



ENERGY FIJI LIMITED

BIDDING DOCUMENT

**Supply and Install 33kV VT with Structures
for Two (2) x Transformer Bays and Carry out
Civil Works at Sigatoka Substation**

TENDER NO: MR 83/2021

INVITATION FOR BIDS

Date: 8th April, 2021

Tender No: MR 83/2021

The ENERGY FIJI LIMITED (“The Employer”) invites sealed bids from reputable and suitable Bidders to Supply and Install 33kV VT for Two (2) x Transformer Bays and Carry out Civil Works at Sigatoka Substation.

All bids for the contract shall be submitted on the appropriate forms provided and shall include the completed price schedule, technical schedule and schedules of experience etc. The bid shall be on the basis of a lump sum contract based on firm prices.

Bidders may obtain further information from, and inspect and acquire the bidding documents, at

ENERGY FIJI LIMITED
The Secretary Tender Committee
2 Marlow Street, Suva, FIJI.
Suva

The deadline for submission of bids shall be **1600hrs (local time) on Wednesday 28th April, 2021.**

During evaluation of bids the Authority may invite a bidder or bidders for discussions, presentations and any necessary clarification before awarding the contract price proposal.

Section 1 - Instructions to Bidders

- 1. Scope of Bid** *The ENERGY FIJI LIMITED (hereinafter referred to as "the Employer"), wishes to receive bids to Supply and Install 33kV VT for Two (2) x Transformer Bays and Carry out Civil Works at Sigatoka Substation as defined in these bidding documents (hereinafter referred to as "the Works").*
- The successful bidder will be expected to complete the Works within 2 month from the date of commencement of the Works.
- 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 Employer as the Employer shall reasonably request.
- Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent.
- 2. Eligible Tools, Equipment and Services** The tools, equipment, and services to be supplied under the Contract shall have their origin from reputable companies from various countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. At the Employer's request, bidders may be required to provide evidence of the origin of materials, equipment, and services.
- 3. 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 complete the works in accordance with the specifications and the time for completion.
- 4. 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.
- 5. Site Visit** The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the design-build and completion of the Works. The costs of visiting the Site shall be at the bidder's own expense. The pre-bid meeting is scheduled on **Wednesday 14th April, 2021 9.30 hours at Sigatoka Substation.**
- 6. Sealing and Marking of Bids** The bidder shall seal the original copy of the technical proposal, the original copy of the price proposal and each copy of the technical proposal and each copy of the price proposal in separate envelopes clearly marking each one as: "ORIGINAL-PROPOSAL", and "COPY PROPOSAL", etc. as appropriate.
- The bidder shall seal the original bids and each copy of the bids in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL" and "COPY".

The inner and outer envelopes shall be addressed to the Employer at the following address:

Jitendra Reddy
Act. Unit Leader Procurement
Energy Fiji Limited,
2 Marlow Street, Suva, FIJI.
Phone: 679 3224 360/9992400
Facsimile: 679 331 1882
Email: JReddy@efl.com.fj

And bear the following identification:

- Bid for: Supply and Install 33kV VT for Two (2) x Transformer Bays and Carry out Civil Works at Sigatoka Substation.
- Bid Tender Number: **MR 83/2021**
- DO NOT OPEN BEFORE Wednesday 28th April, 2021

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) Wednesday 28th April, 2021.

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 Employer after the deadline for submission of bids prescribed in Clause 23 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 Employer prior to the deadline for submission of bids.

The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause 22, 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. Employer's Right to Accept any Bid and to Reject any or all Bids Notwithstanding Clause 34, the Employer 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 Employer's action.

11. Notification of Award

Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder by fax, 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 Employer 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 Employer 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 Employer 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 Employer.

13. Corruptor Fraudulent Practices

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

(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 Employer, 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 Employer 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;

Furthermore, bidders shall be aware of the provision stated in Sub-Clause 1.16 and Sub-Clause 15.5 of the Conditions of Contract, Part II - Conditions of Particular Application.

Section 2

Employer's Requirements
Scope of Works

**Supply and Install 33kV VT with Structures for Two
(2) x Transformer Bays and Carry out Civil Works at
Sigatoka Substation**

1. Scope of Works

This section covers the scope of work to supply and install 33kV VT's, aluminum marshaling cubicle to the specifications listed below and carry out necessary civil works.

General Scope includes:

A. Supply and Install 33kV VT's – 2 Complete sets (6 units)

Bidder to supply and install 33kV Ritz voltage transformers for two 33kV transformer bays.

Bidder to procure, supply, install and commission the VT's with the following scope of work:

- a) Supply and install VT structures – galvanised steel, tubular type
- b) All fasteners on the structures to be of stainless steel 316 grade
- c) Bidder to carry out earthing using flat copper bars on each structure and 120mm² copper conductors for tapping off from each bars. Bidder to carry out earthing of the structure to the main earthing grid. Earthing material to be provided by the bidder. Copper joints shall be cad-welded.
- d) Bidder to supply and install surge arrestors – Tri-DELTA make on each phase on both bays.
- e) Bidder to supply and install dropout holder with fuses for each VT on both bays.
- f) Bidder to carry out control wiring for the VT to the marshalling box, from the VT marshalling box to the rittal panel. Bidder to run the control cables from the bay to the building. Cable will be provided by EFL, contractor to transport the cable from Navutu depot to site and back to depot.
- g) Bidder to carry out Zinka painting both the 33kV Transformer bay's VT structures thoroughly.
- h) Bidder to supply and install all necessary hardwares, conductors, jumpers, terminals, palms and accessories to commission the new VT's for the 33kV bays.

33kV VT Requirement

Description	Required
Rated System Voltage KV (rms)	33kV
Highest System Voltage KV (rms)	36kV
System Frequency (Hz)	50 Hz
System Neutral Earthing	Solidly Earthed
Primary neutral	Provided via an earthing terminal connected to mounting plate
Installation	Outdoor
Voltage Factor (primary)	1.9 times for 8 hrs, 1.2 continuous
1.2/50 microsecond impulse withstand outage KV (Peak)	170kV
1 Minute dry & wet power frequency withstand voltage primary (kV rms)	70kV
Power frequency over voltage withstand requirements for secondary winding.	3 KV
Creepage Distance (Heavily polluted atmosphere) Total (mm)	900
Creepage factor (Max.)	4.0
Accuracy metering, protection	0.5, 3P
Primary Side (KV) Ratio	$33/\sqrt{3}$
Secondary Side (V) Ratio	$110/\sqrt{3}$
No. of Core	1
Rated Burden	20VA/∅
Max. temp rise over ambient 60° C	As per IEC Standards

Bidder to Specify

No.	Description	Manufacturer Data
1	Manufacturer	
	Address, Telephone and fax	
	Place of tendered item	
2	Type	
3	Type of Mounting	
4	Rated Primary voltage	
5	Rated Secondary Voltage	
6	Rated frequency	
7	Volt factor and duration	
8	Transformation ratio	
9	Rated burden	
10	Creepage distance of the insulator	
11	Temperature Rise	
11.1	<i>With 1.2 times rated primary continuously</i>	
11.2	<i>By resistance method</i>	
11.3	<i>By thermocouple / thermometer</i>	
12	Rated Insulation Level	
12.1	<i>1.2/50 micro sec. Impulse withstand voltage on primary side</i>	
12.2	<i>1 min power frequency withstand voltage(dry)on primary side</i>	
12.3	<i>1 min power frequency withstand voltage (wet) on primary side.</i>	
12.4	<i>1 min power frequency withstand test voltage on secondary side.</i>	
13	Ratio & Phase angle error.	
14	Accuracy class	
15	Voltage Ratio	
16	Voltage factor and rated time	
17	Service conditions for outdoor temperature conditions, altitude, humidity, suitability for exposure to steam, vapour, fumes, explosive gases, excessive dust, salt air etc. should be stated.	
18	Type of secondary	
19	Total Weight	
20	no. of phases	

B. Civil Works

Bidder to carry out all necessary civil works to install the VT structures with the following scope of work:

