



ENERGY FIJI LIMITED TENDER DOCUMENT

**SUPPLY, CONSTRUCT PAD AND INSTALLATION
OF NEUTRAL EARTHING RESISTORS AT SUVA,
VATUWAQA AND SAWANI SUBSTATIONS**

TENDER NO: MR256/2018

Invitation for Bids

Date : 30th JUNE, 2018
Tender No : MR 256/2018

Energy Fiji Limited ("the Employer") invites sealed bids from reputable companies for the Supply and Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa And Sawani Substations complete with all civil works .

The Tenderer is required to submit a bid for:

Supply and Installation of Neutral Earthing Resistors (NER) Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa And Sawani Substations.

All tenders for the contract shall be submitted on the appropriate tender forms provided and shall include the completed guarantees, price schedule, technical schedule and schedules of experience etc. relevant copies of which are included. The tender shall be on the basis of a lump sum contract based on firm prices.

Bidders may obtain further information from, inspect and acquire the bidding documents and, if required, arrange for a site visit from

Tuvitu Delairewa
General Manager Commercial
2 Marlow Street, Suva, FIJI.
Phone: 679 3224 185
Facsimile: 679 331 1882
Email: TDelairewa@efl.com.fj

Mandatory Site visit at Suva, Vatuwaqa and Sawani Substation with EFL representatives will be at Wednesday, 10am 4th July, 18 commencing from Suva Substation.

Deadline for submission of tenders shall be 1600 hours on Day, 25th July, 2018.

During evaluation of tenders EFL will invite a tenderer or tenderers for discussions, presentations and any necessary clarification before awarding of the contract.

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Section 1 Instruction to Bidders

	A. General
1. Scope of Bid	<p>1.1 Energy Fiji Limited (hereinafter referred to as "the Employer"), wishes to receive bids for the Supply and Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa And Sawani Substations. as defined in these bidding documents (hereinafter referred to as "the Works").</p> <p>1.2 The successful bidder will be expected to complete the Works within 3 months from the date of commencement of the Works which is the date of contract sign-off.</p>
2. Source of Funds	<p>2.1 Energy Fiji Limited has a capital works program which is self-funded and intends to use part of the funds for the contract ("the Contract") for which this Invitation to Bid is issued.</p>
3. Eligible Bidders	<p>3.1 This Invitation to Bid is open to an installation contractor preferred by a reputable manufacturer with written approval.</p> <p>3.2 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer as the Employer shall reasonably request.</p> <p>3.3 Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent.</p>
4. Eligible Materials, Equipment and Services	<p>4.1 The materials, equipment, and services to be supplied under the Contract shall have their origin from reputable companies from various countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. At the Employer's request, bidders may be required to provide evidence of the origin of materials, equipment, and services.</p> <p>Asbestos materials, materials or insulants containing PCB's, or other materials prohibited by the Fiji Laws shall not be used in the construction of the neutral earthing resistor.</p> <p>4.2 For purposes of Sub-Clause 4.1 above, "services" means the works and all project-related services including design services.</p> <p>4.3 For purposes of Sub-Clause 4.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided.</p>

5. Qualification of the Bidder

- 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.
- 4.4 The materials, equipment and services to be supplied under the Contract shall not infringe or violate any industrial property or intellectual property rights or claim of any third party.
- 5.1 To be qualified for award of Contract, bidders shall:
- (a) submit a written power of attorney authorizing the signatory of the bid to commit the bidder; and
 - (b) Specify joint venture memberships, certification and qualification as equipment manufacturer and subcontractor, financial capability, technical capability, supply and installation facilities with comparable technical parameters, manufacturing and installation capability, work in hand, future commitments and current litigation.
 - (c) Submit proposals regarding work methods, scheduling and resourcing which shall be, provided in sufficient detail to confirm the bidder's capability to complete the works in accordance with the specifications and the time for completion.
- 5.2 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:
- (a) the bid, and in case of a successful bid, the Form of Contract Agreement, shall be signed so as to be legally binding on all partners;
 - (b) one of the partners shall be authorized to be in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
 - (c) The partner in charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the joint venture and the entire execution of the Contract. All contract payments to be made by the Employer will be remitted to the authorized partner in charge, and it shall be their responsibility to disburse the payments to the other partners;
 - (d) all partners of the joint venture shall be jointly and

