



**ENERGY FIJI LIMITED**

**BIDDING DOCUMENT**

**MR 270/2024 - PREFERRED SUPPLIER  
FOR 132KV LINE HARDWARE - 160kN Sag  
Link**

## Section 1: Instructions to Bidders

- 1. Scope of Bid**

The Energy Fiji Limited (hereinafter referred to as "the purchaser"), wishes to receive bids for Preferred Supplier for 132kV Line Hardware - 160kN Sag Link as specified in these bidding documents (hereinafter referred to as "LINE HARDWARE").
- 2. Eligible Bidders**

This Invitation to Bid is open to bidders who have sound financial background and have previous experience in handling such projects.

Bidders shall provide such evidence of their continued eligibility satisfactory to the purchaser as the purchaser shall reasonably request.

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent.
- 3. Eligible Materials, Equipment and Services**

The LINE HARDWARE to be supplied under the Contract shall have their origin from reputable companies from various countries. At the Purchaser's request, bidders may be required to provide evidence of the origin of various parts of the LINE HARDWARE.
- 4. Qualification of the Bidder**

To be qualified for award of Contract, bidders shall submit proposals regarding work methods, scheduling and resourcing which shall be provided in sufficient detail to confirm the bidder's capability to fulfill the contract.
- 5. Cost of Bidding**

The bidder shall bear all costs associated with the preparation and submission of its bid and the Purchaser will in no case be responsible or liable for those costs.
- 6. Tender Submission**

It is mandatory for bidders to upload a copy of their bid in the TENDER LINK Electronic Tender Box no Later than 1600hrs, Wednesday 4<sup>th</sup> September, 2024. To register your interest and tender a response, view 'Current Tenders' at: <https://www.tenderlink.com/efl>

For further information contact the Manager Strategic Procurement, Inventory & Properties at [JReddy@efl.com.fj](mailto:JReddy@efl.com.fj)

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

**This Tender Closes at 4.00pm (1600hrs) on Wednesday 4<sup>th</sup> September, 2024.**
- 7. Deadline for Submission of Bids**

Bids must be received by the Employer at the address specified above no later than 1600 hours (Fiji Time) (4<sup>th</sup> September 2024).

The Employer may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.
- 8. Late Bids**

Any bid received by the purchaser after the deadline for submission of bids prescribed will be rejected and returned unopened to the bidder.

**9. Modification and  
Withdrawal of Bids**

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline for submission of bids.

The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.

No bid may be modified by the bidder after the deadline for submission of bids.

**10. Purchaser's Right to  
Accept any Bid and  
to Reject any or all  
Bids**

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Purchaser's action.

**11. Notification of  
Award**

Prior to expiration of the period of bid validity prescribed by the Purchaser, the Purchaser will notify the successful bidder by fax/email, confirmed by registered letter, that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall name the sum which the Purchaser will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price").

The notification of award will constitute the formation of the Contract.

Upon the furnishing by the successful bidder of a performance security, the Purchaser will promptly notify the other bidders that their bids have been unsuccessful.

**12. Signing of Contract  
Agreement**

At the same time that he notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Form of Contract Agreement provided in the bidding documents, incorporating all agreements between the parties.

Within 7 days of receipt of the Form of Agreement, the successful bidder shall sign the Form and return it to the Purchaser

**13. Corrupt or  
Fraudulent  
Practices**

The Purchaser requires that the Contractor observe the highest standard of ethics during the procurement and execution of such contracts. In Pursuance of this policy, the Purchaser:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
  - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
- (b) Will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

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## Section 2: Technical Specification

### 1 General Description

The Energy Fiji Limited invites sealed tenders from reputable companies with the relevant experience, for the Supply of 132kV Line Hardware - 160kN Sag Link.

This document specifies the requirements for the design, manufacture, testing and supply of 132,000 Volts - rated Line Hardware Sag Link for the installation in the Authority's 132kV Transmission network.

### 2 Scope

The Sag Link shall be installed on the 132,000 Volts Transmission network.