- a) Carry design and construction of concrete pads for the VT structures.
- b) Completely remove the crushed metal and excavated soil and dispose.
- c) Spread new 40mm crushed metal with weed mat at both bays for the VT structure area.
- d) Excavate and spread AP65 and compact at the gate area. Carry out appropriate drainage design and construction at the main gate to divert the water from entering the switchyard.
- e) Carry out fence post rust treatment and zinka counting. Replace all badly rusted post with appropriate concrete pads works. Remove the existing gate and install new sliding gate. Bidder to ensure appropriate rust treatment works are carried out for the gate works.
- f) Replace fence chain-link and barb-wire of the 33kV switchyard. Barb-wire to be of high grade.
- g) Carry out soil erosion rectification works at the switchyard towards the main road side.
- h) Bidder to fabricate and install steel platform at the new control building for the control panels.
- i) Bidder to carry out control cabling works in 150mm conduits to the control cable pit and to the building. Conduits to be procured by the bidder. Cables to be properly fixed on the cable trays.
- j) Bidder to ensure adequate cable space is there at the trenches inside the control building. Bidder to provide modification to the conduit excess at the control trenches if required by EFL.

C. Aluminium VT Box

- Fabricate Weather 3mm thickness aluminum marshaling panel.
- Install aluminum pan inside the box (**Figure 3.1**).
- Install 1 x 200mm Din Rail in each panel (**Figure 3.1**).
- Install 20 Phoenix UK10 Terminal (2.5mm) in each panel (**Figure 3.1**).
- Installation of Earthing Provision in each panel (including door and box).
- Installation of air vent in all boxes.
- Installation of Aluminum Gland Plate in each panel (**Figure 3.2**).
- Locking and mounting provision as shown in **Figure 1.0 and Figure 2.0** for each panel.
- Supply engraved labels as per specifications supplied by E.F.L. Black lettering on white background (Font size of 300)
- The materials, dimensions and design of the panel to be the exact as shown pictures and dimensions below (**Figure 1.0**).
- Install/weld weather proof C grade galvanized angel line to support VT Junction and Resistor Box (**Figure 2.0**).
- All nuts, bolts and fasteners shall be of stainless steel grade 316 type.

NOTE:

- For dimension details refer to **Figure 1.0** for VT Junction Box

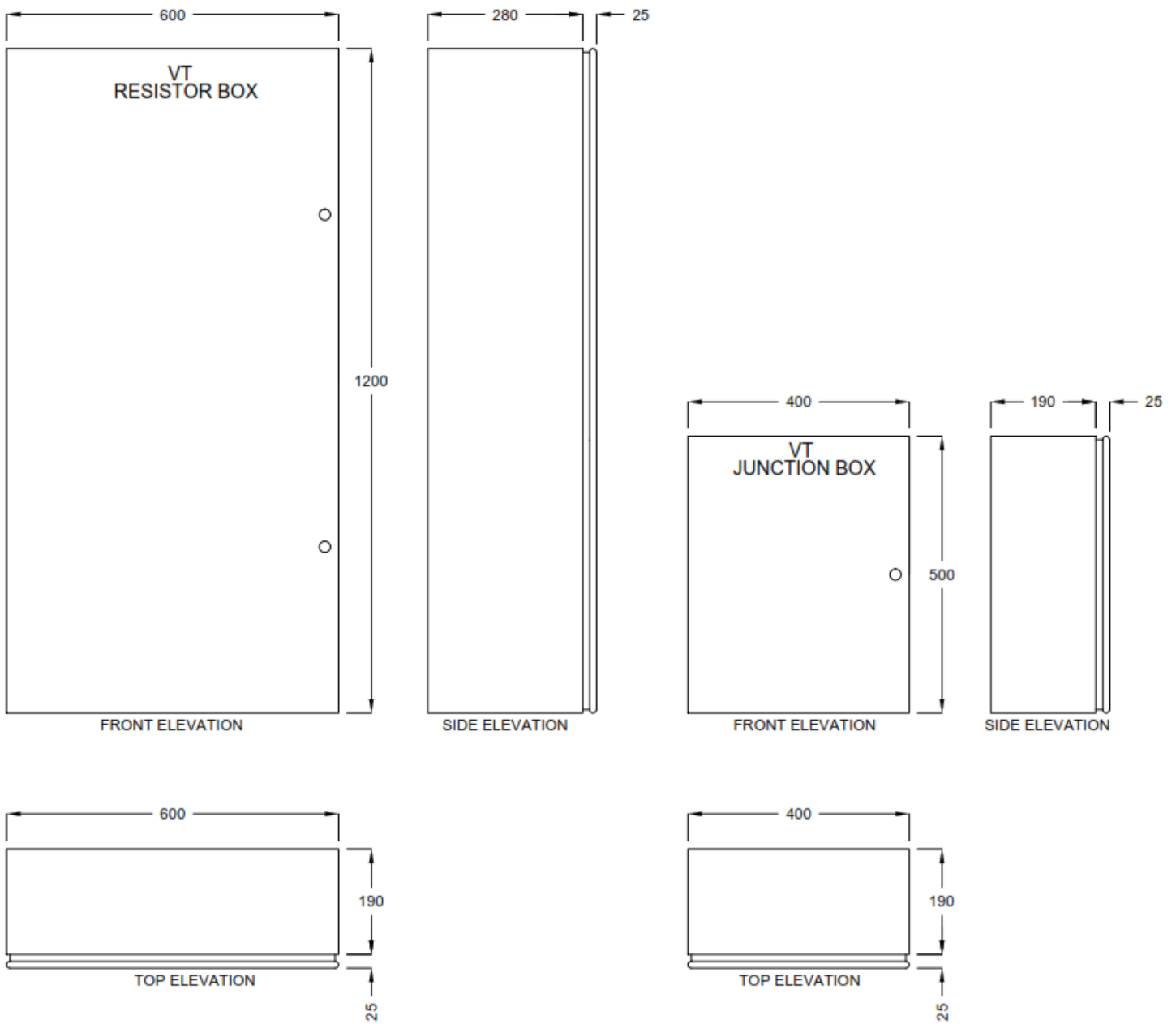


FIGURE 1.0 – VT Junction and Resistor Box Dimension

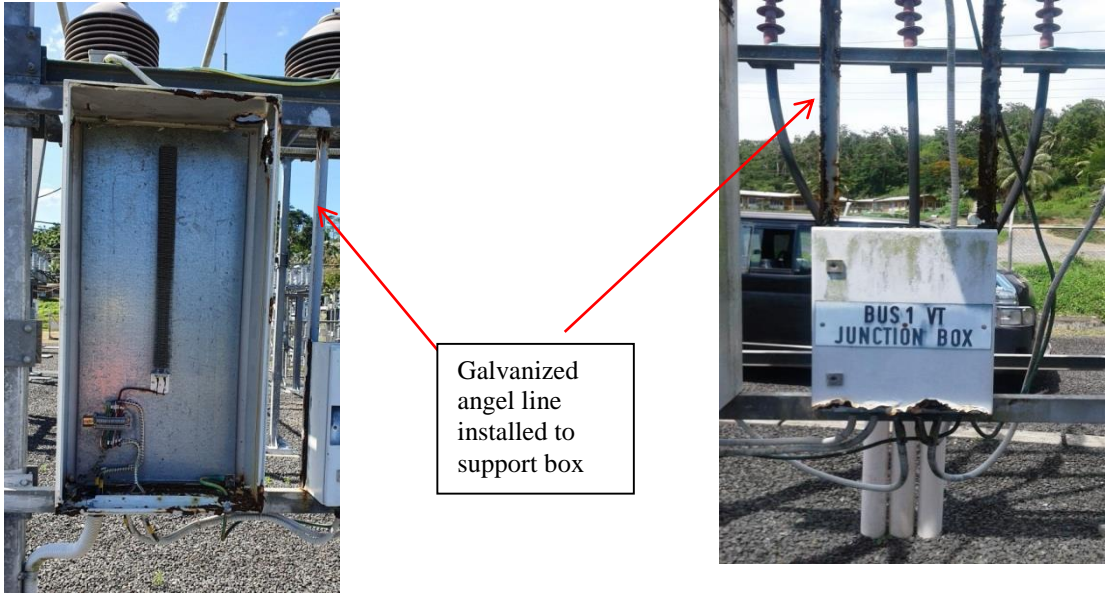


FIGURE 2.0 – Existing VT Junction and Resistor Box Details

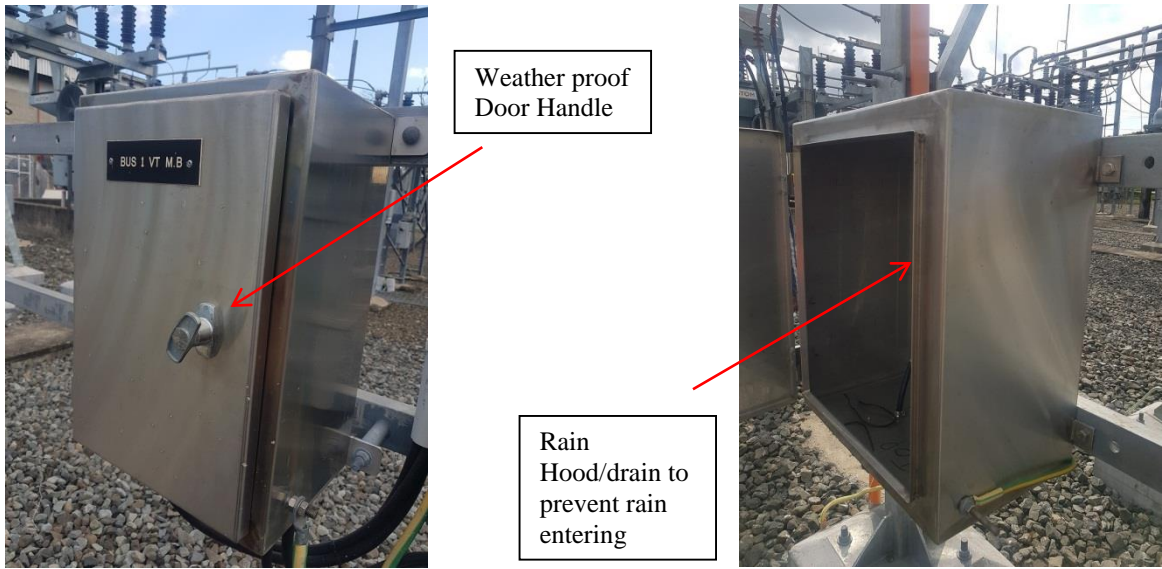


FIGURE 3.0 – Proposed Design for new box



Pan bolted to the box with din-rail installed on it



Gland plates mounted outside with glands

FIGURE 3.1 – Pan Installed/bolted in Box

FIGURE 3.2 – Gland Plates Installed in Box



FIGURE 3.3 – Rubber Installed on doors to prevent water and insects entering

2. ELECTRICITY, WATER, GAS AND OTHER SERVICES

The Contractor shall at his expense, provide all electricity, water, gas and other services necessary to execute and complete the Works on site. Prevailing tariff and service connection procedure shall be applicable.

3. STANDARDS

All electrical works shall be carried out in conformity to the IEC Standards in general. British or Australian standards may be applied where necessary. Any national or international standard may be used if such standards are not less exacting than corresponding standards IEC or BSI. In all instances, a copy of the relevant standard adopted shall be forwarded to the Engineer.

4. INSPECTION AND TESTS

- 4.1 The Authority's Engineer representative shall have the right to inspect the works and to confirm conformity to the contract specifications.
- 4.2 Should any inspected works fail to conform to the specifications, the Authority may reject them and the Contractor shall make all alterations necessary to meet the specification requirements.
- 4.3 Nothing in this clause shall in any way release the Contractor from any other obligations under this contract.

5. SITE CONDITIONS

- 5.1 The site is located at in Sigatoka. The Contractor shall be deemed to have visited the site of the works to satisfy him/her as to the accuracy of all information supplied to the Tenderers and to the feasibility of the works.
- 5.2 The proposed location is in a Substation equipped with therefore all necessary Safety Gear must be worn by the Contractor's Staff at all times.
- 5.3 The Contractor may only enter the site upon provision of access by an Authorized EFL representative. The Contractor is not to execute any work without direct supervision from the EFL representative. The times for work are 9am to 3.30pm Monday to Thursday, and 9am to 3pm on Fridays.