	<p>severally liable for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Bid Form and the Form of Contract Agreement (in case of a successful bid); and</p>
	<p>(e) A copy of the agreement entered into by the joint venture partners shall be submitted with the bid.</p>
	<p>5.3 Bidders shall also submit proposals of work methods and schedule in sufficient detail to demonstrate the adequacy of the bidders' proposals to meet the Employer's Requirements and the completion time referred to in Sub-Clause 1.2 above.</p>
6. One Bid per Bidder	<p>6.1 Each bidder shall submit only one bid either by itself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.</p>
7. Cost of Bidding	<p>7.1 The bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for those costs.</p>
8. Site Visit	<p>8.1 The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the design-build and completion of the Works. The costs of visiting the Site shall be at the bidder's own expense. The site can be visited on the following date and locations at:</p> <p>Suva, Vatuwaqa and Sawani Substations, 10am Thursday, 24th May 2018 commencing from Suva Substation.</p>
	<p>8.2 The bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the bidder, its personnel and agents, will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.</p>

9. Content of Bidding Documents

B. Bidding Documents

9.1 The bidding documents are those stated below, and should be read in conjunction with any Addenda issued in accordance with Clause 11:

	Invitation for Bids
Section 1	Instructions to Bidders
2	Part I - General Conditions
3	Part II - Conditions of Particular Application
4	Employer's Requirements
5	Forms of Proposals and Appendices
6	Sample Forms
7	Schedules
8	Appendices

9.2 The bidder is expected to examine carefully the contents of the Bidding documents. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Pursuant to Clause 29, bids which are not substantially responsive to the requirements of the bidding documents will be rejected.

10. Clarification of Bidding Documents

10.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing by fax, or email at the Employer's address indicated in the Invitation for Bids. Copies of the Employer's response, including a description of the inquiry, will be forwarded to all Employers of the bidding documents.

11. Amendment of Bidding Documents

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

11.2 Any addendum thus issued shall be part of the bidding documents pursuant to Sub-Clause 9.1, and shall be communicated in writing or by fax to all Employers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by email and fax to the Employer.

11.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may extend the deadline for submission of bids, in accordance with Clause 23.

	C. Preparation of Bids
12. Language of Bid	12.1 The bid, and all correspondence and documents related to the bid, exchanged between the bidder and the Employer shall be written in the English language only.
13. Documents Comprising the Bid	13.1 The bid submitted by the bidder shall comprise of a single envelope containing tender proposal. The technical proposal shall contain the following: 13.2 <ul style="list-style-type: none">i. Form of Tender and Appendix to Tender;ii. Power of Attorney;iii. Information on Qualification;iv. Confirmation of Eligibility;v. Schedules of Prices;vi. Schedule of Major Items of Equipment;vii. Schedule of Manufacturers, Place of Manufacture and Testingviii. Schedule of Technical Particulars & Guaranteesix. Schedule of Times for Delivery & Completion and Contract completion timesx. Schedule for Departures from Specificationxi. Schedule of Manufacturers Statement of Experiencexii. Schedule of Contractors Health & Safety Planxiii. Schedule of Other Documents and Drawings to be submitted with the bidxiv. Any other materials required to be completed and submitted by bidders in accordance with these Instructions to Bidders.
14. Bid Form and Price Schedules	14.1 The Bidder shall complete the Bid Form and the appropriate Price Schedules furnished in the bidding documents in the manner and detail indicated therein, following the requirements of Clauses 15 and 16.
15. Bid Prices	15.1 Unless specified otherwise in Employer's Requirements, Bidders shall quote for the entire facilities on a "single responsibility" basis such that the total bid price covers all the Contractor'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), delivery, construction, installation and completion of the facilities. This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the facilities and, where so required by the bidding documents, the acquisition of all permits, approvals and licenses, etc., operation maintenance and training services and such other items and services as may be specified in the bidding documents, all in accordance with the requirements of the Conditions of Contract.

