



ENERGY FIJI LIMITED

BIDDING DOCUMENT

**Design & Construct Transformer
Foundation pads, Oil Separator Pit, Bund Wall
and Carry out associated Civil Works at EFL's
Vuda 33kV Substation, Lautoka.**

TENDER NO: MR 102/2026

INVITATION FOR BIDS

Date: 29th August, 2026
Tender No: MR 102/2026

The ENERGY FIJI LIMITED ("The Employer") invites electronic bids from reputable and suitable Bidders for the Design & Construct Transformer Foundation pads, Oil Separator Pit, Bund Wall and Carry out associated Civil Works at EFL's Vuda 33kV Substation, Lautoka.

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

Design & Construct Transformer Foundation pads, Oil Separator Pit, Bund Wall and Carry out associated Civil Works at EFL's Vuda 33kV Substation, Lautoka.
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 23rd September, 2026**

Site Visit at the Vuda Substation Site is scheduled for 02nd September, 2026 at 11am.

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 for the Design & Construct Transformer Foundation pads, Oil Separator Pit, Bund Wall and Carry out associated Civil Works at EFL's Vuda 33kV Substation, Lautoka, as defined in these bidding documents (hereinafter referred to as "**the Works**").*

The successful bidder will be expected to complete the Works within **8 months** from the date of issue of purchase order.
- 2. Eligible Bidders**

This Invitation to Bid is open to bidders who have sound financial background and have previous experience in handling such civil 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.
- 3. Eligible Materials, Equipment and Services**

The materials, 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.
- 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 complete the works** in accordance with the specifications and the time for completion.
- 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.
- 6. 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.

Mandatory site visit is scheduled on **Wednesday 02nd September at 11.00am at EFL's Vuda 33kV Substation Site.**
- 7. Sealing and Marking of Bids**

Bidders are requested to upload electronic copies via Tender Link by registering their interest at: <https://www.tenderlink.com/efl>
- 8. 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 23rd 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.

- 9. Late Bids** Any bid received by the Employer after the deadline for submission of bids will not be accepted.
- 10. Modification and Withdrawal of Bids** The bidder may modify or withdraw its bid after bid submission on the Tenderlink by editing submission.
No bid may be modified by the bidder after the deadline for submission of bids.
- 11. Employer's Right to Accept any Bid and to Reject any or all Bids** Notwithstanding, 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.
- 12. Notification of Award** Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder via 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 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
- 13. 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.
- 14. 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

1 Scope of Works

The scope of works for this contract for the **Design & Construct Transformer Foundation pads, Oil Separator Pit, Bund Wall and Carry out associated Civil Works at EFL's Vuda 33kV Substation, Lautoka** are as follows:

Clause No.	Scope
2.1	Carry out Geotechnical study of proposed site.
2.2	Design and Construct Transformer Foundation Pads, Auxiliary Transformer Pad, NER Pad, Bund Walls and Oil Separator Pit.
2.3	Design and Construct 33kV Bays for new Transformers and Concrete Pads for Bus Support Structures
2.4	Carry out Boundary Extension and Fence Upgrade Works.

2 Technical Specification & Description

This section covers the detailed scope of work required to be carried prior installation of Transformers at Waqadra Substation.

2.1 *Geotechnical Study of Proposed Site*

A detailed geotechnical study is to be conducted on the identified site to determine feasibility for the construction of transformer pad, their respective bund walls, casting of HV & LV cable trenches and construction of oil separator Pit.

