Energy Fiji Limited
MR 193/2018 Tender for Assessment of 132kV Transmission Tower Foundation Stability
May 2018







# Energy Fiji Limited Tender for Assessment of 132kV Transmission Tower Foundation – MR 193/2018

# **Definitions:**

TOR Terms of reference for the works

Tenderer: The company or consortia that is providing a submission in response to this document.

EFL: Energy Fiji Limited, 2 Marlow Street, Suva, Fiji

Works The project, assignment



# 1. Background

# The Energy Fiji Limited (EFL)

The EFL is a wholly Government of Fiji owned statutory body that was established under the Electricity Act of 1966. It is supervised by a Board of eight members comprising a Chairman, Deputy Chairman, the Chief Executive Officer of EFL, the Permanent Secretary of Public Utilities, the Permanent Secretary of Finance, and representatives of Business and Consumer Groups. All members are appointed by the Minister of Public Utilities except for the Chief Executive of EFL, who is appointed by the Board with approval of the Minister. The Management team of the EFL consists of Chief Executive, Chief Finance Officer, General Manager Human Relations, General Manager Generation, General Manager Network, General Manager Customer Services, Chief Information Officer, General Manager Major Projects & Strategy and General Manager Commercial.

EFL maintains power supply systems on the larger islands Viti Levu, Vanua Levu and Ovalau, which account for some 90% of the country's population. Installed generation capacity is approximately 218MW, comprising 83MW in the Monasavu Hydro Scheme in Viti Levu, 40MW in the Nadarivatu Hydro Scheme, and about 94MW of diesel capacity in 12 stations on the three main islands. Of the diesel capacity 77MW is on Viti Levu which has been supplementing the Monasavu hydro scheme for the Viti Levu Interconnected System (VLIS) which has been reaching maximum demand of 132MW. Transmission is provided by 140km of 132kV lines (connecting Wailoa Power Station to the East and West coasts) and about 266km of 33kV lines. Power distribution is by means of more than 5,000km of 11kV and 415/240V lines.

# 2. Project Overview

### **Project Drivers**

EFL has embarked upon an ambitious program of development in order to fulfil its strategic objectives. These include development of new generating and power system projects as well as improving reliability and capacity-building for future load growth. The EFL plans to almost double the generation capacity of Fiji over the next five years in order to meet continuing demand growth and intends that this additional capacity will be provided by renewable or at least non-polluting resources.

In order to supplement and facilitate the Capital Developments, EFL requires their current 132 kV power evacuation systems to be in structurally sound condition so that hydroelectric power is transmitted to the load centers in a continuous and reliable manner.

One particular 132kV transmission tower lies in the vicinity of a gold mine development and processing facility, namely, Lion One, in Sabeto, Nadi. Lion One's drawings of cut and fill shows that they will encroach



very close to the tower footing, which has had a minor landslide some 6 years back. In order to determine and ensure the structural and geotechnical integrity of the tower and foundations, assessment of the existing conditions and planned earthworks needs to be executed.

In light of the above, EFL wishes to carry out an independent investigation and assessement of the existing condition of the transmission tower foundation and the development plans of Lion One that lies within the vicinity of the tower foundation, and calls for Tenders from reputable firms, Fiji Institute of Engineers registered and Insurance Council Of Fiji recognised Structural/Geotechnical Engineering firms or consortiums for investigation, assessment of existing conditions and review of design and documentation of proposed developments near 132kv Tower xxx.

