



**ENERGY FIJI LIMITED  
INVITATION TO TENDER**

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**Specialist Consultancy Services for 132kV  
Transmission Tower Slippage  
Rehabilitation Works at T104 on the  
Wailoa-Cunningham Line.**

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**Tender No: MR 122/2024**



## LETTER OF INVITATION

Reference: 122/2024

4<sup>th</sup> April 2024

Dear Sir/Madam,

Subject:

1. You are kindly requested to submit a comprehensive proposal for the Specialist Consultancy Services for Slippage rehabilitation works caused at the river bank which is close to the Lattice Tower legs along the 132kV Wailoa - Cunningham Transmission Line at tower T104, as specified in these bidding Documents and Scope of Works.
2. This proposal will cover the required reinforcement works – refer Annex I, Annex II and Annex V.
3. To enable you to submit a proposal for the services, please find enclosed:
  - a. Annex I: Instruction to bidders
  - b. Annex II: Introduction and Background
  - c. Annex III: General Conditions: FIDIC White Book 2017
  - d. Annex IV: Schedule Rates & Price
  - e. Annex V: Scope of Works
  - f. Annex VI: Service Conditions & Standards
  - g. Annex VII: Tender Check List & Submission

This letter is not to be construed in any way as an offer to contract with your firm/company.

### Site Visit

All interested bidders must attend a **compulsory site visit** as follows:

**Location: EFL Kinoya Depot for briefing, then to T104 site at Naqali, Naitasiri**

**Date: 10/04/24**

**Time: 9.00am**

**Contact Person: Kausheel Charan**

**Phone: 8915712**

**Failure to attend compulsory site visit will result in tender being disqualified.**

All tenderers shall inspect and examine the site, its surroundings, and shall satisfy themselves before submitting the tender bid, as to the nature of the work and necessity for carrying out the contract work.

All bidders must come in proper PPE for the site visit. Safety or closed shoes is encouraged.



**ANNEX I**  
**A. INSTRUCTIONS TO BIDDERS**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

## 1. Introduction

Energy Fiji Limited (“EFL”) is a limited liability company that was established under the Companies Act (2015), Laws of Fiji. It is supervised by a Board of Directors comprising a Chairman and representatives from its shareholders.

The Executive Management team of EFL consists of the Chief Executive Officer, Chief Finance Officer, General Manager Human Resources, General Manager Generation, General Manager Network, General Manager Customer Services, General Manager System Planning and Control, General Manager Special Projects and Chief Information Officer.

EFL is primarily responsible for generation, transmission and distribution of electricity in Viti Levu, Vanua Levu, Ovalau and Tavueni in Fiji. It owns over twenty (20) power stations and twenty (20) substations and switching stations on the islands of Viti Levu, Vanua Levu, Taveuni and Ovalau. EFL owns, operates and maintains a network of 147km of 132kV transmission lines, 576km of 33kV lines and over 10,000km of 11kV and 415V distribution lines, as at 31st December 2023.

Energy Fiji Limited (EFL) is hereby inviting Comprehensive Proposal for the Specialist Consultancy Services of slippage rehabilitation works caused at the river bank which is close to the Tower Legs on the 132kV Wailoa - Cunningham Transmission Line at tower T104, as specified in these bidding Documents and Scope of Works at Viti Levu.

## 2. Acknowledgement and/or Withdrawal

2.1 Immediately upon receipt of this tender, if you intend to submit a proposal, you must send an email message to EFL’s Contract Officer (Clause 6) advising who your contact person will be.

2.2 If at any point when considering this tender, you decide your organization is unable to respond or continue with this invitation, please contact the EFL Contract Officer (as shown in Clause 6) as soon as possible. This will enable EFL to evaluate the effects of such a withdrawal upon our procurement process.

## 3. Timetable

3.1 The following is our proposed timetable for this tender

06/04/24                      Issue of tender

17/04/24                      Closing Date

1 Month from Closing Date    Final Evaluation and Selection of contractor (if any).  
Negotiation with contractor will take place after this date.

6 Months from Closing Date    Proposal must remain open for acceptance by EFL.

3.2 Please note this timetable is indicative only and may be subject to change at the sole discretion of EFL. EFL will notify participants of any changes. Fiji Public Holidays are to be excluded for consideration days.