- i. The study shall be undertaken by a qualified geotechnical engineer. The said engineer will be tasked with the responsibility of undertaking the geotechnical investigations and providing the necessary geotechnical design parameters that will be used for foundation design and construction.
- ii. Samples shall be taken from a minimum of **two (2) borings** to determine soil bearing capacities. These shall be tested to determine the physical and chemical characteristics of various strata and of the ground water. A safe bearing capacity shall be determined for the purpose of foundation design.
- iii. A report of the investigation and study carried out shall be submitted. This will serve to clearly inform of the current suitability of the on-site materials for construction of the new transformer yard accounting for a total designed load of **60 Tons transformer**. The study will clearly advise on the sites ability to hold up without fail the combined installation load on the green patch and issue recommendations on type of foundation design.
- iv. The report must also serve to clearly inform the employer of any remedial works that will need to be undertaken so as to ensure the suitability of the site to hold up the transformer yard extension for the new transformers without fail for its projected 60 years' of service life. Detailed excavation work specifications and drawings for all remedial works shall be submitted together with the report.
- v. The employer's written approval is to be given prior to commencing of any remedial earth works.
- vi. The safe bearing capacity of the sub-strata may be modified at the final design stage when the full site survey and investigation have been completed and the final layout, structural details etc. agreed. No variation in contract price will be made due to any variation in the bearing capacity leading to modification of foundation design at the final design stage. Special attention shall be paid to the ground water table and chemical composition of the ground water and soil in the substation area.
- vii. The following shall be considered as a minimum requirement, assuming uniform conditions over the site. This shall be extended if significant inconsistencies arise.

- a) To conduct field testing within the boundaries to assess soil density, depth with other suitable related test using Dynamic Cone Penetrometer (DCP) & Hand Auger and Shear Vane Tests. The Test depth shall be up to 6m to meet the hard stratum of N - value more than 50.
- b) The Test to be carried out on site identified by EFL Project Manager for 2 x (10m x 6m) area. Total of 2 Dynamic Cone Penetrometer (DCP) & Hand Auger and Shear Vane Tests to be carried out at transformer pad area.
- c) Depth of boreholes shall be continued up to bedrock if it does not meet the hard stratum of N - value more than 50.
- d) Borehole records shall describe and indicate level of all soils encountered and indicate the natural water table level. Rock core records shall specify total core recovery, solid core recovery and quality of the rock cored.
- e) Where applicable, samples of soil shall be obtained from all soil strata or at 1.5 meters intervals in a single stratum and tested to determine physical and chemical properties, particularly with respect to Substances, which would react with concrete or other materials to be used for the foundation works.
- f) Where applicable, in situ soil tests shall be completed for all soil strata or at 1.5 meter intervals in a single stratum. Standard Penetration test in non-cohesive soils, field vane tests in sensitive cohesive soils.
- g) Ground water samples shall be obtained from each bore-hole and tested in accordance with approved practice.
- h) Electrical resistivity of the soil shall be verified on four samples, in accordance with approved practice (IEEE 80-2004: IEEE Guide for Safety in AC Substation Grounding).
- i) Conduct CBR test for access road to determine the bearing capacity of Low bed truck and heavy crane transporting transformer easy access to the site.

The bidder is required to provide details of their nominated Geotechnical study engineer (FIE Registered) with the bid document.

2.2 Design and Construction of Transformer Foundation Pads, Auxiliary Transformer Pad, NER Pad, Bund Wall and Oil Separator Pit

The following scope of works needs to be carried out prior installation of new 2 x 15MVA Transformer on the foundation Pads.

Transformer specifications are as follows:

Transformer Specifications (2 x 15MVA)	
Rating	15MVA, 11kV/33kV
Approx. Total Transformer Mass (kg)	Approx. 45,000kg
Approx. Oil Volume (L)	Approx. 12,000L

- i. Clear, excavate and backfill proposed site with appropriate material. Cut and clear all trees at the proposed site. Roll and compact the subject area to 98% compaction and carry out relevant test. Subject area has been proposed in **Appendix 1**.
- ii. Design and Construct minimum **2 x 5000mm x 3500mm x 400mm** transformer pad suited for 60 Tonnes of Loading with minimum floor foundation of 400mm thick.
- iii. Design and Construct transformer bund bases and wall. Bund walls to be minimum 5,000mm high x 200mm thick wall with minimum 400mm x 400mm columns. Construct bund surrounding plinth at a radius of 1.5-2.5mtrs based on the standard. A bund wall shall be constructed in between the two transformers pad. Front end of the bund shall be kept clear for installation of Louvre frame. Bidder to design the bund wall as such that the rear end of the bund wall facing the drain shall serve the purpose of retaining wall and account for rear wall constructed from drainage bed. The bidder shall also account installation of Gabion basket on the retaining wall slab foundation.
- iv. Design and Installation of oil/water drainage system and oil separator pit as per NFA, ASNZ or USA standards. The pit should be able to contain minimum of 24,000L of oil in case of any spill. The oil separator pit shall be constructed below ground level at the nominated location identified by Project Manager.
- v. Design, Supply and Install Aluminium louvre frames or hot-dipped galvanised structure frames on the frontage end of both transformers Bunds. Concept design has been proposed in **Appendix 3** of the tender specification.
- vi. Bidder to install 3.15mm tough galvanised chain-link supported by steel structure and 8mm cables on top of the bund and fasten to all beams.
- vii. Supply and Installation of HD orange conduits for 33kV high voltage power cables and shall have 150mm X 1 conduits for each phase from Pad to the 33kV & 11kV Common Concrete cable trench.
- viii. Supply and Installation of HD orange conduits for 11kV high voltage power cables and shall have 150mm X 2 conduits for each phase along with 100mm x 1 conduit for each phase from Pad to the 33kV & 11kV Common Concrete cable trench. Supply and Installation of HD orange conduits for neutral cable and shall have 100mm x 1 conduit from Pad to 33kV & 11kV Common Concrete cable trench.
- ix. Supply and Installation of Control cable conduits for 1kV cables and shall have 100mm X 2 conduits from Pad to the control cable trench.
- x. Design and construct 33kV & 11kV Common Cable trench 1500mm wide and 1500mm deep Infront of Transformer foundation pad, auxiliary transformer pad and NER pad. Cable trenches to have 50mm x 6mm copper bar for earthing and tails exothermically connected to new and existing grids at minimum 4 places. Cable trench to have 150mm concrete preformed slabs as cover with inspection camber. Supply and Install Cable trays for 33kV, 11kV, 415V, Control Cables and Fiber Optics as required.
- xi. Dig and lay 150mm HD orange Conduits from 33kV & 11kV Common Concrete trench to the designated 33kV Bay locations. Bidder to install 3 sets of conduits for each bay for a total of 2 bays. All digging inside switchyard to be carried out manually.

- xii. Design and construct 11kV Cable trench 1000mm wide and 1000mm deep from Common Trench till Outside of Control Building. Cable trenches to have 50mm copper bar with tails exothermically connected to new and existing grids at minimum 4 places. Cable trench to have 100mm concrete preformed slabs. Install 150mm HV cable conduits from 11kV cable trench to Control Building Cable trench and backfill and reinstate as per EFL standards as and where required. Supply and Install cable tray for 11kV cable, Control Cable and fiber optics. All digging inside switchyard to be carried out manually.
- xiii. Design and Construct 2 x Auxiliary transformer pad. Pad to have minimum 200mm thick concrete slabs and 100mm cable conduits for 11kV & 415V. Conduits to connect to 33kV & 11kV Common Cable Trench. Dimensions of Auxiliary transformer has been provided in **Appendix 4**.
- xiv. Design and Construct 1 x Neutral Earthing Resistor (NER) Pad. Pad to have minimum 200mm thick concrete slabs and 100mm cable conduits. Conduits to connect to 33kV & 11kV Common Trench. Dimensions of typical NER has been provided in **Appendix 5**.
- xv. Bidder to transport and install Auxiliary Transformers and NER on the pad.
- xvi. Design and install Earth GRID 185mm² bare copper, with provision for minimum 20 T-connection joints using CADWELD and 20 X-connection joints using CADWELD. The new grid to be connected to the existing 33kV switchyard earth grid in minimum of 6 places via exothermic connection CADWELD. Earthgrid design to be peer-reviewed by Lightning and Protection Study Consultant. Details of Consultants to be provided during tender bid submission
- xvii. All excavation, cable laying and back filling shall be carried out only under the direct supervision of an EFL representative.
- xviii. Carry out 33kV, 11kV power cable, 415V and control cable pulling as required. All cables will be free issued by EFL; however, it will be bidder's responsibility to transport the cables from Navutu to site and return the remaining to Navutu depot.
- xix. Relocate existing 2 x Street light poles as required to EFL's nominated location.
- xx. Supply and installation of 3 x 9mtr hot dipped galvanised street light poles with each having 2 x 400W Philips brand LED Floodlight. The LED lights to be operated via timer switch wired to a contactor complete with all wiring up to the 415VAC board.
- xxi. Install 4 x 200W Philips brand LED floodlight and 1 x weatherproof 3 Phase GPO and 1 x weatherproof 15A GPO in each bund. Install 6 x 200W Philips Brand LED floodlights on the outside of the bund. The LED lights to be operated via timer switch wired to a contactor complete with all wiring up to the 415VAC board
- xxii. Lay weed control mat all around the transformer bund and lay 40-60mm screened and washed crushed metal minimum 200mm depth. And including all the places where the existing crushed metal will be damaged inside the switchyard. Lay 40-60mm screened and washed crushed metal minimum 200mm depth inside bund.
- xxiii. Bidder to ensure that driveway is properly constructed for easy manoeuvring of heavy truck loaded with 50 Tons of Transformer prior to offloading of the transformer.
- xxiv. Bidder to ensure that all compactions are properly carried out inside substation yard for offloading of 50Tons transformer using heavy cranes.

Note:

- Bidder to ensure all concrete pouring to be of 30MPA and will be required to submit testing results on 7th day, 14th Day and 28th day.
- EFL is required to witness pouring and compression testing. A two-day advance notice is required.
- Sample plinth design has been provided as **Appendix 2** of the tender specification document.
- All design shall be carried out by FIE Approved Engineer. Bidder to submit details for nominated Design Engineer.

2.3 ***Design and Construct 33kV Bays for new Transformers and Concrete Pads for Bus Support Structures***

The following scope of works needs to be carried out for Construction of 33kV Bays for new transformers and Bus support structures.

- i. bidder to demolish existing bay foundation pads at the location of bay construction. All debris to be carted away and deposited by bidder at their allocated dump area.
- ii. Clear, excavate and backfill proposed site with appropriate material. Roll and compact the subject area to 98% compaction and carry out relevant test.
- iii. Design and construct 33kV bay inclusive of Line side disconnector foundation pad, Bus side disconnector foundation pad, Circuit breaker foundation pad, Incomer cable conduit provision and VT structure foundation Pad. Concept drawing has been provided in **Appendix 6**. Supply and Install 150mm conduit and 100mm conduit as required.
- iv. Design and replace existing gate with minimum 3mtrs x 1.8mtrs sliding gate. New gate to be constructed with SHS tubing.
- v. Design and construct 2 set of 33kV bus support structure foundation Pad next to bus section.
- vi. Lay weed control mat all around the excavated area and lay 40-60mm screened and washed crushed metal minimum 200mm depth. And including all the places where the existing crushed metal will be damaged inside the switchyard.

Note:

- All design shall be carried out by FIE Approved Engineer. Bidder to submit details for nominated Design Engineer.

2.4 ***Carry out Substation Fence Upgrade Works***

The following scope of works needs to be carried out for extension of boundary perimeter fence at Vuda Substation.

- i. Bidder to demolish existing fence and offload the fence at EFL's Navutu scrap yard.
- ii. Design and install new perimeter fence with "C" grade 50mm galvanised pipe, 6ft x 3.15mm tough galvanised chain-link, 3 sets of No.8 wire to secure chain-link and 3 rows of high tensile barbed wire at the locations requiring alteration and instructed from Project Manager. Sample drawing has been provided in **Appendix 7** of the tender specification. Bidder to obtain approval from Project Manager prior all purchases.
- iii. All corner post to have appropriate support. Install earthing tab on every third post and connect with the existing earthing grid. Run new 120mm² earth wire properly lugged and exothermically connected to earth grid.
- iv. Lay weed control mat all around the excavated area and lay 40-60mm screened and washed crushed metal minimum 200mm depth. And including all the places where the existing crushed metal will be damaged inside the switchyard.

Note:

All Applicable standards and relevant requirements have been presented in clause 3 of the document, General Information.

3 GENERAL INFORMATION/REQUIREMENTS

3.1 QUALITY OF MATERIALS AND WORKMANSHIP

All materials used under this contract shall be new and of the quality and class most suitable for working under the conditions specified and shall withstand the variations of temperature, atmospheric conditions arising under working conditions without distortion or deterioration or the setting up of undue stresses in any part and also without affecting the strength and suitability of the various parts of the work which they have to perform.

All work shall be carried out and completed in a neat and professional manner to the approval of the Employer's Representative.

3.2 STANDARDS

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

The Electricity Act (Chapter 180) – 1985

Health and Safety at Work Act – 1996

Environment Management Act

In order to achieve Regulatory compliance under the Fiji Electricity Act, the Works shall comply with the Electricity Regulations and AS/NZS 3000:2000 "Wiring Rules".

3.3 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.

3.4 INSPECTION AND TESTS

The Authority's Engineer representative shall have the right to inspect the works and to confirm conformity to the contract specifications.

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.

Nothing in this clause shall in any way release the Contractor from any other obligations under this contract.

3.5 CABLE CONDUITS LAYING:

Bidder to lay cable conduits as per Specifications. Bidder to ensure all backfilling is carried out as per EFL standards.

3.6 FOUNDATIONS:

Concrete Bund base for transformer complete with excavation, backfilling, form works, concrete works and reinforcement bars.

2 Nos.	Pads and plinths for 11kV/33 kV Power Transformers (15MVA)
2 Nos.	Auxiliary Transformer Pads
1 Nos.	NER Pad
1 No.	Oil/Water containment and drainage system. Outlet to be as per Environmental

Management Plan. Pit to be able to contain minimum of 30,000L of oil in case of a spill.

3.7 WATER DRAINAGE SYSTEM

Surface water drainage system. Internal surface water drainage system shall be directed as per the Environmental Management Plan.

3.8 SETTING OUT

- i. 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.
- ii. 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.
- iii. 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 relies and upon which his tender has been prepared and submitted.

3.9 SITE CONDITIONS

- i. The site is located at EFL Waqadra Substation. 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.
- ii. 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.
- iii. 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.

3.10 Oil Containment/Drainage System

The bund shall be equipped with an approved oil/water sump and an approved oil/water drainage system. These shall be designed to address three (3) main risks: 1) Catastrophic failure causing prolonged fire. 2) Catastrophic failure causing large amounts of oil spreading off site. 3) Minimize oil pollution during normal operation. This is as stipulated in the Ausgrid NS189 standard for Oil Containment for Major Substations.

The bund base of each transformer shall be designed to have a 1% slope directing all oil/water towards the designated oil/water sump. The sumps shall have an approved non-slip surface applied onto the inside walls and base.

The Ausgrid NS189 standard details two (2) drainage systems that can be installed for transformer bunds. These are the Closed Drainage PPS System and the Gravity Drainage System with Oil Containment Tank. The selection of the oil containment system that is most feasible for the transformer bunds shall be made by the Contractor as according to Ausgrid NS189 standard. The design of which shall be submitted for employer's approval prior to any

construction and installation works. As detailed in Ausgrid NS189, the selection criteria for the oil containment system shall be based on a Life Cycle Cost (LCC) analysis together with an assessment of site constraints, site risks, environmental aspects and impacts upon project schedule.

The Contractor shall ensure that the breakout of any fire will be contained within the bund and not transferrable under any circumstance to the oil/water separators or oil tanks to be installed as per the design to be submitted for approval.

The oil containment system shall allow for effective discharging of storm water in the event of heavy rainfall or spraying down of the transformers in the event of a fire.

3.11 TRANSFORMER PAD

Transformer pad shall be designed to accept a total transformer weight of 60 tons. This is to account for future upgrades to higher rated and larger transformer.

The pads shall be constructed to dimensions 6000 x 4000 mm (LxW). The transformer pad shall extend upwards from the bund base by a maximum 400mm. The Contractor shall ensure that the pad dimensions are sufficient to cover the transformer base footprint and all cable conduit stub-ups

The Contractor shall ensure that the transformer pad surface is levelled to a maximum deviation of ± 2 mm. The Contractor's engineer shall satisfy himself with the levelling of the two transformer pads.

3.12 TRANSFORMER FOUNDATION

The transformer foundations are to be designed to accept all normal applied dead and imposed loadings without causing any significant settlement. In addition, foundations shall be designed to accommodate any additional imposed loadings during installation and removal of the transformer. This shall be constructed with a minimum 300mm base thickness and an approved steel reinforcement layout.

3.13 FILLING & REINSTATEMENT

If it is required to fill the land, the Contractor shall get approval for the filling material and method of construction before the commencement of work.

Filling for trenches, excavations and levelling of the site shall be deposited in layers not exceeding 300 mm of un-compacted thickness, each layer watered when necessary and well rammed or otherwise compacted to within 98% of the maximum dry density obtained by the use of a Proctor Standard Compaction Test.

Any fill material used within 500 mm of concrete structures cement bound materials shall have a soluble sulphate content not exceeding 2.5g per liter when tested in accordance with BS 1377, special precautions shall be taken to protect the concrete or cement bound materials to the approval of the Employer's Representative.

Where excavations whether in rock or other material, are made to a greater depth than detailed, the Intervening space shall be brought up to the proper level in plain concrete at the Contractor's expense.

Any formation encountered in the excavations which is not sufficiently strong to carry the loads which will be imposed on it, shall be excavated to an adequate load bearing stratum and replaced with mass concrete.

Unless otherwise described, directed or permitted, imported filling shall consist of pervious naturally occurring material, free from mud, silt, clay, peat, vegetable or injurious matter and water soluble salts harmful to copper and other metals. Filling shall be imported only from approved areas.

3.14 STABILITY OF FILL AND EMBANKMENT

The Contractor shall be responsible for the stability of embankments, which formed either by cutting or filling, and precautions taken to protect the earthworks from deterioration under adverse weather conditions. Wherever applicable the recommendations contained in the following codes of practice shall be followed in calculations, detailing and performance of the earthworks and drainage. **Earthworks - British Standard Code of Practice BS 6031-1981.**

Should any slips occur in the excavations, banks or filling during the execution of the Works or during the period of maintenance from any cause whatsoever, the Contractor shall execute the necessary remedial work in such manner, and with such materials as approved by the employer's representative, at the Contractor's expense.

3.15 READY MIXED CONCRETE

30MPA Ready-mixed concrete shall be provided as defined in BS 5328, which batched off the Site, may be used only with the agreement of the Employer's Representative and comply with all requirements of the Contract.

The concrete shall be carried in purpose made agitators operating continuously, or truck mixers. The concrete shall be compacted and in its final position within 2 hours of the introduction of cement to the aggregates, unless a longer time is agreed by the Employer's Representative. The time of such introduction shall be recorded on the delivery note together with the weight of the constituents of each mix. When truck-mixed concrete is used, water shall be added under supervision, either at the Site or at the central batching plant, as agreed by the Employer's Representative but in no circumstances shall water be added in transit. Unless otherwise agreed by the Employer's Representative, truck mixer units and their mixing and discharge performance shall comply with the requirements of BS 5328 part 3.

3.16 BUND WALL

Commencement of wall construction shall be done following the installation of the transformers.

Each transformer bund base shall be surrounded by a low enclosing bund wall designed to a maximum 800mm height which shall account for 110% of the total oil storage capacity of each transformer. An approved non-slip surface shall be applied to the inside bund walls and bases by the Contractor. The Contractor shall ensure that all bunds are designed as according to AS 1940-2004. The bund walls shall be designed for all expected imposed loadings with provision for vertical extension of EI 240 (4 hours) rated fire resistance fire wall.

3.17 STONE CHIPPING AND ACCESS ROAD

Stone chipping used for substation surfacing are to be clean hard crushed stone graded to 40mm (minimum depth 200mm). The formation in areas where stone chipping are to be used shall be well compacted to the approval of the Employer's Representative, and treated with an approved total weed killer, used in accordance with the manufacturer's instructions.

3.18 CRUSH METAL

The contractor must reinstate all crush metal that are to be removed for construction works or have been contaminated with soil and other material due to construction activity. 200mm of depth crushed metal (screened 40mm – 3000ohmm) to be applied on weed control mats. All materials to be supplied by contractor and to be approved by EFL Project Manager before application. Attached drawings shows area of crush metal works required.

3.19 MISCELLANEOUS WORK

Shall be carried out according to the relevant clause of this specification.

3.20 EARTHING SYSTEMS

3.20.1 GENERAL

The earthing of all equipment and the provision of earthing systems, electrodes and connections shall be in accordance with the recommendations in the “Guide for safety in Substation Grounding” IEEE No. 80 and the requirements of this Chapter.

Steelworks and supporting structures shall be bonded and earthed to the substation earthing system. Earth connections shall be made approximately 250 mm above the top of the finished foundation level. Connections shall be made also to the earth terminals of each transformer.