- 15.2 Bidders shall give a breakdown of the prices in the manner and detail called for in the Schedules of Prices.
- 15.3 In the Schedules, Bidders shall give the required details and a breakdown of their prices, including all taxes, With Holding Tax, duties, levies, and charges payable in the Employer's country as of twenty eight (28) days prior to the deadline for submission of bids, as follows:
- (a) Design including all necessary drawings and documentation for the Work.
 - (b) Plant and equipment to be supplied from outside the Employer's country shall be quoted on a DDP to Site. In addition, estimated ocean freight charges, local transport, insurance, installation charges, and import duties and taxes shall also be indicated separately in foreign currency and in local currency.
 - (c) Installation work and Other Services shall be quoted separately and shall include rates or prices for all labour, contractor's equipment, temporary works, materials, consumables and all matters and things of whatsoever nature, including local transportation, operations and maintenance services, the provision of operations and maintenance manuals, training, etc. where identified in the bidding documents, as necessary for the proper execution of the Civil Works, Installation and Other Services.
 - (d) Recommended spare parts shall be quoted separately as specified in either subparagraph (b) or (c) above in accordance with the origin of the spare parts.
 - (e) Tenderers are strongly advised to check with the Fiji Islands Revenue and Customs Authority, 5th Floor Dominion House, Suva, Private Mail Bag, Suva, regarding income tax, With Holding Tax and corporate tax which may become payable in Fiji, and to make particular note of arrangements and procedures which are necessary because of the existence or non-existence of taxation agreements between Fiji and other countries. Tel No. (679) 3301551 Fax No. (679) 3315537
- 15.4 The term DDP shall be governed by the rules prescribed in the current edition of "Incoterms", published by the International Chamber of Commerce, Paris.
- 15.5 Prices quoted by the bidder shall be on a fixed lump sum basis with no forex exchange variation and shall not be adjusted for changes in the cost of labour, material or other matters except only for

	<p>changes in legislation in accordance to Sub-Clause 13.16 of the General Conditions of Contract.</p>
16. Bid Currencies	<p>16.1 Prices shall be quoted in the following currencies:</p> <ul style="list-style-type: none">(a) the prices shall be quoted in the Fijian currency and either in the currency of the bidder's home country, or in Australian and New Zealand Dollars only;(b) a bidder expecting to incur a portion of its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in its Bid; and. <p>16.2 Bidders shall not indicate there any foreign currency requirements in the Appendix to Price Proposal as the price is fixed lump sum.</p> <p>16.3 Bidders may be required by the Employer to clarify their local and foreign currency requirements, and to substantiate that the amounts included in the Schedule of Prices and shown in the Appendix to Price Proposal are reasonable and responsive to Sub-Clause 15.1 in which case a detailed breakdown of its foreign currency requirements shall be provided by the bidder.</p>
17. Bid Validity	<p>17.1 Bids shall remain valid for a period of 120 days after the date of opening of technical proposals specified in Sub-Clause 26.1.</p> <p>17.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing or by cable. A bidder may refuse the request without forfeiting its bid security. A bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to extend the validity of its bid security for the period of the extension, and in compliance with Clause 18 in all respects.</p>
18. Alternative Proposals by Bidders	<p>18.1 Bidders wishing to offer technical alternatives to the Employer's Requirements of the bidding documents must first price the Employer's Requirements as described in the bidding documents and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methods. Only the technical alternatives, if any, of the best value for money bidder conforming to the basic technical requirements shall be considered by the Employer.</p>
19. Format and Signing of Bid	<p>19.1 The bidder shall prepare one original and 1 copy of the bid, clearly marking each one as: "ORIGINAL TENDER PROPOSAL" and "COPY OF TENDER PROPOSAL". In the event of discrepancy</p>