## 4. Circulation of Tender

This tender has also been sent to those potential vendors that we believe could meet our requirements. EFL does not intend to disclose the identity of organizations that have responded to this tender.

## 5. Delivery of Proposals and Contact Details

5.1 All proposals to be received by 1600hrs , 17/04/24

Submission of proposals are to be done through EFL Tender link Portal - <https://www.tenderlink.com/efl>

5.2 Tender will be in two (2) Proposals:

- Proposal 1 will be your Technical Solution
- Proposal 2 will be your Commercial Submission

## 6. Further Communications

- 6.1 All communications as to this tender, or requests for clarification or further information, should be directed to EFL's Contracts Officer (CO);
- Jitendra Reddy  
Manager Procurement, Inventory & Supply Chain  
2 Marlow Street, Suva, FIJI.  
Phone: 679 3222320  
Email: [JReddy@efl.com.fj](mailto:JReddy@efl.com.fj)
- 6.2 At any time, additional discussions to clarify details in a Proposal may be required. As a matter of principle:
- 6.2.1 If such matters affect the content or interpretation of the terms or specifications in our tender, all Contractors will be advised without indicating the source of the query and the registered Contractors will be sent a formal Notice to Contractors (NTC). All NTC's issued will become part of this tender;
- 6.2.2 If the discussion relates only to a proposal being made by an individual Contractor, any matters raised will not be discussed with other Contractors.
- 6.3 EFL will not be bound by any statement, written or verbal, made by any person other than the CEO. The CEO (or any other person authorized by CEO) is the only person authorized to make representations or explanations to Contractors as to this tender.

## 7. Confidentiality of Information

- 7.1 The information supplied by EFL (either itself or through its agents or advisors) in connection with this Proposal or any contract that that may arise out of it, is confidential. The information contained in this tender is provided for the sole purpose of allowing you to submit your Proposal to EFL. The information contained in this tender is not to be used for any other purpose or revealed to any other person or party not directly involved in the submission of your proposal. You are responsible for any unauthorized disclosure of such information by your employees, agents and sub-contractors.
- 7.2 You must not release or disclose any of the information to any other person (other than your employees or advisors), without the prior written consent of EFL.
- 7.3 You may not make any public statements to third parties or release any information to the press or other media in relation to this tender, its contents, your response to it, or the awarding of any consequential contract without the written permission of our CEO or his delegate.
- 7.4 EFL will keep Proposals received confidential except if the information is needed for the day to day running of EFL's business.

## 8. Proposal Validity Period

Your Proposal must be continuing and irrevocable and open for acceptance for 6 months (**180 Days**) from the closing date.

## 9. Bid Clarification

You may be asked to clarify your bid or provide additional information during the Proposal evaluation process. These requests will require prompt action and you must respond in writing within two business days or the time specified in the request. Otherwise, EFL reserves the right not to consider your Proposal.

## 10. Representations

In submitting your Proposal in response to this tender, you are required by EFL to acknowledge specifically in your Proposal, that:

"Energy Fiji Limited may rely upon all representations made by you, in your Proposal and in conjunction with your Proposal to Energy Fiji Limited, whether such representations are expressed or implied, or given in writing or verbally. At Energy Fiji Limited's sole discretion, such responses may form part of any consequential contract to be entered into".

## **11. No Canvassing**

All communications concerning this tender should be with the Contracts Officer only. You should not directly or indirectly lobby or attempt to influence any EFL employee or Board member or advisor in relation to this Proposal. Should you directly or indirectly make such an approach then you may be disqualified from the Proposal.

## **12. Propriety Rights**

You must certify to EFL that any proprietary products or services, supplied with, or required by, the solution you propose are products or services over which you or your associated third party hold rights to supply and such right will continue to be available to EFL under license or other agreement and that for this purpose you may be required to disclose details of all relevant contracts with your suppliers and sub-contractors.

## **13. Acceptance of Proposals**

13.1 EFL reserves the right to:

- Reject any or all Proposals at its sole discretion and not accept the lowest Proposal or any Proposal;
- Award separately for each scope of works depending on submissions/offers received;
- Deal separately with any of the divisible elements of any Proposal, unless the relevant Proposal specifically states that those elements must be taken collectively;
- Re-call the Proposal;
- Waive any irregularities or informalities in the tender process;
- Amend the closing date, the acceptance date or any other date in the Proposal documents;
- Amend this tender, or any associated documents, by the issue of a written amendment notice to each supplier;
- Seek clarification of any Proposal;
- Suspend or cancel, (in whole or in part), this Proposal process;
- Meet with any Contractor after Proposal close and prior to placing any order;
- Consider or reject any alternative Proposal, in EFL's sole discretion.