# 3. Scope of Services

This document sets out the Terms of Reference and Scope of Services for the following structural/geotechnical engineering consultancy services that EFL requires:

## Stage 1

- 3.1 Carry out assessment of conditions existing at the transmission Tower xx foundation, located at Sabeto, Nadi, using existing available geotechnical data and as-built drawings, or carry out new investigations if necessary, with gadgets, equipment and technology, complying to relevant and current AS/NZS standards and testing requirements (or any internationally recognised equivalent standard and testing method); and assess and review the development plan of Lion One that lies close to the tower foundation.
- 3.2 Prepare a report on the outcome of 3.1 above, advising EFL of any issue that arise from existing conditions, and issues that may arise from the development works planned to be carried out my Lion One, with recommendations for repairs, reworks or reinstatements, as necessary, using best industry practise methods and materials that can readily be sourced. The report shall, if necessary, include concept briefs, terms of references, preliminary sketches and arrange for the relevant input for designs and documentation from Lion One, and other the relevant stakeholders of EFL's operations and Strategic Business Areas [SBA] that have services attached to the Tower. This report shall be presented to EFL Management for discussions and approval.

### Stage 2

- 3.3 Once 3.2 above is internally approved by EFL, carry out the detailed designs and documentation of the works, including bills of quantities where relevant for project cost estimates, and in the same token, ensuring compliance with Lion One's requirements, all Statutory/Regulatory and Local Government requirements.
- 3.4 Once the documentation is given approval by EFL, EFL will advertise the tender. The chosen structural/geotechnical consultant is required to be present for the tender site visit, and after close



of tender period, manage all processes for selection and engagement of a Contractor, including the evaluation and selection criteria with respective weightings.

3.5 Advise EFL, in a report form, the outcome of the tenders, with recommendation/s for engagement of Contractor/s.

# Stage 3

- 3.6 On approval by EFL, prepare and co-ordinate the appointment and signing of contracts/agreements. Ensuring that EFL's full interests are appropriately protected and catered for in the contract documents.
  - 3.7 Undertake and seek, on behalf of EFL, applications and approvals for all required Statutory/Regulatory and Local Government approvals/consents for the repair works, including awareness meetings with Lion One.
  - 3.8 Administer the terms and conditions of the signed contracts.
- 3.9 Manage and control the performance of the project to ensure the timely delivery of the outcomes outlined in the contract documents.
  - 3.10 Prepare monthly reports of project progress placing emphasis on costs and time.
  - 3.11 Prepare and submit full as-built drawings after completion.
  - 3.12 Prepare and submit to EFL the Project Completion Report.

### 4. Tender Submissions

#### Submission Requirements

The tender for the above mentioned Services shall include the following:

- 1. A covering letter including the complete name and address of the firm(s) performing the project, the principal firm including the name and title of person principally responsible for the project.
- 2. A detailed methodology including a programme for the works/services. Comments on the TOR can be included to add value to the submission.



- 3. State separate lump sum fee for Stages 1, 2and 3, with some detail of hours and rates building up to the Lump Sum. The fee for stages 2 and 3 will be provisional sums and the scope of services under these will be discharged upon written approval from EFL.
- 4. Allow provisional sum for geotechnical study of the area.
- 5. State chargeable rates per site visit and hourly rates of design office work.
- 6. State hourly rates of personnel and resources, if EFL requests to undertake additional work related to this assignment.
- 7. The reimbursable items shall be indicated in the submission together with estimate of their costs. Refer to table below.
- 8. Company background and evidence of similar works undertaken by the firm over the last five years including project name, summary of work carried out, contact name and address of clients
- 9. Background of proposed sub-consultants, if any.
- 10. CV's of personnel that will be engaged in the work including sub-consultants.
- 11. Completed Responsibility matrix as shown below.

Each firm is limited ONE submission for the main consultant. However, that firm may be considered for a sub-consultant to a submission by another firm.

#### Responsibility Matrix - Please use similar template

Name	Firm	Overall Project Management	Speciality/ Skills Required						
			Structural Engineer	Geotechnical Engineer					
John X	XYZ	Х							
Mary Y	ABC		Χ						

### NOTE:

- a) Complete the first row with the Specialties required
- b) Complete the first column with the names of Project Key Staff.



- c) One Project Key Staff person may be responsible for more than one Specialty.
- d) Place a mark in the appropriate column relative to the appropriate Project Key Staff and Specialty.