Trench earthing – inside 33kV and 11kV power cable trench, supply and install 50mm x 6mm copper bar.

Earthing conductors will be of soft annealed high conductivity copper stranded in accordance with Table 4 in BS.6346. Earthing conductors will normally be buried directly in the ground but where necessary they may be cleated to walls, fixed to cable racks or laid in the cable trenches as convenient.

3.20.2 EARTHING EQUIPMENT

Earthing of new 33kV/11 kV transformer yard shall be properly performed with copper strip 50mmX6mm and 185mm² bare copper, which enable connection to the equipment installed in and linked to main grid with more than two wires. The bidder to allow for 20-X connections and 20-T connection joints using CADWELD methods.

3.20.3 JOINTING AND BONDING

Connections to plant and equipment shall be made using the earthing terminals specified in the Contract. Where a strip has to be drilled to fit an earth terminal the hole shall not be greater than half the width of the strip.

Joints in earthing strip shall employ chemical welding or high compression joints.

The main EFL Grid and the Transformer Grid shall be connected in at least 4 points.

3.21 MATERIALS, WORKMANSHIP AND PLANT

- i. 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.

- ii. The Contractor shall at all times ensure that adequate protection is provided to finished work and materials to be used in the construction of the work. Where necessary, make good any damage to property.
- iii. The Contractor shall provide all workmen, both skilled and unskilled, plant, equipment and materials necessary for the expeditious completion of the work.

3.22 OCCUPATIONAL HEALTH AND SAFETY

- i. 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.

3.23 GENERAL FOREMAN

- ii. 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.
- iii. 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.

3.24 MAINTENANCE AND DEFECTS

- i. 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.

3.25 CLEANING UP

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

3.26 PROGRAM

Within seven (7) days of acceptance of his tender, the Contractor shall submit to the Employer, for approval a Program showing the order in which he proposes to carry out the works. The contractor shall ensure all civil and earth grid works shall be complete by the August, 2027. Construction and installation of the bund walls and other miscellaneous work as specified by the employer's representative shall take place following installation and commissioning of the two new transformers.

3.27 INSURANCE

During the Works, and through to the Date of Completion, while any employees of the Contractor are present at the Site, the Contractor shall provide and maintain, through purchase or its standard insurance program, including provisions for self-retention, the insurance coverage listed below or its equivalent:

a) Accident Compensation Insurance

It is understood that under the Accident Compensation Act 2017 it is a no fault based system and as such these are the maximum amounts payable by the Accident Compensation Commission of Fiji (ACCF) for personal injuries and death arising out from Motor Vehicle Accidents are as follows:-

- Permanent Partial incapacity FJ\$75,000;
- Permanent Total Incapacity FJ\$150,000;
- Any other cases (other than the above) FJ\$75,000;
- Deaths FJ\$75,000.

It would be prudent that the Contractor have in place safe working and driving mechanisms to equip their employees with survival skills so as to avoid Personal Injuries at work or Motor Vehicle Accidents for that matter.

b) Contractors All Risk [CAR] –

CAR insurance, covering the Contractor and its employees, Equipment for all of the Contractor's operations hereunder, including all activities at the Site, including, but not limited to, bodily injury, property damage, premises operations, elevators, independent contractor, products, completed operations and blanket contractual coverage with limits of not less than **FJD\$1,000,000.00** combined single limit; and

c) Public Liability Insurance

covering Contractor, its employees and Third Party for all of Contractor's operations hereunder, including all activities at the Work Site, including, but not limited to, bodily injury, property damage, premises operations, elevators, products, completed operations and blanket contractual coverage with limits of not less than **FJD\$1,000,000.00** combined single limit.

d) Professional Indemnity ('PI') Cover

For the contracts with the various monetary amounts listed below signed with EFL, the Contractor is required to obtain their PI covers (as applicable to them for the contract amount) which are as follows:-

- For EFL Contracts up to FJD\$100K – \$250,000 PI Cover is required;
- For EFL Contracts > FJD\$100K up to \$500K – \$1.5M PI Cover is required;
- For EFL Contracts > \$500K up to \$1M – \$2.5M PI Cover is required; and
- For any EFL Contracts above \$1M and up to \$2M - \$5M PI Cover is required.