20. Sealing and Marking of Bids		between the original and any copy, the original shall prevail.
	19.2	The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder, pursuant to Sub-Clauses 5.1 (a) or 5.2 (b), as the case may be. All pages of the bid where entries or amendments have been made shall be initialled by the person or persons signing the bid.
	19.3	The bidder shall provide one softcopy (in a CD format) of the Technical and Financial proposals
	19.4	The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.
	19.5	The bidder shall furnish information as described in the Form of Bid on commission or gratuities, if any, paid or to be paid relating to this Bid, and to Contract execution if the bidder is awarded the Contract.
		D. Submission of Bids
	20.1	The bidder shall seal the original copy of the bid, and the copy of the bid in separate envelopes clearly marking each one as: "ORIGINAL TENDER PROPOSAL" and "COPY OF TENDER PROPOSAL".
	20.2	The bidder shall seal the original bids and copy of the bids in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL" and "COPY".
	20.3	The inner and outer envelopes shall
		(a) be addressed to the Employer at the following address: Tuvitu Delairewa General Manager Commercial 2 Marlow Street, Suva, FIJI. Phone: 679 3224 185 Facsimile: 679 331 1882 Email: TDeலைrewa@efl.com.fj
		And
		(b) bear the following identification: <ul style="list-style-type: none">• Bid for: Supply and Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa And Sawani Substations• Bid Tender Number: MR256/2018• DO NOT OPEN BEFORE Thursday, 26th, July, 2018.

21. Deadline for Submission of Bids	20.4	In addition to the identification required in Sub-Clause 20.3, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause 22.
	20.5	If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
	21.1	Bids must be received by the Employer at the address specified above no later than 1600 hours (Fiji Time) Wednesday, 6th June 2018.
22. Late Bids	22.2	The Employer may, at its discretion, extend the deadline for submission of bids by issuing an addendum in accordance with Clause 11, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.
	23.1	Any bid received by the Employer after the deadline for submission of bids prescribed in Clause 21 will be rejected and returned unopened to the bidder.
23. Modification and Withdrawal of Bids	23.1	The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline for submission of bids.
	23.2	The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause 21, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.
	23.3	No bid may be modified by the bidder after the deadline for submission of bids, except in accordance with Sub-Clauses 23.2 and 28.2.
24. Opening of Technical Proposals	E. Bid Opening and Evaluation	
	25.1	The Employer will open the bids, including modifications made pursuant to Clause 23, at the earliest suitable date and time after closing of the bids, at the following location: <i>Energy Fiji Limited 2 Marlow st, Suva, Fiji</i>
25. Process to Be	25.1	Information relating to the examination, clarification, evaluation

<p>Confidential</p>		<p>and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of the bidder's bid.</p>
	<p>26. Clarification of Bids and Contacting the Employer</p>	<p>26.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing or by fax, 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 the Employer in the evaluation of the bids in, accordance with Clause 28.</p> <p>26.2 Subject to Sub-clause 27.1, no bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.</p> <p>26.3 Any effort by the bidder to influence the Employer in the Employer's bid evaluation, bid comparison or Contract award decisions may result in the rejection of the bidder's bid.</p>
	<p>27. Preliminary Examination of Bids and Determination of Responsiveness</p>	<p>27.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid (i) meets the eligibility criteria; (ii) has been properly signed; (iii) is accompanied by the required securities; (iv) is substantially responsive to the requirements of the bidding documents; (v) is conforming to Clause 15; and (vi) provides any clarification and/or substantiation that the Employer may require pursuant to Clause 26.</p> <p>27.2 A substantially responsive bid is one which conforms to all the terms, conditions and requirements of the bidding documents, without material deviation or reservation. A material deviation of reservation is one (i) which affects in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the bidding documents, the Employer's rights or the bidder's obligations under the Contract; or (iii) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.</p> <p>27.3 If a bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.</p>
<p>28. Correction of Errors</p>	<p>28.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Arithmetic errors will</p>	