#### 2.1 Estimated quantities

The following table shows the Purchaser's total estimated requirement of Transmission Line Hardware's to be purchased each year for the next three (3) years. The Tenderers should note that the total estimated requirement for Transmission Line Hardware's to be purchased under this contract is not guaranteed.

Stock Code	#	Line Hardware	Quantity
IO5365	1	132kV Sag Link (160kN) - (CTSL)	100

### 3 Service Conditions

The Line Hardware's shall be capable of satisfactory operation outdoors in a tropical environment, which has high solar radiation and varies from hot dry and dusty to hot and humid and subject to cyclonic wind. The following conditions apply:

1. Air Temperature
  - Extreme maximum 45 °C
  - Average maximum 35 °C
  - Average minimum 18 °C
  - Extreme minimum -5 °C
2. Relative Humidity
  - Maximum 93%
3. Solar Radiation
  - Maximum 1.1kW/m<sup>2</sup>
4. Wind Loading
  - Wind loading shall be assessed in accordance with AS 1170.2–2011, for Region C (Tropical Cyclone)

### 4 Manufacturer's Qualification/ Certification

#### 4.1 Certification

Every bidder shall include in his bid the Line Hardware manufacturer's supply experience list, year of supply, type and quantity of supplied insulator, and full name of user.

Manufacturer shall have sufficient supply and manufacturing experience with ISO certification of Line Hardware for at least ten (10) years for the required system voltage and above.

Certificates from customers with satisfactory usage shall be provided with the supply record. Line Hardware's shall be considered, for which a minimum 5 years manufacturing and successful service experience is available, without change of basic design and material.

The qualified manufacturer shall have designed, manufactured, tested and supplied at least 100,000 units of similar hardware for the same system voltage and above. Supplied Line Hardware must have same or higher electro-mechanical strength required in this tender document.

- i. Then less than 1/100,000 of annual failure rate shall be guaranteed.
- ii. The bidder shall include with its bid the Certificate of less than 1/100,000pcs of Annual failure rate issued from at least three different foreign utilities outside of manufacturer's country.

Also, at least two certificates out of above three certificates that show the supplied Hardware's shall be under successful commercial operation for at least five years shall be submitted.

**The manufacturer shall ensure that the supplier of the Line Hardware is accredited by the National Association of Testing Authorities (NATA). The NATA certification provides assessment services to a broad range of organisations and industries based on key International Standards. Additionally, The manufacturer to also provide evidence of NATA Certification.**

## **5 Technical Requirements for the 132kV Line Hardware**

### **5.1 Design and Material Requirements**

### **5.2 Galvanising**

All ferrous parts shall be hot dip galvanised as per AS/NZS 4680 and other standard listed.

### **5.3 Mechanical Strength**

Each individual Sag Link shall be capable for withstanding the rated mechanical terminal loads and electromagnetic forces, without effecting the operation and current carrying properties. **The mechanical strength and electrical strength of the Sag Link shall be submitted with the bid.**

### **5.4 Specifications and standards**

The bidder shall provide an original copy of the specification sheet of the Line Hardware and all attachments. The standards used for each aspect shall also be cited.

### **5.5 Marking**

Markings shall be legible, durable and permanent to include the following:

- a) Manufacturer's name or trademark
- b) Specified mechanical load
- c) Routine mechanical load
- d) EFL Stock Code

### **5.6 Type Tests**

The following type tests are required:

- Visual examination
- Verification of dimensions

- Visible discharge tests
- Temperature cycle test
- Mainly active load breaking capacity test
- Mechanical strength tests
- Operational and mechanical endurance test
- Tests for galvanisation of ferrous parts
- Measurement of the resistance of all Line Hardware accessories.
- Operation test

Note: All the above tests shall be conducted as per the relevant IEEE, IEC, ANSI or AS/NZS specification and a copy of the test report shall be furnished along with the tender.

