



ENERGY FIJI LIMITED

BIDDING DOCUMENT

**MR 100/2026 - SUPPLY OF 132KV
TRANSMISSION MONOPOLE TOWER
EQUIPMENTS, LADDERS AND PLATFORM**

Section 1: Instructions to Bidders

- 1. Scope of Bid**

The Energy Fiji Limited (hereinafter referred to as "the purchaser"), wishes to receive bids for Supply of 132kV Transmission Monopole Tower Equipments, Ladders and Platform.
- 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 132kV Transmission Monopole Tower Equipments, Ladders and Platform 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 132kV Transmission Monopole Tower Equipments, Ladders and Platform.
- 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 9th September, 2026. 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

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 9th September, 2026.
- 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) (9th September 2026). 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.

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 Transmission Monopole Tower Equipments, Ladders and Platform.

2 Scope

This specification covers the design, engineering, manufacturing, testing, and supply of portable strain ladders, suspension ladders, and monopole body support platforms. Monopole body support platform will facilitate safe transition from a steel monopole body to the crossarm during maintenance operations on a 132kV transmission system.

3 Operating & Environmental Conditions (Fiji Tropical Climate)

The Equipments will be stored and deployed in a harsh tropical maritime environment. All components must be designed to withstand the following operational conditions without degradation of safety margins:

- **Ambient Temperature:** 15°C to 45°C.
- **Relative Humidity:** Up to 100% condensing humidity.
- **Atmospheric Corrosivity:** High salinity, heavy salt spray, and prolonged exposure to intense ultraviolet (UV) radiation.
- **Fungal Resistance:** All parts must be chemically treated or naturally resistant to mold, mildew, and tropical fungal growth.
- **Electrical Environment:** Proximity to energized 132kV high-voltage conductors and associated electromagnetic fields.

4 Mandatory Standards & Compliance

The equipment must comply in full with the latest revisions of the following standards:

- AS/NZS 1892.1: Portable ladders - Metal.
- AS/NZS 1665: Welding of aluminium structures (applicable to all structural joints).
- AS/NZS 1576.1: Scaffolding - General requirements.
- AS/NZS 1576.3: Scaffolding - Prefabricated and tube-and-coupler scaffolding.
- AS/NZS 5532: Manufacturing requirements for single-point anchor devices used for harness-based work at height.
- AS/NZS 1170.1: Structural design actions - Permanent, imposed and other actions.
- AS/NZS ISO 9001: Quality management systems – Requirements.

5 Technical Requirements

5.1 Materials & Structural Integrity

- **Structural Material:** High-strength, structural-grade aluminium alloy (6000-series or equivalent) to optimize structural rigidity and minimize manual handling weight.

- Working Load Limit (WLL): Minimum 150 kg rated capacity for a single line worker plus tools.
- Safety Factor: Minimum ultimate safety factor of 3:1 against material yield.
- Deflection Limits: Maximum mid-span deflection under WLL must comply strictly with the limits specified in AS/NZS 1892.1.
- Ergonomics: All rungs must feature an aggressive anti-slip profile. All metallic edges must be deburred and radiused to prevent damage to synthetic fall-protection ropes and PPE.

5.2 Suspension & Strain Ladders (6.0-Meter)

- Overall Length: Exactly 6.0 meters for both suspension and strain ladder variants.
- Crossarm Hook Profile: Top hooks must feature a minimum internal clearance diameter of 320 mm to securely fit over the monopole crossarm.
- Positive Locking Latches: Every crossarm hook must incorporate an integrated, chain safety latch. The latch must lock over the crossarm and require a deliberate, manual manipulation to release.
- Weight less than 6kg.

5.3 Strain Ladder Swivel Mount

- Line-Side Attachment: The line-side hook of the strain ladder must incorporate a heavy-duty, inline swivel mount.
- Articulating Mechanism: The swivel must provide smooth, 360-degree multi-axis rotation under zero-load conditions to facilitate easy conductor capturing and rigging alignment from the crossarm.
- Load Rating: The entire swivel assembly must match or exceed the structural working load limit (WLL) and safety factors of the main ladder body.

5.4 Monopole Support Platforms

- Mounting System: Heavy-duty, universal adjustable chain-binder or ratcheting strap matrix to rigidly clamp onto tapered steel monopole shafts.
- Stability: Platform must remain completely stable without slipping or shifting when subjected to dynamic line worker movements.
- Fall Protection: Integrated, dedicated anchorage points certified for personal fall arrest systems (PFAS).
- Guardrails: Removable or collapsible handrail and toe-board systems complying with standard workspace clearance envelopes.