	<p>be rectified on the following basis. If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of the total costs shall prevail and the total bid amount will be corrected.</p>
	<p>28.2 The amount stated in the Form of Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited in accordance with Sub-Clause 17.6 (b).</p>
29. Conversion to Single Currency	<p>29.1 The Employer will convert the amounts in various currencies in which the Bid Price is payable to the currency of the Employer's country at the selling exchange rates officially prescribed for similar transactions as established by the Reserve Bank of Fiji on the date of opening of bids.</p>
30. Evaluation and Comparison of Bid	<p>30.1 The Employer will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 27.</p> <p>30.2 For plant and equipment, the comparison shall be of the DDP to Site price of plant and equipment offered. The Employer's comparison will also include the costs resulting from application of the evaluation procedures described in Sub-Clause 30.4.</p> <p>30.3 The Employer will carry out a detailed evaluation of the bids in order to determine whether the bidders confirm to meet the prequalification requirements and whether the bids are substantially responsive to the requirements set forth in the bidding documents. In order to reach such a determination, the Employer will examine the information supplied by the Bidders and other requirements in the bidding documents, taking into account the following factors.</p> <ul style="list-style-type: none">(a) Qualification<ul style="list-style-type: none">(i) the determination will take into account the Bidder's updated financial, technical and production capabilities and past performance; it will be based upon an examination of the documentary evidence submitted by the Bidder, pursuant to Sub-Clause 5.1(b), as well as such other information as the Employer deems necessary and appropriate; and

- (ii) an affirmative determination will be a prerequisite for the Employer to continue with the evaluation of the bid; a negative determination will result in rejection of bid.
 - (b) Technical
 - (i) overall completeness and compliance with the Employer's Requirements; the technical merits of plant and equipment offered and deviations from the Employer's Requirements; suitability of the facilities offered in relation to the environmental and climatic conditions prevailing at the site; quality, function and operation of any process control concept included in the bid;
 - (ii) achievement of specified performance criteria by the facilities;
 - (iii) type, quantity and long-term availability of spare parts and maintenance services;
 - (c) Commercial
 - (i) the cost of all quantifiable deviation and omissions from the contractual and commercial conditions and the Employer's Requirements as identified in the bid, and other deviations and omissions not so identified;
 - (ii) compliance with the time schedule called for in Appendix to Bid and evidenced as needed milestone schedule provided in the bid;
 - (iii) the functional guarantees of the facilities offered; and
 - (iv) the extra cost of work, services, facilities etc., required to be provided by the Employer or their parties.
- 30.4 Pursuant to Sub-Clause 30.3, the following evaluation methods will be followed:
 - (a) **Contractual and commercial deviations:** The evaluation shall be based on the evaluated cost for fulfilling the Contract in compliance with all commercial, contractual and technical obligations under this bidding document. The Employer will make its own assessment of the cost of any deviations for the purpose of ensuring fair comparison of bids.
 - (b) **Time Schedule:** The plant and equipment covered by this bidding are required to be shipped, installed and the facilities completed within the period specified in Sub-Clause 1.2 and the Appendix to the Bid.