### **5.7 Factory Acceptance Tests**

The EFL reserves the right to witness sample and routine tests at the manufacturing. The bidders shall factor in the entire costs (Visa, air fare, Local Transportation, Hotel, Meals, etc) for facilitating one factory visit by two (2) EFL engineers at the manufacturing facility to witness a mandatory sample and routine tests, as part of the factory acceptance testing of the Line Hardware's, prior to shipment.

## **6 Warranty**

The supplier and/or manufacturer shall provide warranty of a minimum of 3 Years from the date Energy Fiji Limited receives the equipment.

On the contrary, if the bidder cannot warranty for 3 years than a preferred warranty period shall be given by the bidder

## **7 Drawings**

The bidder shall outline dimension drawings for each component, general arrangement drawing showing component layout and a complete drawing of each Line Hardware item with different drawings of variable components.

## **8 Quality and Environment Assurance**

The quality assurance system of design, manufacture, and inspection shall conform to ISO 9001.

Quality assurance certificate according to ISO 9001 issued by an authorized inspection agency shall be submitted with the bid.

The environment management system of manufacture shall confirm to ISO 14001.

Environment assurance certificate according to ISO 14001 issued by an authorized inspection agency shall be submitted with the bid

Bids will not be considered if the manufacturer's experience or quality assurance system does not meet the above requirements.



## 9 Standards

Standards for Line Hardware Accessories		Bidders Response
AS/NZS 4680–2006 And AS 1650	Hot-dip Galvanized (zinc) Coatings on Fabricated Ferrous Articles	
AS/ NZS 7000	Overhead Line Design	
AS 1222	Steel conductors and stays	
As 1222.1	Part 1: Bare overhead - Galvanized (SC/GZ)	
AS 1222.2	Part 2: Aluminum Clad (SC/AC)	
AS 1111.1	ISO Metric Hexagon bolts and screws Product Grade C	
AS 1112.1	ISO Metric Hexagon Nuts Part 1: Style 1 - Product grade A and B Part 2: Style 2 - Product grade A and B Part 3: Product grade C Part 4: Chamfered thin nuts - Product grade A and B	
AS 1214	Hot dip galvanized coatings in threaded fasteners [ISO metric Coarse thread series]	
AS 1275	Metric Screws for fasteners	
AS/NZS ISO 9001:2008	Quality Management Systems - Requirements	

## 10 Witnessing of Tests

The EFL reserves the right to witness all testing. The Supplier shall give EFL reasonable notice of when testing will be carried out and Two (2) EFL engineers to be invited to witness the testing in the factory.

## 11 Compliance

The Supplier shall state in writing that their offer complies with the relevant Standards and this specification. If the Supplier is offering equipment manufactured to an equivalent standard, full details of that standard must be given including a copy written in English.

## 12 Samples

### 12.1 Production Samples

Samples of items may be required during the tender assessment period. Samples would normally only be required from tenderers who have previously not supplied the items to the Purchaser.

### 12.2 Sample Delivery

When samples are required, production samples shall be delivered freight free, suitably packaged and labelled including reference to the Contract Number.

The EFL may at its discretion either purchase the samples at the tendered price or return the samples to the respective tenderer after the contract has been awarded. Samples shall be supplied within 7 days of official request.

## Section 3: Pricing Schedule

### 1 Incoterms

All pricing shall be done on Cost, Insurance and Freight (CIF) basis, delivered to Suva or Lautoka wharf, Fiji.

### 2 Currency

All pricing shall be in USD, AUD, NZD or FJD.

### 3 Taxation

The pricing shall be EXCLUSIVE of any type of taxation that needs to be paid in Fiji.

### 4 Pricing breakdown

The prices quoted will be fixed and NOT variable.

### 5 Validity

The pricing shall be valid for 90 days.

### 6 Price Breakdown

#	Line Hardware	Quantity	Unit Price	Total Price for 100 pieces
1	132kV Sag Link ( 160kN) - (CTSL)	100		
2	Factory Acceptance Testing	2		
			Grand Total	

## Section 4: Bid Documentation

The Bidder shall furnish, as part of the bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

The documentary evidence of the bidder's qualifications to perform the contract of its bid is accepted will establish to the purchaser's satisfaction.

