

Energy Fiji Limited

Tender Document
Design, Manufacture and Supply of
2 x 315KVA, 33kV/400V 3 Phase
Transformers for Butoni Windfarm,
Sigatoka, Fiji Islands.

MR241/2018

Energy Fiji Ltd Generation June 15th, 2018

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SECTION A

INVITATION TO TENDER

The Energy Fiji Ltd ("the Employer") invites sealed bids from eligible bidders for the Design, Manufacture and Supply of 2 x 300KVA, Dyn11, 11kV/415V, 3phase, 50Hz, Dry Type Auxiliary transformers.

Bidders may obtain further information and acquire the bidding documents from:

Tuvitu Delairewa General Manager Commercial 2 Marlow Street, Suva, FIJI.

Phone: 679 3224 185 Facsimile: 679 331 1882 Email: TuvituD@efl.com.fj

All bids must be delivered to Tuvitu Delairewa, General Manager Corporate Services, 2 Marlow Street, Suva, Fiji, Phone: (679) 3224 185, Facsimile: (679) 331 1882 Email: TuvituD@efl.com.fj or before 1600 hours Fiji Local times on Wednesday, 11th July, 2018.

SECTION B: Instruction to Tender Bidders

- B1.1 This Invitation for Tenders is open to all tenderers. The successful tenderer shall complete the supply of goods by the intended completion date specified in the tender document.
- B1.2 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

B2. Cost of Tendering

B2.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and Fiji Electricity Authority, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

The Tender Document

B3 Contents

- B3.1 The tender document comprises the document listed below and addenda issued in accordance with Clause B5 of the Instructions to Tenderers
 - a) Invitation for Tenders
 - b) Instructions to Tenderers
 - c) General Conditions of Contract
 - d) Special Conditions of Contract
 - e) Technical Specifications and Price Schedules
 - f) Tender Form
- B3.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender document. Failure to furnish all information required by the tender document or to submit a tender not substantially responsive to the tender document in every respect will be at the tenderer's risk and may result in the rejection of its tender.

B4. Clarification of Tender Document

B4.1 A prospective tenderer requiring any clarification of the tender document may notify:

Mr.Tuvitu Delairewa in writing: General Manager Commercial Energy Fiji Ltd 2 Marlow Street, Suva Fiji Phone: 679 322 4185

Email: TDelairewa@efl.com.fj

B5. Amendment of Tender Document

- B5.1 At any time prior to the deadline for submission of tenders, Energy Fiji Ltd, for any reason whether at its own initiative or in response to a clarification requested by a prospective tender, may modify the tender document by amendment.
- B5.2 All prospective tenderers that have received the tender document will be notified of the amendment in writing and will be binding on them.
- B5.3 In order to allow prospective tenders reasonable time to take the amendment into account in preparing their tenders, Energy Fiji Ltd at its direction, may extend the deadline for the submission of tenders.

Preparation of Tenders

B6. Language of Tender

B6.1 The tender prepared by the tenders, as well all correspondence and document relating to the tender exchanged by the tender and Energy Fiji Ltd shall be written in English.

B7. Document Comprising the Tender

- B7.1 The tender prepared by the tenderer shall comprise the following components:
 - a) A tender Form and Price Schedule completed in accordance with Clauses B8, B9 and B10 below; refer to Attachment 1 for Price Schedule template

B8. Tender Form

B8.1 The tenderer shall complete the Tender Form and the Price Schedule furnished in the tender document, indicating the goods to be supplied, a brief description of the goods quantity and prices.

B9. Tender Prices

- B9.1 The tenders shall indicate on the appropriate Price Schedules the unit prices and the total tender price of the goods it produces to supply under the contract
- B9.2 For local suppliers, prices indicated on the Price Schedule shall be delivered to Energy Fiji Ltd,
- B9.3 Prices quoted by the tenderer shall be fixed during the tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to Clause B21.

B10. Tender Currencies

B10.1 Prices shall be guoted in Fijian Dollars or in other freely convertible currency.

B11. Good's Eligibility and Conformity to Tender Documents

- B11.1 The tenders shall furnish, as part of its tender, documents establishing the eligibility and conformity to the tender documents of all goods, which the tenderer proposes to supply under the contract.
- B11.2 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings and data, and shall consist of:
 - a) A detailed description of the essential technical and performance characteristics of goods;

b) A clause-by-clause commentary on Energy Fiji Ltd's Technical Specifications demonstrating substantial responsiveness of the goods to those specifications, or a statement of deviation and exceptions of the Technical Specifications.

B12. Validity of Tenders

- B 12.1 Tenders shall remain valid for 60 days. A tender valid sorter period shall be considered as non-responsiveness
- B 12.2 In exceptional circumstances, Energy Fiji Ltd may solicit the tenderer's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (email). A tenderer granting to be request will not be required nor permitted to modify the tender

B13. Format and Signing of Tender

- B 13.1 The tenderer shall prepare an original and two copies of the tender, clearly marking "ORIGINAL TENDER" and "COPY OF TENDER, "as appropriate. In the event of any discrepancy between them, the original shall govern.
- B 13.2 The original and copy of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract.
- B 13.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

Submission of Tenders

B14. Sealing and Marking of Tenders

Bidders are to submit two (2) hard copies of tenders in sealed envelope into the tender box located at the Supply Chain Office at the FEA Head Office in Suva and also electronic copy shall be uploaded on the evalua website.

- B 14.1 The tenderer shall seal the original and copies of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.
- B 14.2 The inner and outer envelopes shall:
 - (a) Be addressed to:
 The Secretary Tender Committee
 2 Marlow Street

Suva FIJI.

Phone: 679 3224 185
Facsimile: 679 331 1882
Email: TDelairewa@efl.com.fi

- (b) Bear the following Identification, "TENDER No. MR 241/2015 "DESIGN, MANUFACTURE AND SUPPLY OF 2 X 315KVA, Dyn11, 3PHASE, 33KV/400V, 50Hz, DRY TYPE TRANSFORMERS"
- B 14.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late".

- B 14.4 If the outer envelope is not sealed and marked as required by Clause B15.2, Energy Fiji Ltd will assume no responsibility for the tender's misplacement or premature opening.
- B 14.5 All tender documents can be also sent to the Secretary Tender Committee through the website:

www.evalua.com.au/fea

B15. Deadline for Submission of Tenders

- B 15.1 Tenders must be received by Energy Fiji Ltd on the 11th July, 2018 no later than 4:00pm.
- B 15.2 Fiji Electricity Authority may, at its discretion, extend this dead line for the submission of tenders by amending the tender document in accordance with clause B5, in which case all rights and obligations of Fiji Electricity Authority and tenderers previously subject in the deadline will thereafter be subject to the deadline as extended.

Courier charges for delivery of Tender Document must be paid by the bidders and where applicable, all other cost such as Duty, VAT and Customs clearance associated with the delivery of Tender Document must also be paid by the bidders, delivered to EFL Delivered Duty Paid (DDP).

B16. Modification and Withdrawal of Tenders

- B 16.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by Energy Fiji Ltd prior to the deadline prescribed for submission of tenders.
- B 16.2 The tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of Clause B15. A withdrawal notice may also be e-mailed, but followed by a signed confirmation copy, postmarked no later than the deadline for submission of tenders.
- B 16.3 No tender will be modified after the deadline for submission of tenders.
- B 16.4 No tender will be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form.

Opening and Evaluation of Tenders

B17. Opening of Tenders

- B 17.1 Energy Fiji Ltd will open all tenders with the presence of Energy Fiji Ltd nominated Tender Committee, without presence of the bidder's representative.
- B17.2. Each member of the tender committee will initial tender pages of the tender documents and record total price tendered before submitting to the Tender Evaluation Committee for further evaluation.

B18. Clarification of Tenders

B 18.1 To assist in the examination, evaluation and comparison of tenders Energy Fiji Ltd at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.

Any effort by the tenderer to influence Energy Fiji Ltd in its decision on tender evaluation tender comparison or contract award may result in the rejection of the tenderer's tender.

B 19 Preliminary Examination

- B 19.1 Energy Fiji Ltd will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the tenders are generally in order.
- B 19.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the tenderer does not accept the correction of the errors, its tender will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- B 19.3 Energy Fiji Ltd may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any tenderer.
- B 19.4 Prior to the detailed evaluation, pursuant to Clause B21, Energy Fiji Ltd will determine the substantial responsiveness of each tender to the tender document. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender document without material deviation Energy Fiji Ltd's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence
- B 19.5 If a tender is not substantially responsive; it will be rejected by Energy Fiji Ltd and may not subsequently be made responsive by the tenderer by correction of the nonconformity

B20. Evaluating and Comparison of Tenders

- B 20.1 Energy Fiji Ltd will evaluate and compare the tenders, which have been determined to be substantially responsive, pursuant to clause B18
- B 20.2 Energy Fiji Ltd's evaluation of a tender will exclude and not take into account any allowance for the price adjustment during the period of execution of the contract, if provided in the tender.
- B 20.3 Energy Fiji Ltd's evaluation of a tender will take into account, in addition to the tender price and the price of incidental services, the following factors:
 - a) Compliance to Instruction to Tenderers pursuant to Clause B1.3;
 - b) Compliance to the tender requirements pursuant to Clauses B11, B12 and B13;
 - c) Compliance to the technical specifications;
 - d Tender validity of not less than 60 days:
 - Delivery period offered in the tender. The delivery period should not exceed 4 weeks (one month) after the date of signing the Contract;
 - g) Documentary proof of successful delivery of similar assignment deviation in payment schedule from that specified in the Special Conditions of Contract
 - h) Documentary proof of successful delivery of similar assignment.

B21. Contacting Energy Fiji Ltd

- B 21.1 Subject to Clause B18, no tenderer shall contact Energy Fiji Ltd on any matter relating to its tender, from the time of the tender opening to the time the contract is awarded.
- B 21.2 Any effort by a tenderer to influence Energy Fiji Ltd in its decisions on tender evaluation, tender comparison, or contract award may result in the rejection of the tenderer's bid.

Award of Contract

B22. Award Criteria

B 22.1 Subject to Clauses B9, B21 and B25 Energy Fiji Ltd will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest **evaluated** tender.

B23. Energy Fiji Ltd's Right to accept or Reject any or All Tenders

B 23.1 Energy Fiji Ltd reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, 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 its action.

B24. Notification of Award

B 24.1 Prior to the expiration of the period of tender validity, Energy Fiji Ltd will notify the successful tenderer in writing that its tender has been accepted.

B25. Signing of Contract

- B 25.1 At the same time as Energy Fiji Ltd notifies the successful tenderer that its tender has been accepted, Energy Fiji Ltd will send the tenderer the Contract Form provided in the tender document, incorporating all agreements between the parties.
- B 25.2 Within five (5) working days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to Energy Fiji Ltd

B26. Corrupt or Fraudulent Practices

- B 26.1 Energy Fiji Ltd requires that tenderers observe the highest standard of ethics during the Procurement process and execution of contracts. In pursuance of this policy, Energy Fiji Ltd:
 - a) defines, for the purposes of this provision, the terms set forth below as follows:
 - I. "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public 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 Energy Fiji Ltd, and includes collusive practice among tenderers (prior to or after tender submission) designed to establish tender prices at artificial noncompetitive levels and to deprive Energy Fiji Ltd of the benefits of free and open competition;
 - b) Will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question
 - c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded any contract if it at any time determines that the firm has engaged incorrupt or fraudulent practices in competing for, or in executing, a contract.
- B 26.2 Furthermore, tenderers shall be aware of the provision stated in the General Conditions of Contract.

SECTION C: General Conditions of Contract

General Condition of this Contract will adopt FIDIC

SECTION D: Special Condition of Contract

D1. Interpretation

In these Conditions, unless the context otherwise requires:

Accepted Contract Price: means the amount agreed as per Clause B5.1 as the total price payable by EFL to the Supplier/Contractor according to this Agreement.

Agreement means the agreement for the required works of which these Conditions; and the Schedules form part of this agreement.

Conditions mean these General Conditions for the required works according to this Agreement.

Confidential Information means any technical, scientific, commercial, financial or other information of, about or in any way related to the Supplier, including any information designated by the Supplier as confidential, which is disclosed, made available, communicated or delivered to EFL, but excludes information:

- (a) which is in or which subsequently enters the public domain other than as a result of a breach of these Conditions; or
- (b) which the Supplier/Contractor can demonstrate was in its possession prior to the date of this Agreement; or
- (c) which the Supplier/Contractor can demonstrate was independently developed by it; or
- (d) which is lawfully obtained by the Supplier/Contractor from another person entitled to disclose such information.

Delivery Point means Butoni Windfarm.

EFL means the Energy Fiji Ltd or its Authorized Representative advised in writing.

Intellectual Property Rights includes all present and future copyright, all proprietary rights in relation to inventions (including patents), registered and unregistered trademarks, confidential information (including trade secrets and know how), registered designs, circuit layouts, and all other proprietary rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Laws mean the law in force in Fiji, including common law and legislation.

Local Authority means Fiji Revenue and Customs Authority and any other regulatory body in Fiji.

Equipment /Service means the required equipment or service which will be supplied by the Supplier/Contractor in accordance with Schedule

Purchase Order means purchase order or acceptance from the Supplier/Contractor for the supply of the Equipment/Service and required works which incorporates these Conditions.

Specification means the technical specifications to which the required works must comply, as set out in Schedule 1 in this Agreement.

Supplier/Contractor means the Supplier or Contractor and its representatives who is providing the required Equipment or Service.

Time for Delivery means the date and, where relevant, the time specified in the Purchase Order (or such other date or time as may be agreed in writing) by or on which delivery of the equipment/service and required works must be effected by the Supplier.

D2 Commencement Date

- D2.1 This Agreement shall come into effect upon signing by both parties.
- D2.2 This Agreement may be executed in several counterparts (including facsimile copies), all of which when signed and taken together constitute a single agreement between the parties
- D2.3 After execution of this Agreement, EFL shall issue an official Purchase Order to enable the Contractor to initialize the required works and both EFL and the Contractor shall proceed with the performance of its respective obligations hereunder.

D3 Supply, Packaging and Delivery of Equipment/Service

- D3.1 The Conditions of Supply and Delivery of the of required equipment /service are as follows;
 - (a) The Supplier must supply the Equipment/Service to EFL in accordance with Schedule 1 and with this Agreement.
 - (b) The Supplier shall ensure that the equipment supplied will meet the design, technical guarantee and performance criteria as required by EFL as per the Work Scope Specification of this Agreement.
 - (d) The Supplier will deliver the Equipment/Service to the Delivery Point that is Butoni Windfarm, Sigatoka, Fiii.
 - (e) Nothing in this Clause shall in any way release the Supplier from any Warranty or other obligation under this Agreement in case of deterioration or damage until such time the required equipment/service are successfully delivered to EFL

D4 Transfer of Title and Ownership of the Equipment/Service

The required equipment/Service shall to the extent consistent with the governing Laws, become the property of EFL:

- (i) when it is delivered to the Delivery Point; and
- (ii) when the Supplier/Contractor is fully paid for the value of the equipment under Clause D5.1 and Schedule 1.

D5 Price, Invoicing and Payment

- D5.1 EFL will pay the sums on the Payment Schedule which will be agreed by both the EFL and Supplier/Contractor or in the offer letter upon completion and successfully commissioning of scoped works by both parties.
- D5.2 The Supplier/Contractor will submit to EFL a detailed original invoice according to paragraph (D5.1) in order for EFL to process payment, together with such other information as EFL may reasonably require. The original invoice must be sent to EFL's Unit Leader Procurement Accounting, Head Office of EFL.
- D5.3 All original invoices issued pursuant to this Agreement shall be expressed in the Fijian Currency or Foreign Currency agreed by both parties and will be issued using the Supplier's/Contractor's letterhead.

- D5.4 EFL will pay the Supplier payment as stipulated on the agreed Payment Schedule of this Contract, upon the written approval from EFL's Authorized Representative that the required Equipment/Service are in good and satisfying condition.
- D5.5 Unless specified otherwise in this Agreement, EFL will pay the amounts specified in the original invoice as being payable within thirty [30] days from date of receipt of such invoice.
- D5.6 EFL shall not be responsible to pay invoices issued by the Contractor if such original invoices are not in conformance with the above stated requirements.
- D5.7 Any Advance Payment required by the Contractor shall require a Bank Guarantee in accordance to the following EFL Conditions:
 - a) Amount of bank guarantee must be equal to the advance payment on the contract.
 - b) The Bank Guarantee is to be to a designated bank in Fiji accepted by EFL or
 - c) The Supplier's Banker must directly liaise with the banker of EFL.
 - d) Validity of Bank guarantee as per the contract terms & conditions to be provided to EFL.
 - e) Bank guarantee should be irrevocable & non- negotiable until the expiry date and satisfactory delivery of goods & services.
 - f) The supplier's banker shall meet & satisfy the terms and conditions of the designated banker of FEA to ensure that Bank guarantee is issued.
- D5.8 A 10% Retention on every payment will executed on all payment stipulated on the agreed Payment Schedule. This 10% Retention will be released 20days after the Warranty Period of the Transformer expires and after notification from the Supplier/Contractor for the release of fund.

D6 Warranty and Performance Warranty

- D6.1 The Contractor will provide a 12 (twelve) months warranty for the Equipment/Service supplied from the date of the Equipment been fully Commissioned and acceptance signed off by the EFL representative. The Supplier warrants that the Equipment/Service supplied under this Agreement shall operate within specified guaranteed performance levels during the 12 (twelve) months Warranty period.
- D6.2 The Equipment/Service supplied shall meet the requirements and standards detailed in EFL's Specification and as per the Tender proposal and the Supplier warrants that the Equipment/Service will remain free from defects for the warranty period from the time it is used for operation.
- D6.3 EFL shall promptly notify the Supplier in writing of any claims arising under this warranty, upon receipt of such notice, the Supplier shall with all reasonable speed, correct, repair or replace the defective Equipment /Service without any cost to EFL.

D7 Indemnity and Limitation of Liability

D7.1 The Supplier/Contractor shall indemnify EFL and each of its employees and agents against any loss, damage, claim, action or expense (including legal expense) which any of them may suffer as a direct result of failure to deliver the Equipment/Service accordance with this Agreement or any other breach of this Agreement provided FEA gives prior notice of personal and/or agent involved.

D7.2 The total liability of the Supplier/Contractor to EFL under this Contract shall be the Accepted Contract Amount.

D8.0 Delivery and Factory Acceptance Test

- D8.1 The Contractor is to submit the Manufacture schedule within 20 days of the acceptance of his tender for approval, a programme showing the order in which he proposes to carry out the works, including design, manufacture and delivery of the two transformers, that is to be completed within 6 months.
- D8.2 The EFL's Engineer or his representative shall have the right to inspect and/or to witness test the Transformers at the factory or place of manufacture, for their conformity to the Contract Specifications. The EFL shall notify the Contractor in writing of the identity of its Engineer(s) or representative(s) retained for these purposes. The contractor shall provide the authority with a detailed program for the inspections and/or witness tests and notice of at least 144 hours of notice when the materials, equipment, system is ready for inspection & testing. Nothing in this clause shall in any way release the Contractor from any warranty or other obligations under this Contract in delivering a fully functional plant as specified elsewhere in this document or the contractors' design and specifications.

D9 Liquidated Damages for Delay Delivery

- D9.1 If the Supplier/Contractor fails to comply with Clause 8.0 the Supplier/Contractor shall pay delay damages to EFL for this default.
- D9.2 The delay damages shall be the sum stated as follows:
 - (i) FJ\$200 [Five Hundred Dollars] per day for the first seven [7] days of Delay; and
 - (ii) FJ\$500 [Five Hundred Dollars] per day for each day after the lapse of the first seven [7] days for the delay.
- D9.3 The parties agree that the liquidated delay damages sum represents a reasonable pre-estimate of direct loss that EFL would suffer in the event of failure by the Supplier/Contractor to comply with Clause 8.0.

D10 Insurance

The Supplier/Contractor shall provide for 100% insurance cover for the Equipment/Service supply, transport, including third party liabilities and Suppliers All Risk insurance for the Equipment/Service and any applicable consequential damage insurance due to the Supplier's activity/negligence until the Equipment/Service are delivered.

D11 Sub-contracting

- D11.1 The Supplier/Contractor must not sub-contract to any third person/party any of its obligations in relation to the supply of the Equipment/Service without the prior written consent of EFL (which may be given or withheld in its absolute discretion).
- D11.2 The Supplier/Contractor will not, as a result of any sub-contracting arrangement, be relieved from the performance of any of its obligations under this Agreement and will be liable for all acts and omissions of a sub-Supplier as though the actions were that of the Supplier itself.

D12 Compliance with Law

The Contractor must, in the supply of the Equipment/Service and the required works, comply with all Laws of Fiji and with the lawful requirements or policy of EFL.

D13 Termination

D13.1 Events of Termination

- (a) It is an event of termination if:
 - (i) there is a failure by either party (defaulting party) to comply with any undertaking or obligation in this Agreement and the defaulting party does not remedy the failure within fifteen [15] Business Days, or a longer period as determined by the party ("non-defaulting party") after the defaulting party receives written notice from non-defaulting party specifying the failure; or
 - (ii) either party suspends payment of its debts generally or is, or becomes unable to pay its debts when they become due and owing; or
 - (iii) either party ceases or threatens to cease to carry on its business or operations; or
 - (iv) either party assigns or purports to assign this Agreement otherwise then in accordance with the terms of this Agreement; or
 - (v) either party sells or transfers a majority or controlling shareholding interest in itself; or
 - (vi) a receiver, and manager, administrator, trustee or similar official is appointed over either party's assets or undertakings an application or order is made for winding up steps to be taken or passes a resolution for the winding up or dissolution of either party.
 - (vii) Either party will give the other two [2] weeks' written notice (Notice) of an Event of Termination

D13.2 Effect of an event of Termination

If the defaulting party fails to remedy or rectify any Event of Termination on or before the expiry of the two weeks from the date of the Notice, the non-defaulting party may, without prejudice to its other rights and remedies, terminate this Agreement immediately by giving written notice to the other.

D13.3 Continuing Terms

When this Agreement expires or is terminated under Clause 13 or otherwise:

- (a) all order placed by EFL with the Supplier/Contractor for the Equipment/Service is automatically cancelled, unless otherwise advised by EFL and agreed to in writing by the Contractor;
- (b) EFL must within ten [20] Business Days after expiry or termination, pay the Supplier/Contractor all amounts owing by it to the Supplier/Contractor that are due at that time; and

(c) The Contractor must, within ten [20] Business Days after expiry or termination, pay FEA all amounts owing by it to EFL.

D14 GOVERNING Law and Jurisdiction

This Agreement is governed by and is to be construed in accordance with the laws applicable in Fiji. Each party irrevocably and unconditionally submits to the exclusive jurisdiction of the Courts of Fiji and any Courts which has jurisdiction to hear appeals from any of those Courts and waives any right to object to any proceedings being brought in those Courts.

D15 Dispute Resolution

The following procedure will apply if a dispute under this Agreement arises:

- (a) If a dispute arises, the party claiming that a dispute has arisen will give written notice to the other party indicating the nature of the dispute. Upon receipt of the notice, the parties must appoint at least one senior representative, who must, within 7 days from the date of receipt of the notice of the dispute, meet with each other, and attempt to resolve the dispute.
- (b) If the parties fail to resolve the dispute within 14 days from the date of meeting, the dispute will be referred to the respective parties' Managing Director/ Chief Executive Officer, or their nominees, who must then meet and attempt to resolve the dispute within 7 days.
- (b) If the parties fail to resolve the dispute within the further 7 day period, the parties must mutually agree to appoint an Independent Arbitrator to determine the dispute.
- (c) The decision of the Arbitrator, in the absence of manifest error, will be conclusive and binding. Such reference shall be deemed to be arbitration pursuant to the Arbitration Act [Cap. 38] of Fiji or any statutory modification of that Act.
- (d) All cost of the Arbitrator together with any expert report will be borne equally between the parties.

D16 Force Majeure

Notwithstanding anything to the contrary herein contained, should either of the parties hereto be prevented from fulfilling in whole or in part its obligations in terms of this Agreement, whether such prevention arises from Force Majeure, Act of God, war, civil commotion, strikes, lockouts, revolution, fires, explosions, floods, political disturbances, acts of any Government or local authority, breakdown of plant or machinery, or any other cause whatsoever over which the party has no reasonable control over, such party shall be exempted from liability to the extent and for the period it shall hereby have been prevented from fulfilling its obligations hereunder and shall immediately notify the other to that effect and confirm this in writing giving a full and complete explanation of the circumstances responsible for such failure or occurrence as well as the estimated duration thereof and if requested the action(s) that such party is taking or proposes to take to remove the said circumstances with the least delay possible as well as the actions(s) to be taken to prevent future recurrences.

Either Party claiming relief for a Force Majeure Event shall:

- a) Give written notice of the occurrence of the Force Majeure Event to the other Party; and
- b) Do all things reasonably required to mitigate the effect of the Force Majeure Event.

After the Force Majeure Event, the Party claiming relief for a Force Majeure Event will expedite in performing its obligation or condition expediently under this Agreement

SECTION E: Scope of Works

Part 1: GENERAL

1.0 Scope

This specification covers the design, manufacturing, testing, supply and delivery of two (2) x three phase 315kVA, 33kV/400V, 50Hz power type transformers for Butoni Windfarm, Sigatoka as per attached specifications.

2.0 Standards

The equipment shall comply with the latest editions and amendments of the international standards listed below as a minimum.

IEC-International Electro technical Commission:

- IEC 60071: Insulation co-ordination
- IEC 60076: Power transformers
- IEC 60137: Bushing for alternating voltages above 1,000V
- IEC 60156: Method for the determination of the electric strength of insulting oils
- IEC 60296: Specification for unused mineral insulating oils for transformer and switchgear
- IEC 60354: Loading guide for oil-immersed power transformers
- IEC 60437: Radio interference test on high-voltage insulators
- IEC 60551: Determination of transformer and reactor sound levels
- IEC 60616: Terminal and tapping markings for power transformers
- IEC 60722: Guide to the lightning impulse and switching impulse testing of power transformers and reactors

ISO-International Organization for Standardization:

- ISO 1459: Metallic coatings Protection against Corrosion by Hot Dip Galvanizing -Guiding Principles
- ISO 1460: Metallic coatings Hot dip galvanized coatings on ferrous materials. Gravimetric determination of the mass per unit area
- ISO 2178: Non-magnetic coatings on magnetic substrates
 Measurements of coating thickness Magnetic method
- ISO 9000: Quality management and quality assurance standards Guidelines for selection and use

Where any provision of this specification differs from those of the standards listed above, the provision of this specification shall apply. In case of conflict, the order of precedence shall be:

- This specification.
- IEC standards.
- ISO standards.
- Other standards.

Equipment confirming to alternative standards may be accepted provided it is demonstrated that they give a degree of quality and performance equivalent or better than that of the reference standards. Acceptability of any alternative standard is at the discretion of the Employer.

3.0 Service Conditions

Transformers will be installed outdoors, at ambient conditions given below.

3.1 Outdoor

Item	Description		
Localization of Butoni Windfarm:			
Latitude:	18° 7' 0''		
Longitude:	177° 31' 0''		
Location:	Western side		
Country:	Fiji		
Altitude above sea level:	Up to 200-400m above sea-level		
Ambient Temperature:			
Maximum outdoor – shade	+55 °C for 6 hours a day		
Minimum outdoor	+2°C		
Maximum outdoor daily average	+40 °C		
Maximum outdoor yearly average	+30 °C		
Maximum ground at depth 1 m	+35 °C		
Relative Humidity:			
Maximum.	87 %		
Minimum.	12 %		
Yearly Average.	44 %		
Maximum wind velocity:	More than 100 kilometer per hour		
Rainfall per year:			
Maximum	413 mm		
Minimum	55 mm		
Atmosphere:	Subject to storms and wind-blown dust		
Storm category max.	Cat 5		
Average number of days per year of thunder storms	More than 2		

4.0 System Conditions

The network design information is as follows:

Description	Voltage		
	33kV	11kV	415V
Nominal Voltage	33kV	11kV	415/230V
Highest System Voltage	36kV	12kV	440V
Number of Phases	3	3	3
Frequency	50Hz	50Hz	50Hz
Neutral Point	-	-	Directly Earth
3 Phase Short Circuit Level		25kA	31.5kA
Duration of Short Circuit		3 sec	1 sec
Insulation Levels:			
Impulse (peak)	170kV	95kV	-
Power Frequency	70kV	28kV	3kV

5.0 Inspection, Testing and Quality Assurance

5.1 Inspection

The Contractor shall submit a detailed program covering the design, manufacture and testing of the 2 x 315kVA, 33kV/400V 50Hz power transformers within one month of receipt of the contract award.

5.2 Testing

The equipment shall have been type tested and successfully passed all type tests referred to in *Part 2* "Technical", and in the most recent editions of the standards referenced in *Clause 2*. Certificates of type tests already carried out shall be submitted with the bid for evaluation.

5.3 Quality Assurance

The manufacturer must operate a quality assurance system that complies with ISO 9000. The Contractor shall provide current certification showing the manufacturers' compliance with ISO 9000 or equivalent national standard. The certificate must have been issued by an independent, accredited issuing authority.

6.0 Spare Parts

Not required.

7.0 Packing, Shipping and Hazardous Substances

7.1 Packing

All equipment, including accessories, shall be packed and securely clamped against movement in robust, non-returnable packing cases to ensure safe transit from the manufacturer's works to the agreed point of delivery. The base of the packing case shall be strong enough to carry the weight of the transformer and be large enough so that no part of the transformer and accessories such as pipes, valves, bushing etc extends beyond the edge of the pallet.

Transformers shall be supplied filled with oil. The weight and volume of oil in the transformer shall be clearly stated.

All the spare parts shall be packed for long storage.

Internal surfaces of equipment and accessories shall be sealed off by means of gaskets and blanking off plates. Equipment and surfaces liable to deterioration due to condensation shall be protected by packs of silica gel or other approved desiccant.

Each transformer shall have two (2) suitable labels tied to it on adjacent sides. Each label shall contain the following information indelibly marked on it:

- Individual serial number
- Employer's name
- Contract number
- Contractor's name
- Manufacturer's name
- Description of contents
- Country of origin
- Case measurements
- Gross and net weights in kilograms
- All necessary slinging and stacking instructions

Each transformer shall contain a fully detailed packing list in a sealed waterproof envelope robustly attached to it. Five (5) copies of each packing list shall be sent to the Employer prior to dispatching the equipment.

7.2 Hazardous Substances

The Contractor shall submit safety data sheets for all hazardous substances used with the equipment.

If such substances are not used in with the equipment, the Contractor shall give an assurance that there are no substances classified as hazardous in the equipment supplied.

8.0 Submittals Required by Employer after Contract Award

The Contractor shall submit a detailed programme covering the manufacture, testing and delivery of the materials and equipment.

PART 2: TECHNICAL

1.0 General

This specification covers the design, manufacturing, testing, supply and delivery of two (2) x 3phase 315kVA, 50Hz, 33kV/400V power transformers with accessories.

All transformers shall have separate primary and secondary

natural oil and air cooling (ONAN).

The design of the tank, fittings, bushings, etc. shall be such that it will not be necessary to keep the transformer energized to prevent deterioration as the transformers may be held in reserve, outdoors, for many years.

2.0 Technical Requirements

Description		Requirement		
	HV	33 kV		
Rated Voltage	LV	400 - 415 V		
Frequency		50 Hz		
Number of Phase	es	3		
Power ratings		315kVA		
Туре		Oil immersed, hermetically sealed (bolted type)		
Standard		IEC 60076		
Cooling		Self-cooled (ONAN)		
Voltage Variatio	n	Off-load tap changer with 3 positions in the HV winding giving $\pm 1 \times 2.5 \%$.		
Windings		Copper only		
Core		Grain orientated silicon steel, step-lap mitered joints		
HV Bushings		6 nos. with outdoor type (2 bushing/phase)		
LV Bushing		Indoor type		
Vector Group		Dyn11		
Impedance		4.26% with tolerance of ± 2 %		
Dimension		Refer to Appendix A		

2.1 Rated Power

The continuous rating of the two (2) x 33kV/415V power transformers shall be 315kVA with vector of Dyn11.

Each Transformer shall be capable of supplying its rated power being the product of rated voltage and rated current on the line side winding (at center tap) expressed in kVA, as defined in IEC 60076-1.

2.2 Overload Capacity

The transformer shall be capable of operating in accordance with the loading guidelines of IEC 60354 without exceeding the normal daily use of life and without the transformer winding hot spot temperature exceeding 140 °C.

The Bidder shall submit calculations demonstrating that above requirements are met. These calculations shall disregard the effect of winding thermal capacity.

Importance is attached to overload capacity. Transformers incapable of meeting the overload performance specified will not be considered.

2.3 Impedance Voltage

The guaranteed value of impedance measured at 75°C and center tap shall be 4% and it shall be subject to the tolerance specified in IEC 60076.

2.4 Short Circuit Performance

The transformer shall be capable of withstanding the thermal and dynamic effects of short circuits. System short circuit level and the withstanding duration are given in table "system conditions" in section 3.2.

2.5 Flux Density

The flux density at any point of the magnetic circuit when the transformer is connected on the centre tap and operating at normal voltage and frequency. Saturation must not occur at 10 % over voltage.

2.6 Noise Level

The average noise level of the transformers shall not exceed the values given in IEC 60551. The measurements shall be carried out in accordance with the above standard at a distance of 300 mm from the envelope of the transformer.

2.7 Tap Changing Characteristics

Each transformer shall be fitted with 3 taps with \pm 1 x 2.5% voltage variation. Tap changing and the tap changing mechanism shall have the following characteristics:

- Tap changing shall be carried out with the transformer off-load. An externally operated self-positioning tapping switch shall be provided.
- Provision shall be made for locking the tap switch handle with a padlock having a 6 mm diameter hasp.
- Tap changer handles shall be fitted with gasketed covers, so that sealing of the transformer under normal conditions is independent of the switch shaft gland.

3.0 Materials and Construction

3.1 Core and Coils

The HV and LV windings shall be made of high conductivity copper. Copper foil may be used for the LV winding.

The windings shall be uniformly insulated and the LV neutral point shall be insulated for full voltage. The insulation material of windings and connections shall be high quality, free from insulation softening, shrinking or collapsing during service. Moreover none of the material used shall disintegrate, carbonize or become brittle under the action of hot oil, under all load conditions.

The core shall be manufactured from non-aging, grain-orientated silicon steel of high permeability with step-lap mitered joints.

The core and coil assembly shall have the core and coils rigidly connected to the tank and suitable closed lugs shall be provided for removing the core and coil assembly from the tank.

3.2 Bushings and Terminals

The HV bushing shall have a total of six (6) with 2 per phase as prescribe on the proposed drawing and shall have phase mark besides as below:

Line 1 – AE and AS, Line 2 – BE and BS, Line 3 – CE and CS (refer to the proposed drawing)

The LV bushing shall have a total of four (4) with 3 phases and a neutral mounted on the top of the transformer cover. The LV bushing shall be enclosed into the termination box with removable bolts and nuts. The phase indication shall be marked besides the LV bushing as below.

Line 1 - a, Line 2 - b, Line 3 - c, Line 4 - n

All bushings shall be so designed that there will be no excessive stressing of any parts due to temperature changes and adequate means shall be provided to accommodate conductor expansion. Insulation levels for bushings shall be at least equal to those specified for the windings.

The HV & LV Bushings shall be mounted on the tank cover of the transformer so that they are easy to be checked and removed without removing the tank cover. The LV bushing shall be enclosed with the termination box and shall have removable bolts and nuts should cable connection/disconnect takes place on the LV side. It should be the same design as on attached photos

Both HV and LV Bushings shall be complete with Brass terminals suitable for terminating Copper conductors as details given below:

- HV: right angle indoor bushings with clamp for terminating 50-95 mm² single core copper conductor.
- LV: indoor bushings with terminals suitable for terminating 240 -300 mm² copper

The HV and LV bushings shall be:

- Easily replaceable and cemented in bushings are not acceptable.
- Sufficiently robust to withstand normal transport hazards.

The Contract is to also supply 4 sets of 33kV terminations kits for right angle terminations for the transformers. Two will used as spares.

The HV bushings shall be labeled in accordance with IEC 60076. Letters shall be at least 12 mm high. The means of marking shall be either:

- Engraved metal plate or etched anodized aluminium. Identification by adhesive stickers is not acceptable.
- If labeling is to be carried out on the tank, it is preferred that one plate be used rather than
 individual markings for each phase, in order to prevent incorrect phase markings.

3.3 Earthing Terminals

All transformers shall be provided with a main earthing terminal of stainless steel welded to the tank and be fitted with a stainless steel M12 bolt, nut, spring washer and a lock washer.

3.4 Tank Fabrication

The transformer tank shall be of rigid construction, shall not leak and shall be designed so that the completed transformer can be lifted and transported without permanent deformation or oil leakage. The Bidder shall state what method of leak testing is used.

The tank shall be fabricated of mild steel or stainless steel. If stainless steel is used it shall not discolour or corrode.

3.5 Surface Treatment

The transformer tank, radiators and accessories should be adequately protected against corrosion and the Contractor shall submit details of the proposed method of protection.

All surfaces shall be thoroughly cleaned of rust, scale, grease and dirt and other foreign matter and all

imperfections shall be removed by means of approved methods.

The transformer tank and its steel attachments shall be hot dip galvanized or metallized, followed by painting. The painting system used should be proven and documented.

The outside of the tank shall be painted Gray.

The inside of the tank shall be painted with an approved oil resisting varnish so that the oil cannot come into contact with the tank metal at any time.

3.6 Tank Fittings and Attachments

The following fittings and attachments shall be provided in all transformers:

- > Tap changer (off-circuit with pad lockable switch).
- > HV bushing assembly.
- LV bushings assembly.
- Oil filling and drain valves.
- Main earthing terminal.
- > Lifting eyes and jacking pads.
- > Stainless steel engraved rating and connection plate in English languages.
- Pressure relief valve.
- Protecting irons.
- Oil level indicator.
- > Terminal marking.

3.7 Transformer Oil

The transformers shall be supplied filled with class 1 mineral oil conforming to IEC 60296. The Contractor shall submit a detailed specification for the type of oil proposed. The oil shall not contain polychlorinated biphenyls (PCB). The Employer may require evidence that the oil is not contaminated by PCB. If an anti-oxidant is recommended, its use shall be subject to the Employer's approval.

4.0 Transformer Losses

The Contractor shall state the guaranteed losses. No positive tolerance is allowable on the guaranteed values. Transformers supplied with losses exceeding the guaranteed values will be rejected.

The Contractor shall also state the value of guaranteed magnetizing current, subject to the tolerance specified in IEC 60076.

4.1 Loss Evaluation

The admissible tolerances for component and total losses of transformer after testing shall be according to IEC 60076.

The Employer may at its sole discretion reject any transformer with Copper losses or Iron losses exceeding the relevant tolerances.

5.0 Tests

The tests listed hereinafter shall be carried out in accordance with provisions in the referenced standards in the specification.

5.1 Type Tests

Following shall be regarded as type tests:

- Temperature Rise Test. This test shall be carried out on the tap having maximum losses
- Short Circuit Withstand test
- Measurement of zero-sequence Impedances
- Impulse Voltage Test and Power Frequency Test
- Acoustic Sound Level Measurement
- Tank Vacuum Test
- Measurement of Harmonic Level in no load condition
- Oil Analysis

5.2 Galvanizing Tests

Galvanizing tests shall be carried out on transformer tanks prior to painting. Those shall be routine tests, which shall be part of the routine tests documentation and shall not be charged to the Employer. Testing shall be in accordance with ISO 1460 and is summarized as follows.

The following tests, measurements or inspections shall be carried out on each of the selected samples:

- Visual inspection
- Thickness of galvanizing coat
- Uniformity of galvanizing coat

In the event of disagreement or dispute over the results of the above tests a coating mass test shall be carried out. The result of this test shall be definite and binding.

6.0 Label and Rating Plates

Labels, name plates, markings and instructions shall be clear and indelible and in the English language. A weatherproof rating plate shall be provided in accordance with IEC 60076 and showing the following items, indelibly marked:

- Type of transformer
- Specification to which standard it was manufactured
- Manufacturer's name
- Serial number
- Year of manufacturer
- Number of phases
- Rated power
- Rated frequency
- Rated voltage
- Rated currents
- Vector group
- Percentage impedance voltage at rated current
- Type of cooling
- Continuous ambient temperature at which ratings apply
- Top oil temperature rise at rated load

- Total weight
- Volume of oil
- Weight of core and windings
- Table of primary voltages at the 5 tapping positions
- Connection diagram
- Employer's name

7.0 Product Warranty Period

The Bidder shall provide a warranty period as part of the proposal. A Minimum warranty period of twenty-four (24) months from the time of dispatch from the factory shall be provided.

PART 3: SCHEDULES AND ATTACHMENTS

SCHEDULES TO BE COMPLETED BY THE BIDDERS –

1.0 Technical Data Schedule for 2 x 315kVA, 33kV/415V kVA 50Hz Power Transformer.

No.	DESCRITION		UNIT	Data
1.0	Manufacturer			
2.0	Standard (1)			
3.0	Rating		KVA	
4.0	Phases			
5.0	Frequency		Hz	
6.0	Cooling			
7.0	HV Voltage		V	
8.0	LV Voltage		V	
9.0	Vector Group			
10.0	Tap changer type			
11.0	Tap Position			
12.0	Max tap/Min tap		%	
13.0	Tap percentage		%	
14.0	No load Loss @ 75 °C		W	
15.0	Load Loss @ 75 °C		W	
16.0	Impedance voltage @ 75 °C		%	
INSU	LATION LEVEL	<u>'</u>	l	
No.	DESCRITION		UNIT	
17.0	Separate source 1 min, 50 HZ	HV/LV	kV rms	
18.0	Impulse withstand 1.2/50 µsec. (2)	HV/LV	kVp	
TEMI	P. RISE @ 40 °Camb			
19.0	Windings		°C	
20.0	Top Oil		°C	
21.0	Insulation class			
REGU	JLATION	<u> </u>		
NO.	DESCRITION		UNIT	
22.0	@ full load @ power factor	1.00	%	
23.0	@ full load @ power factor	0.85	%	
EFFI (CIENCIES @ UNIT pf.	·		
NO.	DESCRITION		UNIT	
24.0	125 % Load at power factor	1.00	%	
25.0	100% Load at power factor	1.00	%	
26.0	75% Load @ power factor	1.00	%	
27.0	50% Load at power factor	1.00	%	
CONI	DUCTORS			
NO.	DESCRITION		UNIT	
28.0	HV/LV WINDINGS			
29.0	Magnetizing current % of FLC		%	
30.0	Sound Power Level (3)		Db (A)	
	•			

2.0 TENDER SUBMISSION CHECK LIST

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

Tender Number				
Tender Name				
1.	Full Company Name:(Attach copy of Registration Certificate)			
2.	Director/Owner(s):			
3.	Postal Address:			
4.	Phone Contact:			
5.	Fax Number:			
6.	Email address:			
7.	Office Location:			
	TIN Number: (Attach copy of the VAT Registration Certificate – Local Bidders Only)			
9.	Company Registration Number:(Attach copy of the Business License)			
10. FNPF Employer Registration Number:				
11	. Contact Person:			
	I declare that all the above information is correct.			
	Name:Sign:			
	Date:			

2.0 - Proposed Pricing Schedule

Supply of 2 \times 315kVA, 33kV/415V, 50Hz Transformer

Item	ITEM DESCRIPTION	UNIT PRICE % of Contract Price	TOTAL PRICE
1	Design Approval	10%	
2	Manufacture of 2 x 315KVA, 33kV/400V, 50Hz Transformers	40%	
3	Shipment DDU to Lautoka Port, Fiji Islands	40%	
4	Retention	10%	
	TOTAL (VIP)	100%	
1	Design Approval	30%	
2	Manufacture of 2 x 315KVA, 33kV/400V, 50Hz Transformers	30%	

Notes:

1. EFL financial terms are applicable for these works.

Tender Submission - Instruction to bidders

It is mandatory for Bidders to upload a copy of their bid in the TENDER LINK Electronic

Tender Box no later than 4:00pm, on Wednesday 11th July, 2018.

To register your interest and tender a response, view 'Current Tenders' at:

https://www.tenderlink.com/efl

For further information contact The Secretary Tender Committee, by e-mail

TDelairewa@efl.com.fj

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the EFL Head Office, 2 Marlow Street, Suva, Fiji no later than

4:00pm, on Wednesday 11th July, 2018 - Addressed as

Tender – MR 241/2018 – Design, Manufacture and Supply of 2 x 315KVA, 33kV/400V 3 Phase Transformers for Butoni Wind farm, Sigatoka, Fiji Islands

The Secretary Tender Committee

ENERGY FIJI LIMITED

Head Office

Suva

Fiji

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

Tenders received after 4:00pm on the closing date of **Wednesday 11th July, 2018** will not be considered.

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