MR 232/2025

OWNER'S ENGINEER FOR VATUTOKOTOKO HYDRO POWER PROJECT

ENERGY FIJI LIMITED

REVISION HISTORY & DOCUMENT CONTROL

Rev No.	Notes	Prepared By	Reviewed & Approved By	Date of Issue
0.1	Initial draft for internal review and comment	SP		19/07/25

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1 BACKGROUND

Energy Fiji Limited ("EFL") is a public company limited by shares that was established under the Companies Act (2015), Laws of Fiji. It is supervised by a Board of Directors comprising a Chairman and representatives of its shareholders. Its major shareholders include the Fijian Government and Sevens Pacific Pte. Limited.

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

EFL is primarily responsible for generation, transmission and distribution of electricity in Viti Levu, Vanua Levu, Ovalau and Taveuni in Fiji. It owns over twenty (20) power stations and twenty (20) substations and switching stations on the islands of Viti Levu, Vanua Levu, Taveuni and Ovalau. EFL owns, operates and maintains a network of 147km of 132kV transmission lines, 576km of 33kV lines and over 10,700km of 11kV and 415V distribution lines, as at 31st December 2024. It also has over 220,000 customer accounts as at 31st December 2024, made up of domestic, institutional, commercial and industrial customers.

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. EFL plans to increase the generation capacity of Fiji in order to meet continuing demand growth and intends that this additional capacity will be provided by renewable or at least non-polluting resources.

Through grant assistance funding from the European Investment Bank ("EIB"), feasibility studies for development of hydropower projects in Qaliwana and Vatutokotoko (part of Lower Ba Cascade Scheme of projects) have been completed.

EFL is therefore seeking bids from reputable firms for consultancy services to be the Owner's Engineer for Vatutokotoko Hydropower Project. During evaluation of tender bids, EFL may invite a tenderer or tenderers for discussions, presentations and any necessary clarification before proceeding further.

The deadline to submit tender bids is **1600hrs on 10th September 2025**, Fiji Time.

Further information relating to this tender may be acquired from:

Jitendra Reddy
Manager Procurement, Inventory & Supply Chain
2 Marlow Street, Suva, FIJI.
Phone: +679 3224320 / +679 9992400
Email: tenders@efl.com.fj

2 INSTRUCTIONS FOR PARTIES REGISTERING INTEREST

2.1 Eligible Tenderers

This invitation is open to Tenderers who have sound Financial Background, and have previous experience in carrying out such work.

Tenderers shall provide such evidence of their continued eligibility satisfactory to EFL as EFL shall reasonably request, using the forms provided in the Schedules.

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

2.2 Eligible Materials, Equipment and Services

The materials, equipment, and services to be supplied under the Contract shall have their origin from reputable companies and countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. Tenderers shall be required to provide evidence of the origin of materials, equipment, and services in their bids.

For purposes of this Contract, "services" means the works and all project-related services including design services.

For purposes of this Contract, “origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing or substantial or major assembling of components, a commercial recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

The services to be provided under the Contract shall not infringe or violate any industrial property or intellectual property rights or claim of any third party.

2.3 One Bid Per Tenderer

Each Tenderer shall submit only one bid. A Tenderer who submits or participates in more than one bid will cause all those bids to be rejected.

2.4 Cost of Bidding

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

2.5 Site Visits

2 days have been allocated for site visits as detailed below, any 1 visit can be selected. 7 days prior confirmation for the selected visit via email is mandatory. This confirmation should include information on the preferred sites the bidder wishes to visit so arrangement can be made accordingly.

Bidders are to meet at the junction of Kings Road and Nadarivatu Road, Tavua at 9.00am Fiji Time (meeting time may possibly change subject to the site visit plan. Bidders are required to arrange their own transportation for the site visits.

Location	Nominated Site Visit Date
First Visit	6th August 2025
Second Visit	20th August 2025

2.6 Contents of Bidding Documents

The Tenderer is expected to examine carefully the contents of this Bidding document. Failure to comply with the requirements of bid submission will be at the Tenderer's own risk. Bids which are not substantially responsive to the requirements of the bidding documents will be rejected.

2.7 Clarification of Bidding Documents

A prospective Tenderer requiring any clarification of the bidding documents may notify EFL in writing by email addressed to:

Jitendra Reddy
Manager Procurement, Inventory & Supply Chain
2 Marlow Street, Suva, FIJI.
Phone: +679 3224320 / +679 9992400
Email: tenders@efl.com.fj

EFL will respond to any request for clarification which it receives earlier than five (5) days prior to the deadline for submission of bids.

2.8 Amendment of Bidding Document

At any time prior to the deadline for submission of bids, EFL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Tenderer, modify the bidding documents by issuing addenda.

2.9 Language of Bid

The bid, and all correspondence and documents related to the bid, exchanged between the Tenderer and the EFL shall be written in the English language.

2.10 Bid Prices

Unless specified otherwise, Tenderers shall quote for the entire facilities on a “single responsibility" basis such that the total bid price covers all the Tenderer’s obligations mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, including procurement and subcontracting (if any), testing and delivery.

Tenderers shall give a breakdown of the prices in the manner and detail called for in the Schedules of this bidding document, or any issued addenda. All pricing must be inclusive of taxes applicable in Fiji.

2.11 Bid Currencies

Bidders may submit multi-currency proposals with local components priced in FJD and offshore components in USD or EUR. For evaluation and contract purposes, all prices will be converted to FJD using the prevailing RBF exchange rate as at the tender closing date.

2.12 Bid Validity

Bids shall remain valid for a period of **180 days** from the date of Deadline for Submission of Bids specified in Sub-Clause 2.15.

2.13 Format and Signing of Bids

The Tenderer shall submit its Technical and Financial proposals (complete bid) on EFL's electronic tender hosting website, https://www.tenderlink.com/efl.

The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by EFL, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person or persons signing the bid.

EFL will not be accepting hard copy tender bid submissions.

2.14 Deadline for Submission of Bids

Bids must be received by EFL at the address specified above no later than **1600 hours (Fiji Time) 10th September 2025.**

EFL may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of EFL and the Tenderers previously subject to the original deadline will thereafter be subject to the deadlines extended.

2.15 Late Bids

Any bid received by EFL after the deadline for submission of bids prescribed above will be rejected.

2.16 Modification and Withdrawal of Bids

The Tenderer may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by EFL prior to the deadline for submission of bids.

The Tenderer's modification or withdrawal notice shall be prepared as appropriate and uploaded on Tender Link website. A withdrawal notice may also be sent by email but must be followed by a signed confirmation copy.

No bid may be modified by the Tenderer after the deadline for submission of bids.

2.17 Rejection of One or All Bids

EFL 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 Tenderer or

Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the rejection.

2.18 Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process.

Any effort by a Tenderer to influence EFL's processing of bids or award decisions may result in the rejection of the Tenderer's bid.

Lowest bid will not necessarily be accepted as successful bid.

2.19 Clarification of Bids

To assist in the examination, evaluation and comparison of bids, EFL may, at its discretion, ask any Tenderer for clarification of its bid. The request for clarification and the response shall be in writing by email, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by EFL in the evaluation of the bids.

2.20 Compliance with Specifications

The tender shall be based on the equipment and work specified and shall be in accordance with the Technical Specification. It should be noted that unless departures from specifications are detailed in Schedules of the Technical Specification, the tender would be taken as conforming to the Specification in its entirety. The Tenderer shall tender for the whole of the Works included in the Specification.

2.21 Signature of Tenderer

A tender submitted by a Partnership shall be signed by one of the members of the Partnership and shall be accompanied by a certified authorization of all the partners authorizing the individual partner to sign on behalf of the Partnership. A tender submitted by a Corporation to the Contract and shall be accompanied by a certified resolution of the Board of Directors authorizing the individual to sign on behalf of the Corporation.

2.22 Mandatory Compliances

Tenderers are required to ensure that their bid submission includes the following local (Fijian) mandatory compliance:

1. Fiji Revenue and Customs Service compliance
2. Fiji National Provident Fund compliance
3. Fiji National University compliance
4. Other compliances required under Fijian laws and legislation

Failure to submit or meet mandatory compliance requirements could result in automatic disqualification of bids.

2.23 Insurance

The Tenderer is to confirm that they have in effect the relevant insurance policies in place, including at least the ones enlisted below with a copy in the bid:

1. Professional indemnity
2. Public and Products Liability Insurance

3 GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract shall be FIDIC Client/Consultant Model Services Agreement – Fifth Edition 2017 (White Book).

4 ADDITIONAL CLAUSES TO GENERAL CONDITIONS OF CONTRACT

EFL will provide during the contract stage.

5 DESCRIPTION OF PROJECT

EFL is preparing plans for rehabilitation and green field construction of sources of renewable energy generation, as well as the transmission network in Viti Levu, its related catchment area and hydropower schemes.

Feasibility studies have been carried out for two most promising plants, Qaliwana & Upper Wailoa hydropower scheme and Lower Ba (Vatutokotoko) hydropower scheme. The key components of the projects include dam, weirs, power waterways, power house, transmission lines and access roads. This project is financed and technically assisted for strategic investments, particularly in infrastructure, energy efficiency and private sector development under EU's Investment Facility for the Pacific. Basic studies have been performed on hydrology, topography, geology, dam safety with energy production, cost estimates and economic analysis.

Figure 1: Hydropower Scheme Locations

5.1 Overview on Vatutokotoko Hydropower Scheme

Vatutokotoko hydropower scheme is located in the Ba Province, just downstream of the existing Nadarivatu Hydropower Plant. The main components forming this hydropower scheme include the following;

- Construction of a 34m high and 105m crest length gravity dam (of roller compacted concrete type) on the Ba river, equipped with a gated spillway and a mini hydropower plant at the dam toe to exploit the ecological flow, exploiting an estimated 58km^2 catchment area, with an estimated 2Mm^3 storage at full supply level
- A small reservoir on the Savatu creek, created by a concrete weir, constructed to transfer water from an estimated catchment area of 31.1km^2 to the Power house via tunnels
- 645m tunnel will be used to transfer water from Vatutokotoko Dam to the Savatu weir, with a 2.9km power tunnel, a surge shaft and 150m long penstock to transfer water from Savatu weir to the power house.

- Outdoor powerhouse with 2x Francis turbines with rated 19MVA each, with estimated maximum combined output of 33MW
- Expected energy output of 66GWh per annum, based on average annual run-off of 3.9m^3 per second for Ba River, 2.3m^3 per second from Savatu Creek and 5.4m^3 per second from Nadarivatu hydro-scheme, adding to 11.6 m^3 per second in total
- Estimated total new access roads of route length 12km and 2 new bridges across the Savatu creek to access the Savatu creek
- The Vatutokotoko Hydropower Plant installed power would be 33MW with annual energy production of 66GWh/y.