13.2 EFL Proposal will only be deemed to have been accepted or rejected when the fact of acceptance or rejection has been notified in writing to you by EFL. Prior to such written notification, by submitting a Proposal to EFL, you acknowledge that you are owed no legal or tortious obligations by EFL.

## **14. Late Proposals**

EFL reserves the right to accept or decline late Proposals at any time at EFL's absolute discretion. Should the decision to accept late Proposals be made prior to the notified Closing Date above, all Contractors shall be advised of the extended deadline for submitting or re-submitting their Proposals.

## **15. Changes to the Tender**

15.1 EFL reserves the right to vary the requirements of this tender. Nothing in this tender or any subsequent communication or correspondence (taken individually or collectively) prior to our contract(s) being executed with the successful Proposal(s) will in any way bind EFL or impose any obligation on EFL.

15.2 EFL reserves the right to amend this tender in order to correct errors, rectify omissions or discrepancies. EFL also reserves the right to withdraw this tender at any time before the bid date and to accept any bid and to reject any or all bids for any reason and without cause.

15.3 EFL makes no representations and gives no warranties as to the information provided to you. You must examine this tender yourself, and make all other investigations you consider necessary (including as to the information provided by EFL in relation to this tender), before submitting your Proposal.

15.4 EFL accepts no responsibility for any error or mis-description in this tender, or any associated documents.

## **16. Amendments to your Proposal**

- 16.1 EFL is under no obligation to check any Proposal for errors. Acceptance of a Proposal that contains errors will not invalidate any subsequent contract.
- 16.2 We may require you to document any amendment to your Proposal or to re-submit a revised Proposal prior to the execution of any contract between you and EFL.

## **17. Information Complete and Accurate**

- 17.1 By submitting your Proposal you warrant that all information provided by you to EFL or the CO, in or in relation to your Proposal is complete and accurate in all material respects. You also warrant to EFL that the provision of that information to EFL, and the use of it by EFL for the evaluation of your Proposal and for the negotiation of any resulting contract, will not breach any third party intellectual property rights.
- 17.2 The bidder should provide the response in compliance to the requirements and any non-compliance or over compliance must be clearly and elaborately explained for it to be considered in the evaluation. There is no assurance that EFL will consider any explanations for non-compliance and the bid may be rejected on account of such non-compliance, unless it is submitted as an alternate to the specified requirements in the best interest of EFL.
- 17.3 By submitting your Proposal, it shall be deemed that you have understood the specifications / scope and no claims on the grounds of 'lack of knowledge' will be accepted.

## **18. Ownership of Tender and Proposed Documents**

The tender documents are the property of EFL and may not be copied or reproduced in any way (other than for the purposes of preparing and submitting your Proposal) without the prior written approval of EFL.

## **19. Status of Discussions and Communications**

Unless as stipulated in this tender, no contractual negotiations, decisions or actions are to be initiated by you as a result of discussions with any of our employees or any other person purporting to act on our behalf. Only communications in writing from EFL which are signed by authorized individuals, can be regarded as duly authorized expressions on behalf of EFL.

## **20. Evaluation Criteria**

The main points or selection criteria for comparative analysis and objective assessment of the Contractor's ability to perform the contract is as follows:-

EFL reserves the right to apply any weighting to the criteria

### **20.1 Technical Solution:-**

- Information about your organization / Company profile
- Reference customers that is similar to this tender
- Ability to supply required service in a timely manner
- Registrations – Company registration / business license, FNPF Compliance, VAT Compliance, FNU Compliance

### **20.2 Commercial Solution:-**

- Pricing VIP in Fijian Dollars
- Price validity
- Delivery time
- Work Schedule
- Milestone Payment
- Acceptance of EFL's 180-days term

## **21. Results of this Tender Action**

On completion of our evaluation stage, EFL expects to either:

- 21.1 Enter directly into negotiation(s) with a preferred Contractor(s); or
- 21.2 Seek further Proposals; or
- 21.3 Terminate our tender process

## **22. The Successful Bidder**

The successful bidder will be expected to carry out the whole project as stipulated in the scope of works within a period of 4 weeks or less, from the time a purchase order is issued.