6 Bidder Technical Submission Requirements

Bidders must submit a highly detailed technical dossier. Failure to provide any of the following items will result in immediate technical disqualification:

6.1 Product Specifications & Documentation

- Fully detailed product datasheets specifying exact physical dimensions, total weight, and material composition charts.
- Clause-by-clause compliance matrix referencing this specification document.

6.2 Traceability Requirements

- Bidders must outline their complete equipment traceability framework.
- Every load-bearing component must be indelibly marked with a unique manufacturer serial number and manufacturing date.

- Traceability records must map directly to raw material batch test certificates.

6.3 Reliability & Failure Rates

- Bidders must submit documented Mean Time between Failures (MTBF) data, Failure Modes and Effects Analysis (FMEA) summaries, or statistical probability of failure rates under maximum rated loads for the equipments.

6.4 Site Visit

- Bidders are required attend a site visit for the visual inspection of the Monopole tower to clarify all ambiguity prior to bidding.
- The site visit will be on Wednesday 26/08/2026 at EFL's Koronubu Substation at 0900 hours.

6.5 Inspection, Testing, and Quality Assurance

- Welding Inspection: 100% visual inspection and non-destructive testing (NDT) via dye penetrant or radiography on all critical structural welds per AS/NZS 1665.
- Type Test Certificates: Destructive and proof-load testing reports certified by a NATA-accredited facility must be submitted.
- Electrical Earthing: Documented provision for temporary grounding/bonding straps to dissipate induced currents safely from the aluminum structure to the monopole earth network.

6.6 Deliverables and Documentation

- As-Built Drawings: Fully dimensioned engineering drawings detailing the 320mm hook profiles and the line-side swivel assembly.
- User Manuals: Step-by-step rigging, handling, inspection, and maintenance instructions.
- Certificates of Conformance: Issued per serial-numbered batch detailing the unique ID, WLL, test dates, and manufacturing compliance tracking.

7 Commercial Terms & Pricing Validity

- **Price Validity:** All quoted prices must remain firm and **valid for a minimum of ninety (90) days** from the closing date of the tender submission.
- **Currency:** Rates must be clearly broken down into unit pricing, freight/delivery (CIF Lautoka).

8 Routine Inspection, Tagging, and Asset Management

To ensure operational readiness and compliance with safety frameworks, the Equipments, Ladders and Platform shall adhere to a strict inspection protocol designed for high-humidity utility environments:

- **Line worker Pre-Use Check:** All mechanical components must be visually checkable through a rapid-access layout that allows line workers to confirm functional readiness within 60 seconds prior to ascending the monopole.
- **Service Life Limits:**
 - **Soft Goods:** All synthetic textile components (rope, slings, webbing) must have a clearly stated maximum service life of no less than **10 years** from the date of manufacture.
 - **Hard Goods:** Metallic hardware components shall have an indefinite service life, provided they pass visual and mechanical inspection criteria.

9 Warranty Requirements for Tropical Storage

Due to the accelerated degradation risks associated with Fiji's tropical climate (high salinity, UV exposure, and condensation), the following warranty terms apply:

- **Warranty Period:** Bidders must provide a comprehensive, unconditional manufacturer's warranty of not less than three (3) years (36 months) from the date of delivery.
- **Scope of Warranty:** The warranty must cover full replacement costs for any component exhibiting premature corrosion, material pitting, degradation of UV coatings, fungal rotting, or mechanical seizing under standard storage and operational conditions.
- **Storage Preservation:** Bidders must specify any unique climate-controlled storage parameters or protective measures required to maintain warranty validity when the equipment's are housed in regional utility depots.

10 On-Site Line worker Training and Certification

The supplier is required to deliver a comprehensive competency framework to ensure local crews can use the equipments, ladders and platform as required:

10.1 Practical Training Course

- **Delivery:** The Supplier must deliver a hands-on, practical competency course for a designated number of utility personnel (e.g., line mechanics and trainers).
- **Location:** Conducted at a utility-approved training yard or a de-energized facility featuring a compatible 320mm crossarm monopole structure.
- **Duration:** Minimum of 1 full day of practical field execution covering rigging, transition, and rescue operations.

10.2 Training Materials Package

The Supplier must supply comprehensive instructional packages in digital (editable PDF) and physical formats, including:

- **Participant Guides:** Step-by-step illustrated field manuals for rigging and field assembly.
- **Instructor manual:** Presentation slides, lesson plans, and practical assessment checklists.
- **Video Media:** High-definition instructional videos demonstrating the correct engagement of the 320mm locking hook and the setup of the line-side swivel mount.