The proposed evacuation is through step-up (from 11kV to 132kV) and duplicate 132kV, 7.6km tie-lines from the Vatutokotoko power house to a new 132kV switching station.

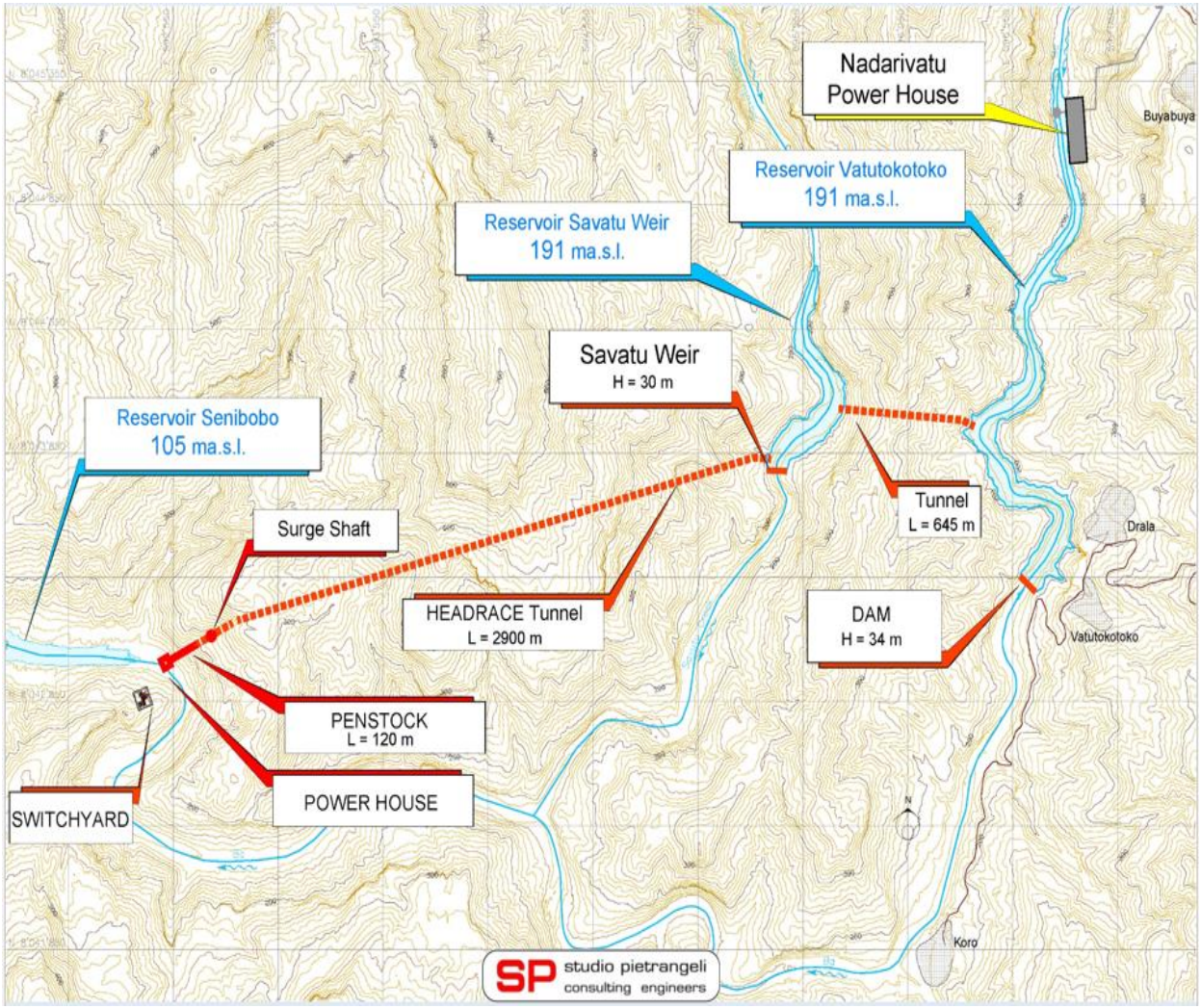

Figure 2: High level layout of Vatutokotoko hydro-electric scheme

Supplementary reports have been provided for geological and geotechnical surveys, hydrological survey, topographic survey and dam safety plans, however, further investigations will be required to prepare tender designs.

A dam monitoring plan, associated resourcing and instrumentation requirements have been provided which would have to be adopted, together with preparation, approval and implementation of an Emergency Preparedness Plan and Emergency Action Plan.

The topographic survey is pre-dominantly reassessment of the aerial surveys conducted by EFL earlier in 2014.

6 SCOPE OF WORK

The services of the Owner's Engineer will be to provide project management and engineering services in the key areas of project implementation.

6.1 General Scope

The Owner's Engineer shall:

a) Prepare project tender design packages including any further design investigation not covered in feasibility study, staging of works – Phase 1 (early works such as site development, access roads, bridges etc.) and Phase 2 (project development)
b) Conduct project risk review and develop Risk Management Plan to assist EFL manage project development risks, including reporting to meet any financing institution requirements
c) Assist EFL in obtaining relevant permits, including environment consents
d) Assist EFL in calling tenders, responding to tender queries, evaluation of tender bids
e) Assist EFL in Contractors design, work plan, implementation methodology and project timeline reviews
f) Review of feasibility study report inclusive of detailed designs prepared by the feasibility study consultant. Function as Project Manager for the Supply and Installations contract
g) Function as "Engineer" for the civil contract - Conduct factory audits and inspections as part of quality assurance process for the project with EFL
h) Assist EFL in contract administration and construction supervision during project execution
i) Attend coordination and review meetings with Owner, Contractors, Equipment Suppliers and Vendors as and when required by the Owner.
j) Provide regular project reports for EFL & International Funding Agencies
k) Facilitate smooth takeover and also ensure that the appropriate warranties for construction maintenance and operation are in place
l) Provide knowledge transfer and assist in Capacity Building to EFL Project Team
m) Coordinate the training program for EFL personnel in the operation and maintenance of the facilities
n) Monitor the implementation and adherence to the Environmental Management Systems and Plans for the Project
o) Assist in monitoring during defects notification period and project closeout
p) Assist EFL in implementing, monitoring and reporting all safeguard matters encompassing both social and environmental aspects as per the plans and policies prepared during project preparation.
q) Conduct Cost-Benefit analysis of deviations in construction phase from planned design etc.
r) Make proper recording of events leading to delay in construction and operational activities.
s) Optimize generation bottlenecks such as availability of water and sedimentation issues.
t) Take care of all safety measures both during project construction as well as during operation.
u) All records and documents shall be reported in electronic data format
v) All the design calculations have to be submitted by Owner's Engineer in editable soft copy in original software format in addition to the word format / pdf format.

6.2 The 2 Stages of Work

Stage 1
Mainly requires construction of access roads to the project sites, permanent bridges, temporary power supply and site preparation for the storage / campsites. This stage will also include geotechnical investigations for both dam abutments, bridge crossings and where necessary for complete design purpose.

Stage 2
Development of all major project components including the design, execution, construction, supply, installation, commissioning and operation monitoring of the project.

6.3 Support before the Selection of the EPC Contractor

6.3.1 Review of documents

Carry out the comprehensive review of design, engineering, analysis, preliminary drawings, construction drawings, review of any revision in drawings as and when required, covering all the aspects of the Civil works, Hydro Mechanical works & Electro Mechanical Works. There shall be no cap on the number of drawings required to be reviewed and vetted for the successful and timely execution of the project.

6.3.2 Project implementation planning

The Owner's Engineer shall prepare project implementation schedule of bidding process and construction works with relevant supporting documents within one month after effectiveness of the consultancy contract with EFL and submit for review and approval. If schedule changes, the Owner's Engineer shall modify the implementation schedule with clear explanation of reasons which caused changes within one month after such cause is revealed, and submit it to EFL.

6.3.3 Tenders, bid evaluation and contract negotiation

Bids and contract for each package, the Owner's Engineer shall;

a) Prepare and finalize the tender documents
b) Arrange tender conferences and site visits,
c) Prepare answers to bidders' clarifications and issuing amendment(s) if required,
d) Evaluate bids and prepare bid evaluation reports
e) Negotiate with prospective bidders for tender award and contract execution.

6.3.4 Planning and preparation of strategy documents

The Owner's Engineer shall review strategy plans from contractors under discussions with EFL. The documents shall include

a) Confirmation of interactions regarding important subjects such as Contractor's payment schedules, variation order, claim handling, disputes, etc., under each contract between EFL and the contractor,
b) Methodologies regarding manufacturing, delivery, storage and construction works,
c) Safety policies during construction stage
d) Confirmation of the plans and policies prepared during project preparation stage.

6.4 Support during construction

6.4.1 Review and approval of drawings and designs

The Owner's Engineer shall review and approve drawings and design documents produced by the contractors.

For the civil works, they consist of:

i. Detailed designs of the permanent works,
ii. Shop drawings,
iii. Operation and maintenance manual for any plant and equipment incorporated in the permanent works,
iv. Documents showing construction method, specifications, data on materials and construction machines furnished,
v. As-built drawings of the permanent works and
vi. Other drawings and their support documents prepared by the contractor in accordance with the contract of the said packages.

For the equipment and transmission lines, they consist of:

i. Manufacturing drawings and design calculations,
ii. Shop drawings (for work drawings),
iii. Documents showing construction method, specifications, data on materials and construction machines furnished,
iv. Operation and maintenance manual,
v. As-built drawings,
vi. Other drawings and their support documents prepared by the contractor in accordance with the contract of the said packages.

6.4.2 Management and monitoring of construction process

a) At the initial stage of construction works, establish project management system, which will incorporate;

i. Overall organization with communication and correspondence system, including EFL, the Owner's Engineer and the Contractors.

ii. Conduct joint meetings to facilitate the project management, which consists of
- Progress meeting to be held fortnightly / monthly with respective contractors,
- Interface meeting to be held periodically with attendance of all the contractors, and
- Other meetings as and when required.

iii. Project management system to maintain
- Correspondence data,
- Construction drawing data base,
- Progress monitoring,
- Cost control, and
- Others as deemed necessary.

b) Review progress of the works regularly by

i. Monitoring performance of the contractors,
ii. Comparing actual progress with the schedule, and

iii. Communicating with the contractors to maintain the progress on time. It aims to ensure that actual completion date of the works should follow the project schedule envisaged at pre-construction stage.

c) Establish procedures and methods of reporting system to confirm that every work items being performed by the contractors shall fully comply with specifications.

6.4.3 Witness and approval of equipment testing and commissioning

The Owner's Engineer shall;

a) Review and approve factory testing procedures and factory test results submitted by the contractor.
b) Witness factory testing of major equipment and issue corresponding certificates.
c) Review factory test inspection reports and certificates submitted by the contractor.
d) Review and approve commissioning test procedures submitted by the contractor for gates, valves, electromechanical equipment such as hydraulic turbines, generators etc. for both dry and wet tests.
e) When the works are ready for inspection and test for substantial completion,
    i. Prepare a program for inspection and test,
    ii. Examine the works and assure that they are ready for operation, and
    iii. Issue taking-over certificates to the contractors, if the works are satisfactory for operation or instruct the contractors remedial works and/or further test if they failed the verification test.

6.4.4 Supervision of all works including manufacturing / fabrication of equipment

The Owner's Engineer shall;

a) Review and approve the contractors' temporary works, facilities and equipment.
b) Review and approve the Contractors' construction methods.
c) Supervise and inspect all construction activities of the contractors so as to ensure compliance with the approved drawings, documents and specifications, and ensure that they are within schedule.
d) Regularly review manufacturing schedules and delivery schedules of equipment by the contractor.
e) Monitor manufacturing progress and works by regular inspections to ensure the compliance to specifications and specified standards.
f) Certify the payments to the contractors, after checking and verifying the contractor's measurements
g) Report regularly financial status of the project to EFL by
    i. Reporting the financial result and financial position.
    ii. Actual cash flow position.
    iii. Performing detail variation analysis between estimated / budged position versus the actual position.
    iv. Future requirements & payment schedules.
    v. Recommending possible measures for reducing expenditure, if any.
h) Investigate, inspect and assess requirements from the contractors for extension of time, additional works, payment for additional works, etc.
i) Review claims along with its supporting data, evaluate reports on the claim and assist EFL in settling the claims or disputes (if any).
j) Maintain records of construction activities, which will be eventually needed to prepare completion report, operation / maintenance manuals and as-built drawings. They shall include records of:
    i. Investigation and monitoring,

ii. Drawings,
iii. The Owner's activities,
iv. The Owner's Engineer's activities,
v. The Contractor's activities,
vi. Payments,
vii. Quality control,
viii. Progress of works,
ix. Safety control,
x. Notable events and
xi. Others as required.

k) Quality assurance in conformance with international best practices in regards to engineering practices, standards/ specifications. The Owner's Engineer shall review and approve the contractors' quality assurance programs during design, manufacturing, delivery and construction. The Owner's Engineer shall ensure the contractor's compliance to the approved quality assurance program by regular inspections.
l) Support EFL in ensuring overall financial, human resources, information technology and administrative functions to develop the project and for fulfilling the desired performance level under contractual arrangement.
m) Support EFL in implementing all safeguard matters encompassing both social and environmental aspects following the plans and policies prepared during project preparation.

6.5 Support EFL in Operation (Post Commissioning) of the Project

6.5.1 Plant operation planning in detail

The Owner's Engineer shall prepare operations and maintenance strategy documents including organization and staffing of operation, long-term and mid-term maintenance schedules, schedule and procedures of regular inspections, sediment flushing schedule and procedures, training program for EFL staff, recording system on regular basis, accident reporting system and submit them to EFL for review and consent. The Owner's Engineer shall also prepare operation and maintenance manuals of the plant for EFL staff, in consideration of time intervals for each maintenance activity, and submit it to EFL. The strategy documents, operation, and maintenance manual shall be finalized not later than one month before the commissioning of the project.

6.5.2 Operational and maintenance activities of the plant on regular basis

Based on the operation and maintenance strategy documents and daily instructions by the EFL's control center, the Owner's Engineer shall assist EFL in operating the plant for the three shifts. The Owner's Engineer shall train EFL's operation staff through training program as consented in the operation and maintenance strategy documents. The Owner's Engineer shall gradually transfer their operation and maintenance activities to EFL staff under prior consent, so that the EFL staff can operate the plant by themselves after the consultancy contract with EFL expires. The Owner's Engineer shall prepare an annual maintenance plan with an estimated budget to optimize cost of maintenance and to achieve long term reliability of operation of the systems and equipment. The maintenance plan shall include the maintenance activities, frequency of maintenance. For overhauling works, the Owner's Engineer shall prepare the overhaul schedule with budget estimates in the long term schedule. The Owner's Engineer shall assist EFL in conducting maintenance of the plant in accordance with the annual maintenance plan.

6.5.3 Monitoring, controlling and reporting operational performance of the project

a) The Owner's Engineer shall establish document management system for reports on operation and maintenance activities. The Owner's Engineer shall review the daily, weekly, monthly, and annual reports prepared by EFL staff at the initial operation stage. The Owner's Engineer shall establish monitoring and control system of operation and maintenance activities, based on the operation and maintenance strategy documents as consented with EFL. The Owner's Engineer shall periodically review efficiency of the said systems and modify as and when required.
b) Quality assurance in conformance with international best practices with respect to engineering practices, standards and specifications. The Owner's Engineer shall establish quality assurance system in accordance with the consented operation and maintenance strategy documents. It is recommended that the Owner's Engineer should apply for quality assurance system ISO 9001. EFL and the Owner's Engineer shall establish operating and control procedures for all units, monitor performance of all activities concerned, conduct internal audits, correct or prevent nonconformities, and adopt continual improvement actions.
c) The Owner's Engineer shall supervise all works conducted based on the annual maintenance plan or overhaul schedule.

6.6 Review of EPC Contractor Documents, Drawings and Engineering Works

Owner's Engineer shall review and vet all documents, concept notes, and designs prepared by various EPC Contractors.

a) Owner's Engineer shall review and vet the final documents and drawings, taking into consideration all the observations raised by the Owner's Engineer in the preliminary drawings and agreed by the Owner.
b) In case in the opinion of the Owner, the approved documents and drawings need further modifications due to site conditions and project requirements, these shall be further reviewed and vetted by the Owner's Engineer.
c) In the event of requirement of interpretations/explanations by the Owner with specific reference to site conditions, Owner's Engineer shall provide such clarifications and explanations to all such queries without delay.
d) The Owner's Engineer shall review and vet the construction methodology proposed by the EPC Contractors and shall submit its report on adequacy of the methodology. However, Owner's Engineer may also propose an alternative methodology based on new technological developments, if any, with its merits and demerits.
e) Owner's Engineer shall be required to review the Design & Engineering carried out by the EPC Contractors, irrespective of the software used by the EPC contractors.
f) Owner's Engineer shall submit editable soft copies of all the design and Engineering calculations, analysis etc, being carried out by Owner's Engineer under this Contract. For the clarification purpose editable soft copies means the analysis done in word, excel, AUTOCAD and other relevant software format in their original format.
g) All works shall be reviewed, vetted and shall conform to relevant national / international standards and be capable of performing in continuous commercial operation throughout the designated life of the relevant project components and in accordance with design specifications and requirements in a manner acceptable to the Owner.
h) Owner's Engineer shall review, vet and recommend for approval all the Quality Assurance plans, Quality Control manuals and submissions by the various EPC contractors.
i) Owner's Engineer shall review, vet and recommend for approval the testing and commission procedures.

j) Owner's Engineer shall review the Design, Engineering and construction schedule interfacing between the Civil works, Hydro Mechanical works and Electro-Mechanical works and assure the consistency between them, so that works are carried out smoothly.
k) Owner's Engineer shall prepare an integrated O&M manual taking into consideration the O&M manuals supplied by the various EPC Contractors and shall be submitted to the Owner for approval.
l) Owner's Engineer shall prepare the Project Completion Report incorporating all the as built drawings, calculations and test reports. Owner's Engineer shall submit a hard copy and editable soft copies of the Project Completion Report.

6.7 Civil Works

Scope of Civil works shall include review of design and drawings and there revisions, if any, vetting and recommending for approval of detailed construction drawings of all the components of the project. Shall include but not limited to River Diversion Structures, Dam spillway and appurtenant works, Power Intake, Water transfer system, Pressure shaft, Power House, Surge Chamber, Transformer cavern, Tailrace Tunnel & Outlet and any other component of the project including the slope stability of the project area, Dumping areas (retaining walls) and Quarry areas etc. Review of the design & drawings / documents for supply / works shall broadly include but not limited to the following works:

a) General Arrangement drawings with coordinates of all major points and locations.
b) Detailed design calculations and structural analysis.
c) Drawings, establishing reference co-ordinates and alignments of each individual structure, specifically aimed to show the interfaces between civil works and EM/HM equipments.
d) Excavation drawings complete with blasting patterns, rock support details, and benching details.
e) Rock support & rock reinforcement drawings.
f) Foundation treatment drawings.
g) Instrumentation drawings as required in Dam, Power House and other structures.
h) Soil conservation and Slope Stabilisation drawings
i) Structural steel works details and arrangement.
j) Concrete outline drawings for all concrete structures, giving complete dimensions and characteristics such as the grade of concrete, mix designs, types of finishing, location and characteristics of expansion and contraction joints etc.
k) Principal reinforcement steel drawings showing bar diameters and spacing.
l) Bar Bending Schedule.
m) Metal works drawings, giving the position and detail of embedded and nonembedded metal parts and exposed metal structures.
n) Review of all Structural Steel Fabrication drawings.
o) Piping and ducts required for air conditioning and ventilation systems.
p) Environmental protection measures for Dumping area such as retaining walls etc.
q) Landscaping and Embellishment of the Dam area.
r) Architectural and finishing drawings of Power House, showing architectural finishing and elements such as door, windows etc.
s) Restoration and Landscaping works of all the dumping sites, quarry sites and any other component related to project.
t) Illumination of all the project components.
u) Review of QA & QC Plans and Protocol Sheets.
v) The Owner's Engineer shall review the Detailed Design (Hydraulic, Structural and others) using latest Engineering and Geotechnical Software for analysis and Design of Dam, Power House, Water Conductor System, Underground works and Construction drawings for various civil works covering all the structures.

6.8 Hydro-Mechanical Works

Scope of Hydro Mechanical works shall include review, vetting and recommending for approval of Design, Engineering & Drawings which cover all equipment/systems required for the project including their hydraulic designs, sizing, etc. The Hydro Mechanical works broadly include the following but not limited to the following works:

- Pressure Shafts & Associated works
- All Gates, Hoists and gantry
- Trash rack and Trash rack cleaning machine etc.
- Any other works, as required for the project.

The work shall include

a) Pressure shaft steel liner, ferrule details including welding and testing methodology.
b) Hydro Mechanical equipments like various types of gates (with their hoisting arrangement, spares etc.) at Dam spillway, Intake,
c) Power House, Draft Tube, Surge Shaft, Tailrace, etc.
d) Trash Racks and Racking Machine (with installing, removal, cleaning arrangement, etc.) as required.
e) Based on design data sheets and specifications, contractors /manufacturers/suppliers will carry out and submit structural designs and fabrication drawings to the Owner's Engineer through Owner.
f) The Owner's Engineer shall review and recommend for approval, vendor design, and fabrication and installation arrangement drawings for hydro-mechanical works.
g) Loading and embedded parts details supplied by H&M and other vendor/s shall reviewed for incorporation in the civil construction drawings.
h) Review of construction/installation methodology for various hydro-mechanical components submitted by the EPC /HM Contractor.
i) Reviewing and recommending the revision, if any, in the drawings, after taking into account the details of HM equipments furnished by HM vendors.