### **22.1 Eligible Bidders**

The bidder shall demonstrate that they have the relevant Engineering Design and Project Construction Phase experience in Electrical High Voltage, Transmission Lines, Transmission Towers and general Civil and Structural Engineering, with particular reference to the Design and Construction Phase project supervision of Monopole type power transmission structures, Lattice Type Transmission Towers, High Voltage Electrical Transmission Lines, with specific demonstrated experience and capability in the design of similar structures in a tropical environment.

Documented evidence of suitable relevant experience shall be provided with the tender bid including project details and names of referees who can be contacted for verification.

Bidders with relevant technical expertise and demonstrated experience in the Power Transmission Industry with a firm understanding of technical compliance requirements of relevant AS/NZS, IEC, IEEE, and ANSI standards.

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

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent practice.

### **22.2 Proposed Personnel**

Provide relevant details of (and attach CVs for):

- Proposed Director in active charge.
- Proposed Electrical Engineer(s) tasked to carry out the Electrical High Voltage Engineering Consultancy for Owners Engineers role during the Construction Phase of this project
- Proposed Civil Engineer(s) tasked to carry out the Civil Engineering Consultancy for Owners Engineers role during the Construction Phase of this project
- Proposed Structural Engineer(s) tasked to carry out the Structural Engineering Consultancy for the Owners Engineers role during the Construction Phase of this project
- Proposed Technical support personnel to carry out Electrical High Voltage Engineering, Civil Engineering and Structural Engineering inspections, witness tests, sign off and certify works, attend site meetings and provide technical support during the Construction Phase of this project
- Proposed support personnel.

Details should include relevant experience, proposed role statements and an organizational chart for your team showing links to the Client, The Project Manager, The Design Consultants and any other relevant parties. Please concentrate on relevancy of information and be succinct.

### **22.3 Assessment Criteria**

The following Assessment Criteria are also subject to review as a part of the submission. The submissions should provide specific statements and details with regard to the following:

- Task Appreciation: 20%
- Relevant Experience 30%
- Proposed Personnel 20%
- Tender Bid Price 30%

Bidders shall note that the evaluation scoring will include evaluation of Task Appreciation, Relevant Experience, and Proposed Personnel for Deployment. Bidders shall note that the evaluation scoring will include evaluation of Quality Assurance, HSE Compliance, Past Records of Safety and Quality

#### **22.4 One Bid per Bidder**

Each bidder shall submit only one bid either by itself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.

#### **22.5 Cost of Bidding**

The bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for those costs.

#### **22.6 Tender submission**

Tenders shall be submitted in the following manner: -

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

**Energy Fiji Limited 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 17/04/2024.**

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.**

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.**

#### **22.7 Insurances**

Certificates of following valid insurances are mandatory for bidders:

1. Public Liability : FJD 1M
2. Professional indemnity : FJD 5M

#### **For Companies Registered in Fiji**

- Companies must comply with the Fiji Income Tax and the Value added tax regulation.
- Provision of valid Tax Compliance Certificate.
- Provision of valid FNPF Compliance Certificate.
- Provision of insurance policies – Public Liability
- EFL will deduct 5% from supplier payment and remit to FRCS as provisional Tax under new tax administration decree.



**For Companies Registered Offshore**

A Withholding Tax (“WHT”) of 15% will be deducted by the employer on the service component before making the payment to the contractor. The employer (EFL) will provide to the Contractor a WHT deduction certificate for any WHT deducted by the Employer, where applicable.