10.3 Core Competency Units

The training framework must verify that every participant achieves proficiency in the following core areas:

10.3.1 Pre-Use Inspection & Care

- **Structural Checks:** Identifying hairline cracks in structural welds (AS/NZS 1665), deep gouges, or bending along the 6.0-meter aluminium ladder beams.
- **Mechanism Verification:** Testing the positive-locking safety latches on the 320mm crossarm hooks to ensure automatic locking.
- **Swivel Maintenance:** Checking the 360-degree rotation of the line-side swivel mount for smooth multi-axis tracking under zero load.
- **Platform Inspection:** Verifying the integrity of the chain-binder/ratcheting strap matrix and dedicated PFAS anchor points (AS/NZS 5532).

10.3.2 Safe Rigging & Handling

- **Manual Handling:** Safe techniques for lifting, maneuvering, and positioning the 6.0-meter ladders without causing structural deflection or dynamic impact loads.
- **Monopole Attachment:** Proper clamping of the support platform onto tapered steel monopole shafts to prevent slipping.
- **Electrical Bonding:** Correct installation of temporary grounding/bonding straps to mitigate induced voltage risks from adjacent parallel 132kV circuits.

10.3.3 Field Operation & Transition

- **Crossarm Transition:** Safe transition procedures for a line worker moving from the monopole body platform onto the 6.0-meter suspension or strain ladder.
- **Line-Side Capturing:** Utilizing the line-side swivel mount to properly align and capture the conductor from the crossarm.
- **Fall Arrest Integration:** Continuous 100% tie-off configurations using personal fall arrest systems throughout the entire climbing and transitioning sequence.

10.3.4 Emergency Response & Rescue

- **Rescue Rigging:** Setting up dedicated rescue lines and escape systems directly from the platform or crossarm hooks.
- **Recovering Casualties:** Practical execution of recovery protocols for a suspended or incapacitated line worker on a 6.0-meter ladder section.

10.3.5 Compliance & Certification Standards

The training framework must align with the following frameworks:

- **AS/NZS 1891.4:** Industrial fall-arrest systems and devices - Selection, use and maintenance.
- **AS/NZS ISO 9001:** Verification that training tracking and assessment records conform to quality assurance processes.
- **Competency Assessment:** Line workers must pass both a written theory exam and a physical field assessment before receiving a Certificate of Competency.

Section 3: Pricing Schedule

11 Price Breakdown

#	Description	Quantity	Unit Price	Total Price
1	Strain Ladder 6m	4 sets		
2	Suspension Ladder 6m	4 sets		
3	Monopole Tower Support Platform	3 sets		
4	Training and Certification of Personnel	72		
			Currency	
			Grand Total	

Note: Bidder to provide additional accessories required for the Equipment's that is not included in the specifications with technical details submitted with the bid.

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.

Price submitted is to be in bidders currency to CIF Lautoka

Tender Evaluation Criteria

The following shall be provided in the bid submission:

No.	Criteria	Points	Requirement	Bidders Response
1.	Ambient Temperature	10	15°C to 45°C.	
2.	Relative Humidity	10	Up to 100% condensing humidity.	
3.	Atmospheric Corrosivity	10	High salinity, heavy salt spray, and prolonged exposure to intense ultraviolet (UV) radiation.	
4.	Fungal Resistance	10	must be chemically treated or naturally resistant to mold, mildew, and tropical fungal growth.	
5.	Electrical Environment	10	Proximity to energized 132kV high-voltage conductors and associated electromagnetic fields.	
6.	Written commitment to the standards specified	50	AS/NZS 1892.1, AS/NZS 1665, and AS/NZS 1576.1/.3. AS/NZS 1892.1, 1665, 1576.1, 1576.3, 5532, 1170.1, ISO 900 and AS/NZS 1891.4	
7.	Hook Dimensions	10	Crossarm hook has a minimum internal clearance diameter of exactly 320mm .	
8.	Ladder Length	10	Both suspension and strain ladders are exactly 6.0 meters in length.	
9.	Hook & Latch Engineering	10	Robustness, reliability, and dual-action mechanism of the spring-loaded positive locking crossarm latch.	
10.	Line-Side Swivel Mount	10	Smoothness, 360-degree articulation under zero load, and structural integrity of the strain ladder swivel assembly	
11.	Platform Mounting	10	Ease of use, flexibility, and anti-slip stability of the chain-binder or ratcheting strap system on tapered poles.	
12.	Weight & Ergonomics	10	Strain and suspension ladders less than 6kg	
13.	Product Specifications & Documentation	10	Fully detailed product datasheets specifying exact physical dimensions, total weight, and material composition charts. Clause-by-clause compliance matrix referencing this specification document.	
14.	Traceability Requirements	10	Bidders must outline their complete equipment traceability framework.	