6. SETTING OUT

- 6.1 All tenderers shall inspect and examine the site, its surroundings, and shall satisfy himself before submitting his tender, as to the form and nature of the site, the nature and type of existing work, the quantities and natures of the work and materials necessary for the completion of the Works and the means of access to the site, the accommodation he may require, the availability, conditions and rates of pay of labour and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender.
- 6.2 The Contractor shall be responsible for the correct detailed setting out of the Works as indicated in the Tender Documents and shall, at his own cost, amend any errors during the progress of the Works arising from inaccurate setting out.
- 6.3 If a tenderer has any doubt as to the meaning of any portion of the Works, he shall when submitting his tender, include a statement of the interpretation upon which he replies and upon which his tender has been prepared and submitted.

7. MATERIALS, WORKMANSHIP AND PLANT

- 7.1 Materials in all trades shall be new and the best of their kinds specified and necessary complying with relevant standards (Fiji, Australia, New Zealand or USA) where applicable and subject to approval or rejection by the Engineer.
- 7.2 The Contractor shall at all times ensure that adequate protection is provided to finished work and materials to be used in this work. Where necessary, make good any damage to property.
- 7.3 The Contractor shall provide all workmen, both skilled and unskilled, plant, equipment and tools necessary for the expeditious completion of the work.

8. OCCUPATIONAL HEALTH AND SAFETY

The Contractor shall comply with the Health and Safety at Work Act, 1996 and regulations and Amendments thereto and the Energy Fiji Limited HSE Policy.

9. GENERAL FOREMAN

- 9.1 The Contractor shall appoint a competent General Foreman who shall be constantly on the works during the progress of the same, to whom instructions may be given by the Engineer.
- 9.2 The Engineer may require the Contractor to dismiss the General Foreman or other person shall he be incompetent or shall misconduct himself or for any other good reason to be assigned by the Engineer to the Contractor.

10. MAINTENANCE AND DEFECTS

Period of maintenance shall be 1 year (12) calendar months after practical completion of works. All defects during this period shall be made good by the Contractor, at his cost.

11. CLEANING UP

- 11.1 On completion, remove all surplus materials from site and leave site in a clean and tidy condition.
- 11.2 The Contractor shall remove and cart away all rubbish and trade debris as it accumulates during the progress of the works.

12. PROGRAM

Within seven (7) days of acceptance of his tender, the Contractor shall submit to the Authority, for approval a Program showing the order in which he proposes to carry out the works.

13. INSURANCE

The Contractor is to effect the following insurance policies:

- | | | |
|------|-----------------------------------|-----------|
| 13.1 | Contractor's All Risk Insurance - | \$500,000 |
| 13.2 | Public Liability Insurance - | \$500,000 |
| 13.3 | Workmen's Compensation - | \$250,000 |

Section 3

Form of Proposals and Appendices

SECTION 3

The Schedules are intended to provide the Employer with essential supplementary information in an organized format. Examples of more commonly used Schedules are given herein. Others may be devised and added in accordance with the requirements of the Instructions to Bidders.

All the Schedules are essential for bid evaluation and some in contract execution; they should all be incorporated in the Contract, and appropriate changes introduced with the approval of the Employer or its representative.

The schedules are to be completed and submitted as part of the Technical Proposal and Price Proposal in accordance with the Instructions to Bidders Clause 13, Documents Comprising the Bid. **Bidders whose Bids do not contact the data in the required format will be treated as non-responsive.**

1 SCHEDULE OF PRICES & CONDITIONS OF PAYMENT

1.1 CONTRACT PRICE

The bidder to provide the total cost of carrying out the above scope, which includes the materials and labor costs, including any other work related costs subjected to the above scope of work.