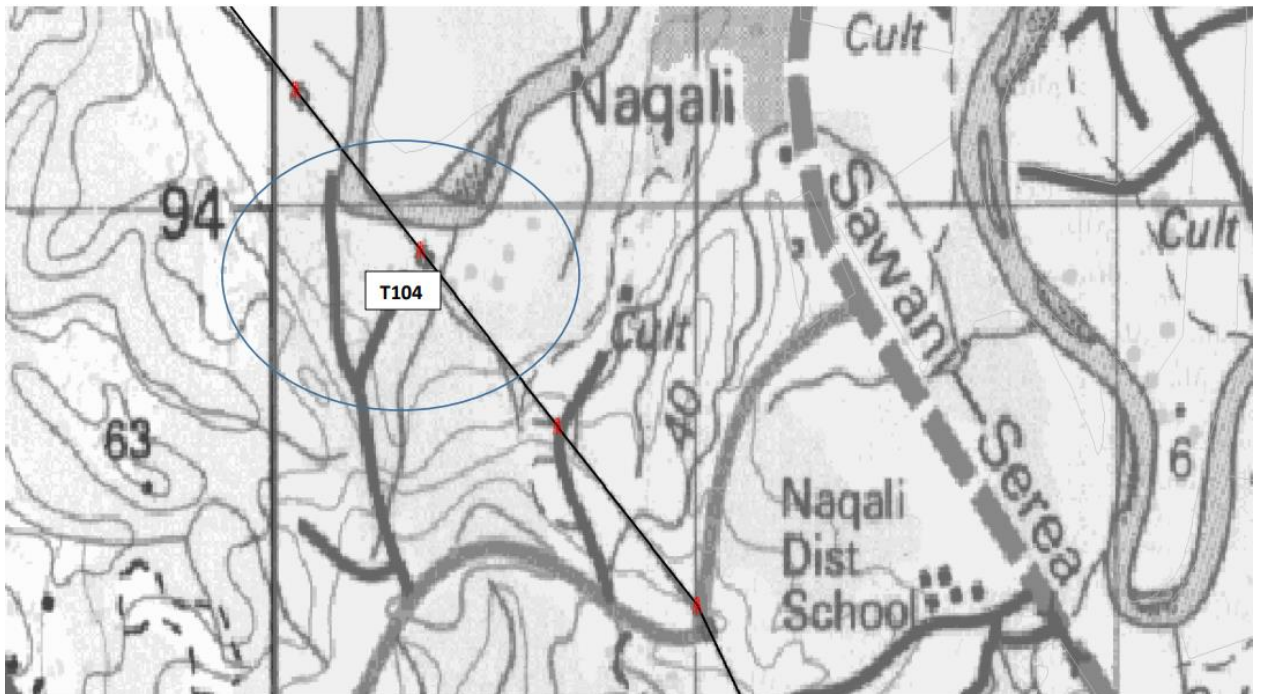
**ANNEX II**  
**B. INTRODUCTION & BACKGROUND**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

**1. INTRODUCTION & BACKGROUND**

The Energy Fiji Limited (EFL) is a limited liability company, which is solely responsible for generating, transmitting, distributing and retailing electricity in the Republic of Fiji Islands.

The EFL has undertaken major refurbishment works on its aged Transmission Lines. An Specialist Consultant is required to execute slippage rehabilitation works near a river bank that has exposed the foundations of a 132kV Suspension Tower T104 on 132kV Wailoa-Cunningham Transmission Line. The Suspension HSL+9 Tower have served a life span of more than 40 years

**Locality Plan**





**ANNEX III**  
**C. CONDITIONS OF CONTRACT**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

## **CONDITIONS OF CONTRACT FOR CONSULTANCY SERVICES**

The Conditions of Contract For Consultancy Services, for the Owners Engineer Contract shall be based on the FIDIC Client / Consultant MODEL SERVICES AGREEMENT, Fifth Edition 2017.

Published by The International Federation of Consulting Engineers (FIDIC)

Copies of the FIDIC Client / Consultant MODEL SERVICES AGREEMENT, Fifth Edition 2017 can be obtained from:

FIDIC Secretariat P.O. Box 86 1000 Lausanne 12 Switzerland

Facsimile: 41 21 653 5432

Telephone: 41 21 653 5003.

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**ANNEX IV**  
**D. SCHEDULE RATES AND PRICES**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

### Basis for Remuneration

Submit a fixed price , lump sum fee proposal for this project, in Fijian Dollars with all applicable duties, taxes, withholding taxes included and clearly identified.

Submit the tender bid price as per the bid price schedule, Bidders Returnable

Schedules of this document.

**In addition to the above fixed lump sum fee, the consultant shall all confirm hourly rate[s] applicable for all resources intended to be used in this project.**

- All disbursements including where applicable costs for communications, printing, air fares,
- Accommodation and expenses shall be clearly identified as being included or excluded. In addition
- Provide rates per person, per trip for air fares, accommodation and expenses as applicable.