### Estimate of Reimbursable Costs - Please use similar table

Item No.	Particulars	Quantity	Rate	Sub-Total	VAT	Total	
Total							

# 5. Contract Conditions

FIDIC General Conditions of Client Consultant Agreement shall be used. If the Consultant proposes to use an alternative, then it should be mentioned as part of this Tender submission.

# 6. Insurance

Certificates of insurances including any Professional Indemnity Insurance are to be submitted.

# 7. Evaluation Methodology

Tender submissions will be checked for completeness, firms that fail to submit all information required above may not be considered for award. A 60% weighting shall be given for the firm and personnel background, experiences and performance and 40% for the lump sum price.

# 8. Additional Information to tenderers

#### **EFL Project Manager**

The EFL Project Manager for this Assignment shall be

Mr Mohammed Anees Khan A/GM – Major Projects Navutu, Lautoka



### **Closing Date**

Submissions close at **4pm (Fiji Time) on Wednesday 30th May, 2018** at EFL's Suva office. Submissions are to be received at this location in an envelope prior to the specified time and marked:

#### MR 193/2018

Assessment of 132kV Transmission Tower Foundation Secretary Tender Committee Energy Fiji Limited 2 Marlow Street Suva, Fiji

- Facsimile submissions will not be accepted.
- Late submissions will not be accepted
- All submissions shall be in the English language.
- Electronic copies will be accepted if the hardcopy is received prior to closing date.
- All proposals shall be in a single bound hard copy with one soft copy on CD.

#### Costs

All costs of preparing the submission shall be borne by the tenderer.

#### **Enquiries**

All enquiries shall be directed to:

Tuvitu Delairewa General Manager Commercial 2 Marlow Street, Suva Phone: + 679 331 1133 Facsimile:+ 679 331 1882

Email: TDelairewa@EFL.com.fj

### Site Visit

A visit to the powerstation sites has been arranged as follows:

**Date**: Tuesday 20 March 2018.

**Time:** 10.30am

**Location:** Lion One Gold Mine Yard, Sabeto, Nadi.

Contact Person: M. Anees Khan – A/GM Major Projects (9999613)



#### Notification and Award

Following EFL board approval, tenderers will be advised, by letter, whether they have been successful or not. Tenderers will be able to debrief with the evaluation team should they so request, however the scoring information will not be released to any of the tenderers at any time.

Notwithstanding any other provision of this document, EFL reserves the right to:

- Accept or reject any proposal
- Seek clarification of any aspect or information provided in a Tender document and to seek further information from any party
- Amend the closing date for submission of Tender or any other date referred to or implied in this invitation for Tender.
- In whole or in part, suspend or cancel this Invitation for Tender process and/or the overall process
- Re-advertise this invitation for Tender.



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

It is mandatory for Bidders to upload a copy of their bid in the TENDER LINK Electronic Tender Box no later than **1600hrs**, **Wednesday 30<sup>th</sup> May, 2018**.

To register your interest and tender a response, view 'Current Tenders' at: https://www.tenderlink.com/efl

For further information contact The Secretary Tender Committee, by e-mail <a href="mailto:TDelairewa@efl.com.fj">TDelairewa@efl.com.fj</a>

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the EFL Head Office, 2 Marlow Street, Suva, Fiji no later than **1600hrs**, **Wednesday**, **30**<sup>th</sup> **May**, **2018**.

Addressed as:

Tender – MR 193/2018 Assessment of 132kV Transmission Tower Foundation Stability

The Secretary Tender Committee Energy Fiji Limited Head Office

Suva

Fiji

Hard copies of the Tender bid will be accepted after the closing date and time provided a <u>soft copy is uploaded in the e-Tender Box</u> and it is dispatched before the closing date and time.

Tenders received after closing time 1600hrs, Wednesday 30th May, 2018.

- Will not be considered.
- ➤ Lowest bid will not necessarily be accepted as successful bid.
- ➤ It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission.