



MR 197/2021

**SUPPLY OF 48VDC BATTERY CHARGER FOR THE SEVEN (7) EFL
REPEATER STATIONS.**

PUBLICITY

NO PUBLICITY OR DETAILS ABOUT THIS PROJECT ARE TO BE DISCLOSED BY ANY BIDDER OR ANY OTHER ASSOCIATED PARTY WITHOUT THE WRITTEN PERMISSION OF EFL PRIOR TO, DURING, OR AFTER THE PROJECT IS AWARDED. IN GENERAL ANY PUBLICITY OR MEDIA ENQUERIES WILL BE DEALT WITH BY EFL.

ALL THOSE WHO REQUEST TO UPLIFT A COPY OF THIS TENDER HAVE AGREED NOT TO DISCLOSURE ANY INFORMATION REGARDING THIS TENDER.

1. GENERAL

1.1 The Company - EFL

Energy Fiji Limited, (formerly Fiji Electricity Authority), was established, incorporated and constituted under the provisions of the Electricity Act of 1966 and began operating from 1 August of that year. The powers, functions and duties of EFL under the Electricity Act are for the basic purpose of providing and maintaining an efficient and cost-effective power supply to the Fijian people in a safe and secure manner that meets high benchmarks in quality. EFL is entrusted with enforcing the Electricity Act and regulations, setting standards, examining and registering electricians, and is empowered to approve and license suppliers to serve certain areas. EFL is also governed by the requirements under the Public Enterprise Act. Fiji Electricity Authority (FEA) was corporatized into Energy Fiji Limited (EFL) on 16 April 2018, a public company limited by shares, and was registered under the Companies Act pursuant to regulations that were gazetted. In March 2017, a new Electricity Act 2017 was passed by Parliament and will come into effect on a date to be set by the Minister responsible for the Electricity Act 2017. Once the new Electricity Act 2017 comes into effect, the corporatized FEA will cease its regulatory functions, and such functions will be undertaken by the Fijian Competition and Consumer Commission.

The operations of the company are organized into three geographically defined divisions, which correspond to the national administrative divisions. These divisions are:

- Central Eastern Division based in the capital Suva
 - Suva, Lami, Navua, Tailevu, Levuka and part of the Coral Coast
- Wertern/Nothern Division based in Lautoka
 - Lautoka, Tavua, Ba, Sigatoka, Vatukoula,
- Northern Division
 - Labasa, Savusavu, Taveuni

EFL provides electricity services to most parts of the country especially in the Viti Levu, Vanua Levu, Taveuni and Ovalau.



Figure 1 – Energy Fiji Limited coverage Area; EFL’s official website is: www.evl.com.fj



2. PURPOSE AND DESCRIPTION OF THE TENDER

The Energy Fiji Limited (EFL) is looking for Bids from reputable Companies to SUPPLY 48VDC BATTERY CHARGERS AT SEVEN (7) EFL REPEATER STATIONS. The Site are listed in the Table below:

No.	Repeater Station	Max DC Load
1	Kavukavu Repeater	20 Amps
2	Vuda Repeater	20 Amps
3	Lololo Repeater	20 Amps
4	Tuidreke Repeater	20 Amps
5	Nadarivatu Repeater	20 Amps
6	Taladrau Repeater	20 Amps
7	Delaikoro Repeater	20 Amps

3. ELIGIBILITY / SELECTION CRITERIA OF THE BIDDER

The Supplier should be a **Certified Manufacturer, Authorized Distributor and/or Reseller** of the offered **Products**.

The Vendors shall submit the Names/Contacts of Utilities or Projects where they have previously supplied and install their “Offered Product”.

All relevant Test Reports, Product Standard Certificates, Electrical Drawings, Product Specification, Installation and Commissioning Procedures, and Operation and Maintenance Process and Procedures must be submitted in a Table format. All drawings, diagram, circuit diagram is required to be supplied in the Tender as part of their Bid Documents.