### Price Schedule

| No.                         | Scope of Work  | Price | Currency |
|-----------------------------|--|-------|----------|
| 1.                          | <b>Preliminary &amp; General</b>   |       |          |
| 2.                          | Site Visit, Tower Foundation Load Calculation and necessary test as required.                |       |          |
| 3.                          | Draw up a Procedure and Methodology for the rectification of slippage near tower foundation. |       |          |
| 4.                          | Draw a Tender Specification for the rectification Works                                      |       |          |
| 5.                          | Assist in the Tender Evaluation for the Repair Works   |       |          |
| 6.                          | Carry out the Supervision of the Complete Project  |       |          |
| 7.                          | Provide the Work Completion Certificate  |       |          |
| <b>Total Lump Sum Price</b> |  |       |          |

| <b>1.0</b> | <b>Day Works Rates (All sites)</b> | <b>Unit</b> | <b>Hourly Rate</b> |
|------------|------------------------------------|-------------|--------------------|
| <b>1.1</b> | <b>Project Director</b>            | <b>hr.</b>  |                    |
| 1.2        | Principal Electrical Engineer      | hr.         |                    |
| 1.3        | Principal Civil Engineer           | hr.         |                    |
| 1.4        | Senior Structural Designer         | hr.         |                    |
| 1.5        | Electrical Engineer                | hr.         |                    |
| 1.6        | Civil Engineer                     | hr.         |                    |
| 1.7        | Electrical Technician              | hr.         |                    |
| 1.8        | Civil Technician                   | hr.         |                    |
| 1.9        | Drafts Person                      | hr.         |                    |
| 1.10       | Works Supervisor                   | hr.         |                    |

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**ANNEX V**  
**E. SCOPE OF WORKS**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

**1. Objectives of The Owners Engineer Consultancy Role:**

The purpose of Specialist Consultancy Services is to provide specialist supervision, recommendations, specialist construction phase technical support and regular reporting of the sites, for the project to ensure the project is completed to the functional requirements, technical specifications and design intent.

Attend Factory Acceptance Tests if any (at off shore locations from Fiji or within Fiji) as required to ensure that materials and/or equipment is certified to comply with the requirements of the specifications prior to shipment to site.

Attend regular testing and witnessing of works in site throughout the construction process and provide signed documentation for each of the events so witnessed.

Attend final testing and commissioning of all of the works provided by the Construction Contract.

Provide final sign-offs to certify the works are constructed and commissioned to the intent of the drawings and specifications.

**2. Scope of Works for Specialist Consultancy Services For This Project:**

- a. The Specialist Consultants shall perform the following tasks as a minimum. Other tasks as necessary to provide the complete intent and outcome may be added to this list of tasks as necessary:
  - i. Mobilize necessary equipment, resources, personnel, transport and other logistics to maintain an adequately resourced office for the operational activities of the Specialist Consultancy,
  - ii. Have the necessary administrative compliance documents in place including Fiji business license, Fiji Tax Compliance, Fiji FNPF Compliance, Professional Indemnity Cover, Public Liability cover, National Fire Authority Compliance for premises and other necessary legal and operational requirements. It is anticipated that the bidders will partner up and / or form joint ventures with competent local counterparts to provide the deliverables for this project
  - iii. Have in place necessary work permits and visas, as required, for foreign nationals working on this project.
- b. Engineer to Contract, Project Management and Quality Assurance for Slippage Rectification works on the Tower 104 Foundation:
  - I. Carry out site visit and review all existing tower details available with EFL.
  - I. The Specialist Consultant is required to thoroughly study and understand the content of all documentation forming part of the this tender and issue drawings, technical specifications, after jointly discussion with EFL.
  - II. Calculate the Foundation Load on Tower 104. The above information will be used to determine how to rectify the slippage near the tower legs.

- III. Design the Detailed Solution for rectification works for the Foundations. Draw up a Procedure or Methodology for the Repair works without 132kV Line Outage.
- IV. All the associated works must be planned in such a way that there is no Line Outage. Exception of a Reclose Block can be arranged by Energy Fiji Limited under the Guidance of EFL's Live Line Personnel.
- V. Prepare Tender Specification with necessary design for the repair Works
- VI. Assist in the Tender Evaluation for the Repair Works
- VII. Carry out the Supervision of the Complete Project Confirmation on the Methodology being used Verification as per the Consultant's Design
- VIII. Provide the Work Completion Certificate to Energy Fiji Limited
- IX. Inspections upon project completion and Any / All other professional duties to be performed as required by the Consultant or any relevant duties assigned by the EFL.
- X. Verification of the contractor's site activities and ensuring compliance to specifications and approved procedures
- XI. Verification of the contractor's records of environmental conditions
- XII. Works to be carried out according to AS/NZS or any relevant IEC standards to ensure compliance to the specifications.
- XIII. Consider the impact of climate on building design when constructing any structure.