Prior to commencing the Works, the Contractor shall provide to EFL appropriate statements or certificates verifying that the above insurance covers are in place.

Section 3

Form of Proposals and Appendices

4 SCHEDULE OF PRICES & CONDITIONS OF PAYMENT

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 contain the data in the required format will be treated as non-responsive.**

4.1 CONTRACT PRICE

The Contract Price is comprehensive in that, in consideration of the Contractor meeting all obligations, conditions and liabilities under the Contract, including the Contractor's allowance for the cost of supply of all labor, materials, plant, supervision required to complete the Contract Works, overheads and profit, subject only such adjustment as is provided for the Contract.

The contractor shall fill in the table below for the pricing of the below scope of work.

No.	Scope of Work	Price in VIP FJD
1	Carry out Geotechnical study of proposed site.	\$
2	Design and Construct Transformer Foundation Pads, Bund Walls and Oil Separator Pit.	\$
3	Design and Construct 33kV Bays for new Transformers and Concrete Pads for Bus Support Structure	\$
4	Carry out Fence Upgrade Works.	\$
	Total Cost of the Project – LUMP SUM	\$
	Price Validity	120 Days
	Total Duration for work (Months)	8 Months

5 Submission of Work Completion Report

The contractor will be required to submit mandatory progress report on the works completed together with the invoices while requesting for either progressive or retention payment.

The work completion Report shall be on Contractors official letterhead and shall clearly state the Scope of Work, the Purchase Order number under which the work is being carried out, the milestone for which the payment is requested, and photos showing the work for which the payment is requested. The Contractor or his /her designated representative shall sign off the work completion report. The EFL Engineer supervising the work shall verify the Work Completion Report via site inspection, note his /her endorsement on the Work Completion Report, and sign the same. Failure to submit Work Completion Report will result in invoice to stay on hold until the work completion report is submitted.

Section 4

Drawings and Literature

6 Drawings

All applicable drawings to this tender specification are uploaded as Appendix with the tender specification.

1. Appendix 1 – Vuda Substation Site Layout Preliminary Drawing
2. Appendix 2 – Sample Foundation Pad, Bunds and Oil Separator Pit Design
3. Appendix 3 – Aluminium Louvre Design
4. Appendix 4 – Auxiliary Transformer Dimension
5. Appendix 5 – NER typical Dimension (Note this will be confirmed at the time of construction)
6. Appendix 6 – 33kV Bay Concept Drawing
7. Appendix 7 – Concept fence design

COMPLIANCE CHECKLIST

Compliance – the following documents are to be provided with the tender bid:

No.	Compliance	Check(√)
1	Valid FRCS tax compliance certificate.	
2	Valid FNPF certificate of Compliance.	
3	Previous list of similar work experience.	
4	Work procedure for working at site.	
5	Proposed Gantt chart.	
6	Business registration details.	
7	Insurance cover details.	
8	Details of nominated Structural FIE Design Engineer and Geotechnical Engineer	
9	Details of nominated Lightning and Protection Peer Review Engineer	
10	Manpower Capability to carry out this works.	
11	Contractor Capability statement to carry out this works.	

Note:

Bidder is required to submit the following with the bid document in addition to above:

1. Geotechnical Study Engineer/Firm details and letter of intent
2. Structural/Design Engineer/Firm details and letter of intent
3. Electrical Engineer/Firm for earthing design details and letter of intent
4. Concept drawing of transformer foundation pad, bund, oil separator pit, trench, aluminium window and fence.
5. Previous experience of similar nature of projects.
6. State advantages offered by bidder if any.

Bidder has to scope 100% Mandatory compliance for consideration.

7 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
Quality Assurance	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? Will the bidder be able to deliver the service as per the requirement of EFL? 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. 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 Health , Safety and Environmental procedures. This is indicated by the Tenderer signing the Form of Tender Schedule, acknowledging all applicable procedures.
Financial Stability	Assessment of Tenderer's current financial stability and ability to remain financially stable.
Price Evaluation	Base tendered prices; Other value adding options.
Ability to Complete Project	Has no outstanding pending projects with EFL that is contributing toward delay in implementation. Has no contractual issues.

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: _____

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>

This tender closes at 4.00pm (1600hrs) on Wednesday 23rd 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.

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.