- that the Bidder has the financial, technical, and production capability necessary to perform the contract ;
- That the Bidder meets the qualification criteria listed in Section 2.

### 1 Documents establishing equipment conformity to Bidding documents

The Bidder shall furnish as part of its bid, documents establishing conformity to the bidding documents of the Line Hardware Item, which the Bidder proposes to supply under the contract.

The documentary evidence of conformity of the Line Hardware to bidding documents may be in the form of literature, drawings, and data, and will consist of:

- A detailed description of the essential technical and performance characteristics of the Line Hardware.
- The bidder should specifically mention about furnishing the test certificates and a specimen form of test certificate should be furnished along with the bid.
- A list giving full particulars, including available sources and current prices of spare parts, special tools etc., necessary for the proper and continuing functioning of the materials/equipment following commencement of the use of the Line Hardware by the purchaser; and

- d) A commentary on the purchaser's Technical specifications demonstrating substantial responsive-ness of the Line Hardware and services to those specifications, or a statement of deviations and exceptions to the provisions of the technical specifications.

For purpose of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications, are intended to be descriptive only and not restrictive.

The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in their bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

## 2 Submission Checklist

The following shall be provided in the bid submission:

Particulars	Unit	Requirement	Bidders Response
1. Manufactures name			
2. Place of manufacture			
3. Origin of materials used for manufacturing			
4. Type test certificates provided and sample routine test reports; (Yes/No)		Bidder to state	
5. Item-by-item commentary on the purchaser's <a href="#">Technical specifications</a>			
6. Minimum Failing Load	kN	160kN	
7. Minimum and Maximum Adjustable Lengths (Range)	mm	Bidder to state	
8. Descriptive literature giving full technical details of equipment offered;		Sag link to be Clevis Tongue Sag Link Type. Description details to be provided by bidder	
9. Outline dimension drawing for each component, general arrangement drawing showing component layout;			
10. Detailed reference list of customers already using equipment offered during the last 5 years with particular emphasis on units of similar design and rating;		Bidder to state	
11. Details of manufacturer's quality assurance standards and programme and ISO 9000 series or equivalent national certification;		Bidder to state	
12. Supplier experience details		Bidder to state	
13. Deviations from this specification (if any).		Bidder to state	
14. Certificates of annual failure rate		Bidder to state	
15. Standards Compliance and Listing		Bidder to specify if their product are in compliance with all the compliance listed in Clause 9.	

16. Factory Acceptance Test Plan and Breakdown		2 EFL Engineers	
17. Complying and Completed pricing schedule			
18. NATA Certification		Bidder to state	
<b>Packaging Details</b>			
1. Mass of Sag Link	kg	Bidder to state	
2. Total number of sag link per pallet		Bidder to state	
3. Total weight of pallet and sag link	kg	Bidder to state	

### 3 Submission Requirements

All tenderers are required to complete and submit a copy of the submission requirements with their bid submissions.

Requirements	Response from Bidders
Completed technical details (Clause 5) (Yes/No)	
Witnessing included as part of bid. (Yes/No)	
Validity of bid (90 days required) (Yes/No)	
Payment conditions.	
Delivery Term. (CIF preferred)	
Price review period after award of tender. (months)	
Bidders company profile outlining financial, technical and production capabilities.	
Detailed reference list of customers already using equipment offered during the last 5 years with particular emphasis on units of similar design and rating.	
Quality management system used in the production of line hardware, attached certificate.	
Minimum warranty period from time of acceptance of line hardware.	
Disposal method after service life.	
List of Type test certificates provided. (As per Clause 5.6)	
Sample routine test certificates.	
NATA Certification	

Name of Tenderer: \_\_\_\_\_

Signature of Tenderer: \_\_\_\_\_

Date: \_\_\_\_\_

#### **4 Tender Submission - Instruction to bidders**

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 4<sup>th</sup> September, 2024.**

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](mailto: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.**

## 5 APPENDIX

- Refer attachment drawings.