			Every load-bearing component must be indelibly marked with a unique manufacturer serial number and manufacturing date. Traceability records must map directly to raw material batch test certificates.	
15.	Reliability & Failure Rates	10	Bidders must submit documented Mean Time Between Failures (MTBF) data, Failure Modes and Effects Analysis (FMEA) summaries, or statistical probability of failure rates under maximum rated loads	
16.	Site Visit	10	Bidders are required attend a site visit for the visual inspection of the Monopole tower to clarify all ambiguity prior to bidding.	
17.	Price Validity	20	Minimum of ninety (90) days from the closing date of the tender submission	
18.	Currency	20	Rates must be clearly broken down into unit pricing, freight/delivery (CIF Lautoka).	
19.	Lineworker Pre-Use Check	10	All mechanical components (descender and pulleys) must be visually checkable through a rapid-access layout that allows lineworkers to confirm functional readiness within 60 seconds prior to ascending the monopole.	
20.	Service Life Limits:	10	Metallic hardware components shall have an indefinite service life, provided they pass visual and mechanical inspection criteria.	
21.	Warranty Period	10	Bidders must provide a comprehensive, unconditional manufacturer's warranty of not less than three (3) years (36 months) from the date of delivery and commissioning.	
22.	Scope of Warranty	10	The warranty must cover full replacement costs for any component exhibiting premature corrosion, material pitting, degradation of UV coatings, fungal	

			rotting, or mechanical seizing under standard storage and operational conditions.	
23.	Storage Preservation	10	Bidders must specify any unique climate-controlled storage parameters or protective measures required to maintain warranty validity when equipments are housed in regional utility depots.	
24.	Training and Certification	50	Provide on site training in Fiji for 72 personnel.	

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: _____

12 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 09th September, 2026.

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.

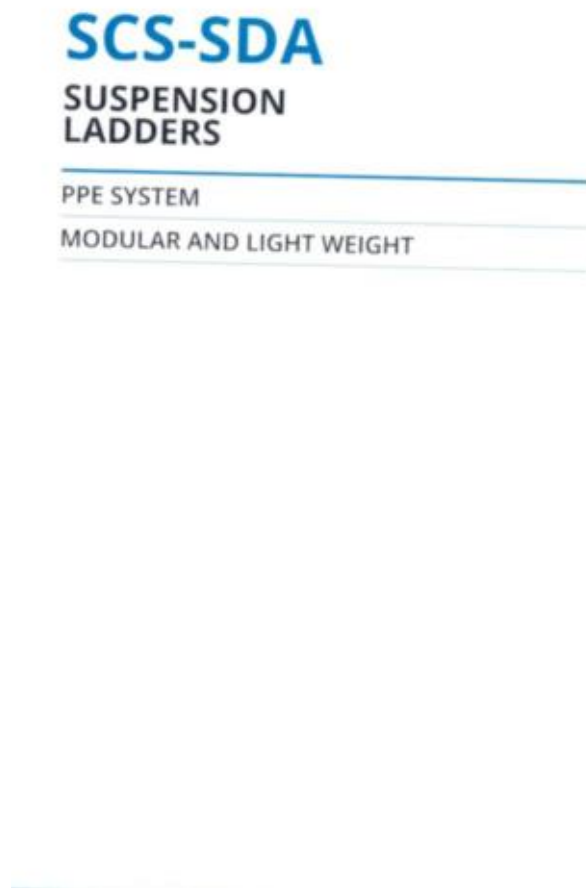
The Tender Bids particularly the “Price” must be typed and not hand written.

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.

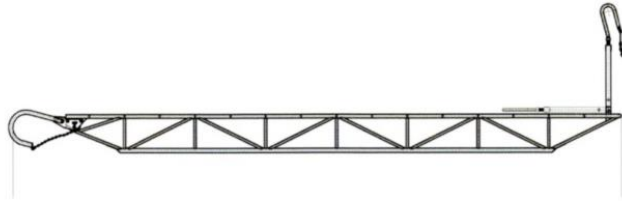
Tender Submission via email or fax will not be accepted.

APPENDIX - Images for Reference

1. Suspension Ladder



2. Strain Ladder



SCA ANCHORING LADDERS

LIGHT WEIGHT PLATFORM

EASY TO HANDLE

CONFIGURATION

Specifically designed for anchoring works. The ladders are made of light aluminium alloy, with anti-slippery rungs and with galvanized steel suspension hooks.

The ladders are supplied with a supplementary swivel hook to be located on the conductor, which allows the ladder to be used in horizontal position. The ladders are available with triangular or trapezoidal section.

3. Monopole Support Platform

