to perform.

2.1.7 STANDARDS

IEC, IEEE and AS/NZS Standard are to be adopted in general. Any other national or international standard may be used if such standards are not less exacting than corresponding IEC Standard. In such an instance a copy of the relevant standard should be forward. The work shall be in accordance with the following standards.

AS/NZS 3191	- Low voltage switchgear and control gear (all relevant parts)
IEC 60529	- Degrees of Ingressive protection.
IEC 60909	- Short-circuit current calculation in three phase Ac system.
IEC 60934	- Circuit breakers for equipment.
IEC 60947-2	- Low voltage switchgear and control gear.
IEEE 446	- Recommended Practice for Emergency and Standby Power Systems for Industrial and Commercial Applications (IEEE Orange Book™)

2.1.8 PACKING

The plants and accessories shall be carefully packed for transport and shipment in such a manner that it is protected from all dust and climatic conditions during loading, transport, unloading and subsequent storage in the open area.

2.1.9 WARRANTY

The Contractor shall provide warranty for plant supplied for a Period of Twelve [12] months after delivery of the equipment.

2.2 SCHEDULE – PRICE

ITEM	ITEM DESCRIPTION	UNIT PRICE	TOTAL PRICE CURRENCY:_____
1	Supply of 1xELTEK BRAND RECTIVERTER WITH SPARES	90%	
2	Warranty of 12 Months from the Date of receiving in good working condition	10%	
	TOTAL		

Notes:

* Please specify currency (FJD, USD, AUD, NZD)

3.0 APPENDIX

TENDER CHECKLIST

The Bidders must ensure that the details and documentation mention below must be submitted as part of their tender Bid

Tender Number _____

Tender Name _____

1. Full Company / Business Name: _____

(Attach copy of Registration Certificate)

2. Director/Owner(s): _____

3. Postal Address: _____

4. Phone Contact: _____

5. Fax Number: _____

6. Email address: _____

7. Office Location: _____

8. TIN Number: _____

(Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only (Mandatory))

9. FNPF Employer Registration Number: _____ **(For Local Bidders only) (Mandatory)**

10. **Provide a copy of Valid FNPF Compliance Certificate (Mandatory- Local Bidders only)**

11. **Provide a copy of Valid FRCS (Tax) Compliance Certificate (Mandatory Local Bidders only)**

12. **Provide a copy of Valid FNU Compliance Certificate (Mandatory Local Bidders only)**

13. Contact Person: _____

I declare that all the above information is correct.

Name: _____

Position: _____

Sign: _____

Date: _____

3.1 TENDER SUBMISSION

Bidders are requested to upload electronic copies via Tender Link by registering their interest at: <https://www.tenderlink.com/efl>

EFL will not accept any hard copy submission to be dropped in the tender box at EFL Head Office in Suva.

This tender closes at 4.00pm (1600hrs) on Wednesday 27th December, 2023.

For further information or clarification please contact our Supply Chain Office on phone (+679) 3224360 or (+679) 9992400 or email us on tenders@efl.com.fj

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act. Bidders are to clearly state the percentage of VAT that is applicable to the bid prices.

The lowest bid will not necessarily be accepted as the successful bid.

The Tender Bids particularly the “Price” must be typed and not hand written.

Any request for the extension of the closing date must be addressed to EFL in writing three (3) working days prior to the tender closing date.

Tender Submission via email or fax will not be accepted.