No.	Items	Cost	Total Cost
1	Supply and installation of 33kV VT's with steel structures and all necessary accessories		
2	Carry out civil works, earthing works and rust treatment works		
3	Carry out soil erosion rectification works.		
4	Total Lump Sum		
	Total Duration of Works (Days)		

2 Compliance Checklist

No.	Mandatory Compliance	Percentage
1	Valid FRCS tax compliance certificate for Local Companies	100%
2	Valid FNPF certificate of Compliance for Local Companies	100%
3	Business registration details	100%
Technical Compliance		
No.	Technical Compliance	Percentage
1	Filled Product Specification Criteria from Bidder	1%
2	Product Warranty Period Details and Insurance Details	2%
3	Product Specification from Manufacturer	2%
4	Product Manuals	1%
5	Bidder to account for all the cost of the items with delivery	2%
6	Filled Standards Table	1%
7	Bidders experience to carry out the work scope as per this tender	20%
8	Quality of the offered product and its durability	2%
9	Product to match the specification required by EFL	67%
10	Product to have all necessary accessories as required by EFL	2%

3 Overall Evaluation Criteria

Tender Evaluation Criteria	
Category	Criteria
Bid Responsiveness	General responsiveness of bid, compliance to submission requirements and documentation
Health Safety and Environment	Assessment of Tenderer's compliance to health, safety and environmental requirements detailed within the technical specification Past performance of Tenderers Manufacturer holds third party accreditation to ISO 14001, ISO 45001 and IEC 17025
Quality Assurance	Manufacturer holds third party Quality Assurance accreditation to ISO/AS/NZS 9001:2015. Tenderer has Quality Management systems in place that are acceptable to Energy Fiji Limited.
Technical Compliance	Does the Tender meet Energy Fiji Limited's minimum technical requirements as outlined in the Technical Specification? Performance of equipment and all components Sustainability and ease of operation Reliability data Independent accreditation and type test certification Risk management plan and mitigation of foreseeable risks Past experience Ability to deliver on time / delivery timeframe
Commercial Compliance	Tenderer holds the required current insurance provisions and has provided evidence through valid insurance certificates of currencies Has the Tenderer submitted Departures to the Terms and Conditions? If so is it likely that Energy Fiji Limited will be able to negotiate agreement without delay? Assessment of the Tenderers operational risks including conflicts of interest. Tenderer must comply with statutory requirements, such as that enforced by FRCS, FNPF, FNU, etc. and provide evidence of compliance as required in the specifications.
Energy Fiji Limited Procedures	Tenderer must comply with all relevant Energy Fiji Limited safety and environmental procedures. This is indicated by the Tenderer signing the Form of Tender Schedule, acknowledging all applicable procedures. Tenderer must also comply with the requirements of Electricity Act (2017), Electricity Regulations (2019).
Financial Stability	Assessment of Tenderer's current financial stability and ability to remain financially stable.
Price Evaluation	Base tendered prices; Price escalation formula (foreign exchange and commodity based rise and fall formula or similar review mechanism); TOC Other value adding options.
Bid Submission Requirements	Tenderer must submit all technical data, preliminarily design drawings, test reports.

TENDER SUBMISSION CHECK LIST

The Bidders must ensure that the details and documentation mention below must submitted as part of their tender Bid

Tender Number _____

Tender Name _____

1. Full Company 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)

9. Company Registration Number: _____

(Attach copy of the Business License)

10. FNPF Employer Registration Number: _____

(For Local Bidders only)

11. Contact Person: _____

I declare that all the above information is correct. Name:

Position: _____

Sign: _____ Date: _____

Submission of Tender

Two (2) hard copies of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the EFL Head Office, 2 Marlow Street, Suva, Fiji.

Courier charges for delivery of Tender Document must be paid by the bidders. EFL will not clear any bids received at the Post Office via registered mail.

This tender closes at 4:00 p.m. (16.00hrs Fiji time) on Wednesday 28th May, 2021.

Each tender shall be sealed in an envelope with the envelope bearing only the following marking:

MR 83/2021

Supply and Install 33kV VT for Two (2) x Transformer Bays and carry out Civil Works at Sigatoka Substation

The Secretary, Tender Committee

Energy Fiji Limited
Supply Chain Office
2 Marlow Street
Suva

It must also indicate the name and address of the tenderer on the reverse of the envelope.

All late tenders, unmarked Envelopes and envelopes without bidder's name and address on the reverse on the envelope will be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act and must have the most current Tax Compliance Certificate.

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224360** or **(+679) 9992400**.

Bidders are requested to submit a:

- Valid Tax Compliance Certificate
- FNPf Compliance Certificate
- FNU Compliance Certificate

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

(Tender Submission via email or fax will not be accepted)