Other Information or Documents to be provided by the Bidder as part of the proposal are:

1. Manufacturer’s / Vendor’s **warranty** on the product.
2. **Method of replacement or reimbursement** of faulty / defective or damaged goods
3. **Lead Time** including manufacturing time and shipping duration.
4. The Bidder must provide the **freight weight and dimensions, or CBM** of the offered products
5. Previous bidders experience in supplying and supporting similar products in the last 10 years.
6. It is mandatory for the Bidders to provide the full specification of the offered Battery Charger (Rectifier, 48/24 volts converter, 48/12 Volts converter).
7. Technical Training on the Installation, Commissioning, and Operation and Maintenance of the offered product shall be provided to EFL Technical Team, as part of the offered package.
8. **Overseas Bidders shall OFFER there bid price CIF Lautoka, while Local Bidders shall quote their price in FJD (VIP).**



4. BIDDER DETAILS

The Bidder shall provide all the necessary information specified in the tables below:

General
The Registered Name of the Bidder:
Business Address for correspondence: <i>(Location, Street, Locality City, Pin Code, Country, Telephone, Facsimile, Email Other)</i>
Contact Name of the Authorised Person:
Contact's Position: <i>Contact addresses if different from above</i> <i>Locality City, Pin Code</i> <i>Location, Street, Country, Telephone, Facsimile, Email, Web address</i>
Business Structure:
Include the organisations years of experience in this field and reputation in the market place.

5. OTHER VALUE ADDED SERVICES

The Bidder is open to include any other information that may add value to their Product or Bid.

6. TECHNICAL SUPPORT

- i. Bidder should provide details of what Technical Support is available to EFL to make better use of their product and/or services.
- ii. Include relevant Operation & Maintenance Manuals and Instructions for proper care and handling of the equipment and accessories by the EFL Technical Team who will be responsible for the Operation and Maintenance of the product.
- iii. Proper Technical Training for the EFL Technical Team shall be carried out either before or during the installation and commissioning of the first Unit or Station, which shall be guided by the Supplier or locally contracted technical Partner.

7. PRODUCT INFORMATION

Bidders must include the following document together with their Bid:

- Full Product Specification.
- Relevant Test Certificates.
- Standard Compliance Certificate.
- Safety Standards and Procedures.
- Installation Procedures
- Testing and Commissioning Procedures



8. DEFECTS WARRANTY PERIOD

All goods shall be supplied with a **Warranty Period of not less than 24 months** from the date of the official Commissioning and Handover of the offered Product by the EFL Technical Team or Representatives, with the assistance or guidance of the Supplier or locally contracted technical Partner. **During the Warranty Period, defective parts shall be returned to the Supplier for replacement on a pick-up exchange and return-delivery basis.**

9. PRICE VALIDITY

The offered price shall remain valid for acceptance within 90 working days from the date of opening of Bids and Bidders shall not withdraw or amend their proposal prior to the expiration of the validity period. Price Validity of more than 90 working days is highly accepted.

In exceptional circumstances prior to expiry of the original validity period, EFL may request the Supplier for an extension in the period of validity. The request and the response thereto shall be in writing. **A supplier agreeing to the request will not be permitted to amend their tender price**, during this process.

10. PAYMENT TERMS

EFL shall pay the Invoice Amount in Foreign currency to the Overseas Bank Account nominated by the successful supplier within 30 days of the delivery of the item and receipt of the invoice, subject to the payment terms as per the Contractual Agreement. **The Local Bidders will be paid in Fijian Dollars.**

Any supplier requesting for advance payment shall provide EFL with a bank guarantee from EFL preferred commercial banks for the sum of the advance payment amount.

11. SCOPE OF WORKS

The successful Bidder is required to carry out the following works:

- 1) Supply of 7 x 48VDC Battery Chargers (including the Rectifier Modules and DC/DC Converter) for the seven (7) EFL Repeater Stations listed in Section 2 above.
- 2) Battery Charger must be suitable for the existing battery bank of 48VDC, 20A (full load), and minimum of 600Ahr capacity.
- 3) One (1) x 48VDC distribution board with 6 x 10A DC miniature circuit breakers for each Site.
- 4) One (1) x 24VDC distribution board with 6 x 10A DC miniature circuit breakers for each Site.
- 5) One (1) x 12VDC distribution board with 6 x 10A DC miniature circuit breakers for each Site
- 6) Battery Charger, Rectifier Modules, DC Distribution Panels (12/24/48VDC) must be installed and prewired, including protection system and mechanism, inside a standard 19" Cabinet.



- 7) All rack mount modules must be housed in a standard 19' Rack Mount inside a 24RU Cabinet.
- 8) Recommended Spares for critical parts – 1 set per Station/Site.
- 9) Training/Guidelines Documents/Manuals on how to install, test, commission, and the operation and maintenance procedures of the Battery Charger System, including trouble shooting
- 10) Installation and commission will be carried out in house (EFL Team). Bidders are required to provide all installation, testing and commissioning guideline manual to allow EFL Engineers and Technical Team to successfully install and commission the supplied Battery Charger System.
- 11) ALL relevant Electrical Technical Manuals, Installation, Testing & Commissioning, and Operation & Maintenance Manuals shall be provided.
- 12) Bidders shall furnish the following Technical Manuals:
 - a. Technical Specifications of all equipment installed
 - b. Commissioning and Testing Procedures/Guidelines of individual equipment as per Manufacturer's guide
 - c. Electrical wiring/diagram showing connectivity between each equipment modules and parts
 - d. Test results on various modes of operations when the system is under test
 - e. Alarms to trigger when certain conditions are met
 - f. Remote Monitoring, Reporting and Control
 - g. Any other information important for EFL Technical Staff to understand and competently carry out the installation, testing, commissioning and maintenance of the system.
- 13) The successful Bidder will enter into a Contractual Agreement with EFL on the Supply of these seven (7) 48VDC Battery Chargers with its associated components.
- 14) EFL Purchase Orders will be issued after the signing of the Contract Agreement.
- 15) Bidders shall also provide detail information on support it offers after system commissioning.

12. TECHNICAL SPECIFICATION AND REQUIREMENT

<u>No</u>	<u>Item</u>	<u>Required Specification</u>
1.	AC Supply	➤ 220 – 240V 50Hz
2.	Power Factor	➤ >0.99
3.	Output Power	➤ 1800W
4.	DC Output Voltage	➤ 12 VDC ➤ 24 VDC ➤ 48 VDC
5.	Efficiency	➤ 12 VDC (85 – 95%) ➤ 24 VDC (85 – 95%) ➤ 48 VDC (85 – 95%)
6.	Operating Temperature range	➤ -5°C to 65°C
8.	Remote Communication	➤ 10/100BaseT Ethernet TCP/IP ➤ Web Browser ➤ SNMP ➤ TC/IP & MODBUS/DNP
9.	DC Distribution	➤ Battery Breaker (Isolator) ➤ 12VDC Load Breaker ➤ 24VDC Load Breaker ➤ 48VDC Load Breaker
10.	Cabinet Dimension	➤ To fit the Rectifier, DC-DC Converter, 12VDC, 24VDC, 48VDC DC Output Distribution Board and Miniature Breakers. ➤ Cabinet Cooling Fan ➤ Standard 24" Rack Mounting provisions
11.	Protection System	➤ Input Surge Protector. ➤ Lightning Protector ➤ Low Voltage Disconnect
12.	Display	➤ For configuration and monitoring purpose ➤ For Alarm and Events viewing ➤ For Report and Performance Diagnoses.
13.	Blank Panels	➤ To cover unused compartments or section
14.	Software	➤ For configuration and report generation
15.	Other Requirements	➤ Remote monitoring provision. ➤ Remote Monitoring Protocol provisions – SNMP, TCP/IP, MODBUS, DNP (TCP/IP)

13. TENDER EVALUATION

After the Bids are received, it will go through the normal Tender Evaluation Process as per EFL's Tender Policy and Procedures. The successful and unsuccessful Bidders will be advised of the outcome after completion of the Tender Evaluation Process.

The evaluation of the Tender submissions will be weighted as such:

	Mandatory Requirement	Weight (%)
1	TECHNICAL Specification and SCHEDULE	30%
2	Price	30%
3	Lead Time for Battery Chargers of at least 8 weeks	5%
4	Training/Guideline Manuals	5%
5	Warranty Certificate Proposal – 2 years	5%
6	Other successful projects/utilities with the same type of battery bank and chargers	5%
7	Customer listing with contact person for reference	5%
8	Full battery charger Design, Drawings, Manuals and Brochure relevant to the type of Battery Charger being proposed	5%
9	Design, drawings material list and enclosure size for the Automatic Changeover	5%
10	No advance payment and design payment. Payment 30 days after delivery is received and invoice issued.	5%

14. SUBMISSION OF TENDER

This tender closes at 4:00 p.m (1600hrs Fiji time) on Wednesday 3rd November, 2021.

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

This is due to COVID 19 restriction on movements. Therefore, EFL will not accept any hard copy submission to be dropped in the tender box at EFL Head Office in Suva.

For more information or clarification please contact the Supply Chain Office on 3224360/9992400/9987085 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.

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.



15. Appendix

15.1 Submission Forms

The following Information has to be filled by the bidder and submitted with Tender Documents:

1. Company Name: _____
2. Director/Owner(s): _____
3. Postal Address: _____
4. Email Address: _____
5. Phone Number: _____
6. Fax Number: _____
7. Office Location: _____
8. Facsimile & Skype: _____
9. Web Address: _____
10. After Sales Contact details:

11. TIN Number (local bidders only): _____
12. Company Registration Number (local bidders only): _____
13. FNPf Employer Registration Number (local bidders only): _____
14. Number of Branches & locations: _____
15. Years of Experience & reputation in the market:

16. Area of business Specialization: Manufacturer & Supplier
[Please tick where applicable] Retailer
 Licensed Agent
 Others, please specify _____
17. Business Structure: _____
18. FRCA Compliance Letter (For local bidders only)
19. FNPf Compliance Letter (For local bidders only)
20. FNU Compliance Letter (For local bidders only)

I hereby, declare that all the above information is correct.

Sign: _____
Name: _____
Position: _____
Date: _____

15.2 General Requirement:

<u>No</u>	<u>General Requirements</u>	<u>Please tick where applicable (✓)</u>	<u>Prescribe in Detail</u>
1.	AC Supply (220 – 240VAC)		
2.	Power Factor (>0.99)		
3.	Efficiency: 12 VDC (85 – 95%); 24 VDC (85 – 95%); 48 VDC (85 – 95%)		
4.	DC Output Voltages (12V, 24V, 48V)		
5.	Operating Temperature Range (-5°C - 65°C)		
6.	Remote SCADA Communication Protocol (TCP/IP, SNMP, MODBUS, DNP3).		
8.	DC Distribution Panel for each DC Volt Output (12V, 24V, 48V)		
9.	Cabinet Dimension		
10.	Protection System		
11.	Display		
12.	Blank Panels		
13.	Software & Manuals		
14.	Other Requirements		

✓ **Attach pictures and technical brochures of the Battery Charger offered**



15.3 Cost Proposal & Summary:

Bidders shall use the Table below to list the item with its associated Cost. Bidders shall add/edit the list to ensure equipment supplied is complete.

Requirements	EFL Repeater Stations						
	Kavukavu	Vuda	Lololo	Tuidreke	Nadarivatu	Taladrau	Delaikoro
48/1800W Rectifier (Preinstalled & wired)							
48/24V Converter (rack mount – preinstalled and wired)							
48/12V Converter (rack mount – preinstalled and wired)							
MOV Surge protection kit with MCB protection							
48VDC distribution board (output) rack mount with 6 x 10Amps miniature breaker							
24VDC distribution board (output) rack mount with 6 x 10Amps miniature breaker							
12VDC distribution board (output) rack mount with 6 x 10Amps miniature breaker							
Bid Currency							

Note: All modules must be supplied completely pre-wired

Overseas Bidders are to provide their cost of freight, i.e., CIF Lautoka Port.

Local Bidders are to provide their cost in FJD VIP

Overseas bidders may contact the following to obtain various rates:

http://www.frcs.org.fj/contact-us/ Email : info@frcs.org.fj	Duty and Tax Rates
Williams & Gosling Limited Email : info@wgfiji.com.fj or RajnishC@wgfiji.com.fj Website: www.wgfiji.com.fj Telephone: +679 6722855 / Fax: +679 6735730 / Mobile: +679 9977790/ 679 7053008 Office: Nadi Airport / P O Box 9414, Nadi Airport, Fiji Or any freight forwarder from the list available on the following website: http://www.yellowpages.com.fj/categories/Freight+Forwarders/	Rates for Freight, Customs Clearance, and Delivery.