6.9 Electromechanical Works

Scope of work shall include review, vetting and recommending for approval of the design & drawings / documents for supply / works, which broadly include but not limited to the following for Electromechanical Equipment:

- MIV's
- TG sets, Generators Governors
- Static Excitation System
- Bus Ducts, LAVT, NGC Cubicles
- Control, Protection and Metering, SCADA
- Grounding system
- Instrumentation system
- EOT cranes
- Power-transformers, Auxiliary/Station Service Transformers
- Unit Auxiliary Boards, Station Service Boards
- Bus Ducts
- GIS
- Power Cables
- HT / LT Switch gear
- DC Battery and charger system
- Cooling water system
- Drainage / Dewatering system

- Compressed Air system
- Fire Protection System
- Air Conditioning and Ventilation Systems
- Communication System
- Security and alarm system
- Oil handling Systems
- DG sets,
- Power and Control cables
- Illumination system for Dam, Power House Complex, Colony
- Switch Yard / Pot Head yard
- Transmission lines and associated works
- Conductor & clamps
- Receiving stations
- Any other, as required for the project

The Work shall include, but not limited to the following:

a) Reviewing and recommending the revision / modifications, if any, in the drawings of the Power House Complex, after taking into account the details of E&M equipment furnished by E&M vendors.
b) Based on design data sheets and specifications, E&M Contractors will carry out the design of E&M equipment, and submit fabrication and layout drawings.
c) The Owner's Engineer shall review and recommend for approval, vendor design, fabrication and layout drawings for electromechanical equipment.
d) Loading and embedded parts details supplied by E&M vendor/s will be used by the Owner's Engineer for incorporation in the civil construction drawings.
e) Review of construction/installation methodology for various electro-mechanical components submitted by the E&M Contractors.
f) The General Arrangement drawings prepared originally at tendering stage will be reviewed and revised on the basis of the drawings and data received from the E&M manufacturers/suppliers.

7 DELIVERABLES

a) Within one week of commencement, the Owner's Engineer shall submit to EFL a detailed work program outlining time inputs, field visits and the methodology, in MS Project format. An indicative work program shall be submitted in the bid document.
b) An inception report shall be submitted with the detailed work program.
c) The Owner's Engineer will provide, presentation of activities, findings and recommendations to the EFL executive management group during progress meetings, also subject to the arising matter.
d) The Owner's Engineer will be responsible for submission of monthly progress reports capturing all engineering and project management resources and updates during the concerned month; shall be submitted to EFL before the end of first week in the following month.
e) All other project related documents as specified under the scope or works.

8 PROGRAM

The anticipated program for the work is shown below.

Milestone	**Target Deadline**
Close of Tender	10th September 2025
Award of Tender	Within 3 Months from close of tender
Execute Contract	Within 6 weeks from award of tender
Issue of Purchase Order	Within 1 month from Contract execution
Owner's Engineer Mobilization	Within 1 Month from issue of purchase order

The key milestone dates relating to the Contract will be determined once the tenders are called and awarded. Bidders however are required to submit their nominated program for the delivery of the project and its completion by Quarter 3 of 2030.

9 SUPERVISION AND REPORTING

The Project Owner is the Chief Executive Officer. The Owner's Engineer will report to the Chief Executive Officer of EFL for overall project delivery. The Owner's Engineer will coordinate with General Manager Special Projects of EFL for various project related components.

10 EXPERTISE AND QUALIFICATION

The Bidders themselves or with their Joint Venture partners should have previous experience and expertise in Review and Vetting and /or Detailed Design & Engineering of at least three Hydro Electric Power Projects in last 20 years, and at least one of them should be in the last five years; involving:

10.1 Similar Project Experience

i. Experience of review and vetting as Owner's Engineer and/or as Consultant for Detailed Design & Engineering of at least 3 Hydro Power Stations with Cumulative Installed capacity of 200 MW and above and single generating unit rating not less than 20MW. Out of the three

Hydro Power Stations at least one (1) should have been commissioned within the last 7 years from date of closing of this tender, and currently in operation.

ii. Experience of review and vetting as Owner's Engineer and/or as Consultant for Detailed Design & Engineering of at least 3 Concrete Gravity (including RCC) Damsof height 40m. Further, the Owner's Engineer should have completed Detailed Design and Engineering of at least one Concrete Gravity (including RCC) Dam . Out of the three dams one should be in operation.

10.2 Staff Qualification and Experience

Owner's Engineer must have as a minimum, qualified and experience key staff in the following areas:

1. Project Management of hydro projects in the region and internationally
2. The Project Manager and their staff should possess demonstrated experience in handling FIDIC contracts.
3. Strong leadership in multidisciplinary teams (engineers, contractors, government liaisons).
4. Expertise in risk management, scheduling (E.g. Primavera P6 / MS Project), and financial oversight.
5. Construction Supervision of similar hydro projects
6. Geology & Geotechnical Engineers
7. Hydrology & Hydraulics Engineers
8. Tunneling & Penstock Design Engineers with Construction supervision & experience
9. Dam / Weir Design Engineers with Construction supervision & experience
10. Power Station Design Engineers
11. Civil, Electrical & Mechanical Engineers with hydro project implementation experience
12. High Voltage Substation & Transmission Design Engineers with construction supervision & experience
13. Power System & Protection Engineers
14. Communications & Control System Engineers
15. Commissioning Engineers with hydro plant commissioning experience

All identified Key Staff and their Curriculum Vitae (CV) should be included in the bid submission

10.3 Other Qualification Areas

The Owner's Engineer is required to have and be able to demonstrate relevant experience in managing and having technical oversight of similar hydropower projects.

The Owner's Engineer (its team) shall have the following minimum qualifications and competencies:

a) Suitably degree qualified engineer(s), preferably Electrical, Mechanical and Civil Engineering
b) Project experience with volcanic geology to the conditions base on site properties
c) Professional Engineering affiliation/membership with Fiji Institute of Engineers or Engineering New Zealand or Engineers Australia, or an equivalent body
d) Minimum 10 years' experience in engineering design, monitoring and technical oversight of similar hydropower projects
e) Knowledge of international (pre-dominantly Australian and New Zealand) and local (Fijian) standards related to Engineering works

f) Knowledge of Fiji's Energy Regulatory Framework, environmental compliance (Fiji EPA guidelines), and grid connection standards will be advantageous.
g) Proven experience in design and review of hydropower projects
h) Fluency in English (verbal and written)
i) Preference for candidates with previous work in Fiji or Oceania region, including familiarity with local contractors, materials, and logistics

In its submission, the bidder is required to provide:

a) Overall organization chart proposed for the project and manpower man-month allocations
b) Proposed Specialist engineering team members including the list of experts as outlined in sub-clause 10.2 above details including CVs
c) Proposed Project Director and Project Manager CVs, and other key management persons who will be engaged on the project
d) CVs of any support personnel to be used during any phase of the project
e) Overall resourcing structure and expected man-days plan for each phase of the project
f) Audited financial accounts for past two fiscal years (from time of closing of tender)
g) Quality Management System established in the firm
h) Integrity management system
i) Access to support resources and established associations

11 PAYMENT SCHEDULES AND TERMS

Payments shall be made upon verification and formal acceptance of deliverables linked to defined project milestones. No advance payment will be made. All pricing shall be inclusive of applicable taxes.

For offshore services, payments will be made net-off for applicable Withholding Tax under Fiji's Income Tax Act. Bidders must clearly indicate the WHT amount applicable in their price schedules.

12 INPUTS AND FACILITIES PROVIDED BY EFL

EFL will provide the following:

- Feasibility study reports and necessary supporting documents, upon engagement of services
- Any other data required by the Owner's Engineer for the study, in its tender submission and as agreed by EFL; and
- Office space for limited number of 3 persons at EFL office, (excluding workstations, printing facilities and internet connectivity) at EFL's Navutu depot. This will be subject to EFL's review of the Owner's Engineer's Resource Plan during different phases of the project.

SCHEDULE 1: PROPOSED TEAM MATRIX & RESOURCING PLAN

Bidder is required to provide a complete team matrix and resourcing plan associated with its offer. Bidder is also required to provide details of its key personnel with their relevant details and accompanying CVs.

Designation	Nominated Person	Nationality	Age	Years of Experience	Copy of CV
Project Director					
Project Manager					
Engineering Experts (bidder to outline)					
Other Support Staff (bidder to outline)					

SCHEDULE 2: SCHEDULE OF RATES

The Tenderer is required to provide hourly rates for all its personnel proposed in its Owner's Engineer team over the course of the project:

Position	**Hourly Rate incl. VAT and other Taxes**
Project Director	
Project Manager	
Project Management Support Personnel	
Engineering Expert (Electrical)	
Engineering Expert (Mechanical)	
Engineering Expert (Civil)	
Support Personnel	
Tenderer to include others	

Important Instructions for Bid Submission

Description: Dear Valued Suppliers,

This is a reminder to all suppliers to ensure that your bid submissions are made under the registered name of your business, as per your official business registration. This is important to avoid any confusion related to business identity. If there have been any changes to your business name or registration details, kindly update the information accordingly in your TenderLink user profile.
For local suppliers, please double-check your pricing calculations, including both the detailed breakdown and the total bid amount. Also, clearly indicate whether your prices are inclusive or exclusive of VAT. The prices should be received on your company letter heads, or put a company stamp.
For overseas suppliers, kindly state the currency in which you intend to submit your bid, along with the applicable Incoterm. This will assist us in accurately analyzing your submission.
Before submitting your bid, please ensure that all required documents have been uploaded to avoid incomplete submissions. Please upload valid Tax compliance, Valid FNPF Compliance and Valid FNU Levy Compliance for local bidders.
Lastly, please ensure that the Tender Submission Checklist is completed in full, including:

Company name: _____

Names of directors: _____

Contact phone number: _____

Email address: _____

These details are essential for us to reach out for any required clarifications.
Kindly ensure that you upload your tenders at least one hour before the closing time to avoid any last-minute internet or technical issues.
Thank you for your cooperation.

Kind regards,
EFL Supply Chain

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

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

EFL will not accept any hard copy submission to be dropped in the tender box at EFL Head Office in Suva.

This tender closes at FJT 4.00pm (1600hrs) on Wednesday 10th September 2025.

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224320 or (+679) 9992400** or email us on tenders@efl.com.fj

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act. Bidders are to clearly state the percentage of VAT that is applicable to the bid prices.

The lowest bid will not necessarily be accepted as the successful bid.

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

Any request for the extension of the closing date must be addressed to EFL in writing three (3) working days prior to the tender closing date.

Tender Submission via email or fax will not be accepted.