### **3. Review of All Documentation Forming Part of the Construction Contracts:**

- I. The Consultant Engineer is required to thoroughly study and understand the content of all documentation forming part of the works and the requirement of EFL. This includes the tender original tower drawings, technical specifications and standards.
- II. The Consultant Engineer will be required to submit a report summarizing their understanding of the project documentation that they will be responsible for ensuring the delivery of the construction phase.

### **4. Participate In Regular Site Meetings and Project Control Group Meetings:**

- I. It is anticipated that there will be fortnightly at a minimum or more frequently as required, meetings held on site or EFL office, with the contractors. The Consulting engineer will be required to attend these meetings and provide their input as required into these meetings. The meetings will be chaired, conducted and recorded by the EFL Engineer.

### **5. Inspect and Sign Off Works On:**

- I. Provide regular site inspections at sites as and when required by the Construction Contractor(s) to inspect Civil Works, Structural Works, Electrical High Voltage Works and any other works associated with this project. Consultant shall provide detailed photos, defects and covering report for site inspection visit.
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- II. Provide Structural Engineering, Civil Engineering, Electrical Engineering and other Engineering Sign offs from suitably qualified and experienced engineers who hold valid corporate membership of the Fiji Institution Of Engineers (FIE) or any recognized international Engineering body (as appropriate for Structural Engineering and Civil Engineering)
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**ANNEX VI**  
**F. SERVICE CONDITIONS & STANDARDS**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

### 1. Reference Conditions:

The following environmental conditions are applicable to this site.

- i) Elevation above mean sea level      50 metres
- ii) Average barometric pressure      1012 mBar
- iii) Ambient air temperature
  - Design Temperature      35 Deg C
  - minimum      14 Deg C
  - maximum      40 Deg C

- iv) Relative Humidity
  - Maximum relative humidity      95%
  - Minimum relative humidity      70%

- v) Seismic Condition

All equipment shall be capable of withstanding an acceleration of 3.3 m/sec<sup>2</sup> in any direction without sustaining any damage.

The temperature of the fresh water supply is always less than 30 ° C at the site. The following is an analysis of the supply water available:

|   |                               |
|---|-------------------------------|
| pH  | 8.3                           |
| Alkalinity  | mg CaCO <sub>3</sub> /Ltr68.2 |
| Chloride  | mg/Ltr7.3                     |
| Sulphate  | mg SO <sub>4</sub> /Ltr8.4    |
| Free CO <sub>2</sub>  | mg/Ltr0.62                    |
| Temporary Hardness  | mg/Ltr3.6                     |
| Permanent Hardness  | mg/Ltr64.0                    |
| Total Hardness  | mg CaCO <sub>3</sub> /Ltr68.2 |
| Total suspension solids   | mg/Ltr<1                      |
| Total dissolved solids  | mg/ltr126                     |
| Maximum Wind Speed (under cyclonic 85m/sec - gusting (under conditions)<br>cyclonic conditions) |                               |
| Isokeraunic Level   | 50                            |

|                           |                                   |
|---------------------------|-----------------------------------|
| Seismic Level             | 7 on the open ended Richter scale |
| Average Rainfall per year | 2663mm                            |

Note: Fiji is situated in a region where cyclones are experienced frequently. All works shall be designed and constructed to withstand these extreme conditions. All installation shall be rust proof, vermin proof and weather proof and designed to be suitable for a damp, tropical climate, which may be experienced simultaneously.

## 2. Reference Standards:

IEC Standards are to be adopted in general. British or Australian standards too may be applied wherever necessary. Any other national or international standard may be used if such standards are not less exacting than corresponding IEC Standard. In all instances a copy of the relevant standard adopted should be forwarded to the Engineer. All civil works should be carried out in conformity with Fiji Building Code. The Works shall be constructed in accordance with the laws of Fiji and associated Acts and Regulations.

These Includes:

The Electricity Act (2017) and Electricity Regulations (2019) Building Code of Fiji

Health and Safety at Work Act – 1996

Environment Management Act and subsidiary Regulations

In order to achieve Regulatory compliance under the Electricity Act, the Works shall comply with the Electricity Regulations and AS/NZS 3000:2018 “Wiring Rules”.

In the absence of specific standards being nominated in the specifications, the following standards shall apply:

### Australian/New Zealand Standards

|        |          |   |
|--------|----------|---|
| AS/NZS | 1170     | Structural Design Actions   |
| AS/NZS | 1768     | Lightning Protection  |
| AS     | 1824     | Insulation coordination – Definitions, principles and rules   |
| AS     | 1940     | The storage and handling of flammable and combustible liquids   |
| AS/NZS | 2312     | Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings                 |
| AS/NZS | 2373     | Electric cables – Twisted pair for control and protection circuits  |
| AS/NZS | 3000     | Wiring Rules  |
| AS/NZS | 3008.1.1 | Electrical installations – Selection of cables – Cables for alternating voltages up to and including 0.6/1 (1.2) kV.        |
| AS     | 3011.2   | Electrical installations – Secondary batteries installed in buildings,<br>Part 2: Sealed cells                              |
| AS/NZS | 3080     | Telecommunications installations - Generic cabling for commercial premises  |
| AS/NZS | 3155     | Approval and test specification - Electric cables - Neutral screened –<br>For working voltages up to and including 0.6/1 kV |
| AS/NZS | 3835     | Earth potential rise - Protection of telecommunications network users,  |

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|        |        |  |  |
|--------|--------|--|--|
|        |        |  | personnel and plant  |
| AS     | 4024.1 |  | Safety of machinery, (all relevant parts)  |
| AS     | 60529  |  | Degrees of protection provided by enclosures (IP Code)   |
| AS/NZS | 60898  |  | Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Circuit-breakers for a.c. operation |
| AS     | 1345   |  | Identification of the contents of pipes, conduits and ducts  |
| AS/NZS | 2053   |  | Conduits and fittings for electrical installations (all parts)   |
| AS     | 2700   |  | Color standards for general purpose  |

International Electro technical Commission (IEC)

|     |        |      |  |
|-----|--------|------|--|
| IEC | 11801  |      | Information technology – Generic cabling for customer premises   |
| IEC | 14763  |      | Information technology – Implementation and operation of customer premises cabling                                     |
| IEC | 24702  |      | Information technology – Generic cabling – Industrial premises   |
| IEC | 60269  |      | Low-voltage fuses  |
| IEC | 60304  |      | Standard colours for insulation for low frequency cables and wires   |
| IEC | 60364  |      | Electrical installations of buildings  |
| IEC | 60934  |      | Circuit breakers for equipment   |
| IEC | 61009  |      | Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) |
| IEC | 61089  |      | Round wire concentric lay overhead electrical stranded conductors  |
| IEC | 61232  |      | 20SA/A Aluminium clad wires for electrical purposes<br>British Standards (BS)  |
| BS  | EN ISO | 1461 | Hot dip galvanized coatings on fabricated iron and steel articles  |
| BS  | 6231   |      | Specification for PVC-insulated cables for switchgear and controlgear wiring   |
| BS  | 6651   |      | Protection of structures against lightning.  |
| BS  | 7354   |      | Code of Practice for Design of high-voltage open-terminals stations, Section 7: Earthing.                              |
| BS  | 7430   |      | Code of Practice for Earthing.   |

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**ANNEX VII**  
**G. TENDER CHECK LIST & SUBMISSION**  
*Invitation to Tender no: MR 122/2024*  
**Specialist Consultancy Services**

**TENDER CHECKLIST**

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

Tender Number \_\_\_\_\_

Tender Name \_\_\_\_\_

Full Company / Business Name: \_\_\_\_\_

**(Attach copy of Registration Certificate)**

2. Director/EFL(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: \_\_\_\_\_

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## **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 HeadOffice in Suva.**

**This tender closes at 4.00pm (1600hrs) on Wednesday 17/4/2024.**

For further information or clarification please contact our Supply Chain Office on phone **(+679)3224360 or (+679) 99926520 or (+679) 9983096** 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.**