- Bidders submitting bids which deviate from the time schedule specified will be rejected.
- (c) The price of recommended spare parts quoted in Schedule of Prices shall not be considered for evaluation.
- (d) **Functional Guarantee of the facilities:**
- (i) Bidders shall state the functional guarantees (e.g. performance, efficiency, consumption) of the proposed facilities in response to the Employer's Requirements. Plant and equipment offered shall have a minimum (or a maximum, as the case may be) level of functional guarantees specified in the Employer's Requirements to be considered responsive. Bids offering plant and equipment with functional guarantees less (or more) than the minimum (or maximum) specified shall be rejected.
- (e) **Work, services, facilities etc., to be provided by the Employer:** Where bids include for the undertaking of work or the provision of services or facilities by the Employer in excess of the provisions allowed for in the bidding documents, the Employer shall assess the costs of such additional work, services and/or facilities during the duration of the Contract. Such costs shall be added to the bid price for evaluation.
- 30.5 (a) Any adjustments in price which result from the above procedures shall be added, for purposes of Comparative evaluation only, to arrive at an "Evaluated Bid Price". Bid prices quoted by Bidders shall remain unaltered.
- (b) The Employer reserves the right to accept or reject any variation, deviation or alternative offer. Variations, deviations, and other factors which are in excess of the requirements of the bidding documents or otherwise result in the accrual of unsolicited benefits to the Employer shall not be taken into account in bid evaluation.
- (c) The estimated effect of the price adjustment provisions of the Conditions of Particular Application, applied over the period or execution of the Contract, shall not be taken into account in bid evaluation.
- (d) If the bid of the successful bidder is substantially below the Employer's estimate for the Contract, the Employer

		<p>may require the bidder to produce detailed price analyses to demonstrate the internal consistency of those prices. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 37 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.</p>
31. Domestic Preference	31.1	No preference shall be given for domestic contractor or joint venture partners.
	F.	Award of Contract
32. Award	32.1	Subject to Clause 35, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the Best Value for Money, provided that such bidder has been determined to be (i) eligible in accordance with the provisions of Clause 3; and (ii) qualified in accordance with the provisions of Clause 5.
	32.2	The bidder may be required to attend meetings at the Employer's office for techno-commercial discussions prior to the signing of the Contract at no cost to the Employer.
33. Employer's Right to Accept any Bid and to Reject any or all Bids	33.1	Notwithstanding Clause 32, the Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Employer's action.
34. Notification of Award	34.1	Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder by e-mail that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall name the sum which the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price").
	34.2	The notification of award will constitute the formation of the Contract.
	34.3	Upon the furnishing by the successful bidder of a performance security, the Employer will promptly notify the other bidders that their bids have been unsuccessful

**35. Signing of
Contract
Agreement**

35.1 At the same time that he notifies the successful bidder that its bid has been accepted, the Employer will send the bidder the Form of Contract Agreement provided in the bidding documents, incorporating all agreements between the parties.

35.2 Within 28 days of receipt of the Form of Agreement, the successful bidder shall sign the Form and return it to the Employer.

**36. Performance
Security**

36.1 Within 28 days of receipt of the notification of award from the Employer, the successful bidder shall furnish to the Employer a performance security in an amount of 10 percent of the Contract Price in accordance with the Conditions of Contract. The form of performance security provided in Section 6 of the bidding documents shall be used.

36.2 Failure of the successful bidder to comply with the requirements of Clauses 35 or 36 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

**37. Corrupt or
Fraudulent
Practices**

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

(a) defines, for the purposes of this provision, the terms set forth below as follows:

i) "corrupt practice" means behaviour on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and

ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition;

(b) will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

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

Section 2 General Conditions of Contract

FIDIC CONDITIONS OF CONTRACT

for

DESIGN, BUILD & TURNKEY

First Edition, 1995

A Publication of The International Federation of Consulting Engineers

Notes on the Conditions of Contract

The Conditions of Contract comprise two parts: Part I – General Conditions (Section 2 of this document), and Part II – Conditions of Particular Application (Section 3 of this document).

The International Federation of Consulting Engineers (FIDIC) has recently prepared the First Edition (1995) of Conditions of Contract for Design-Build and Turnkey Contracts. FIDIC Part I – General Conditions is included herein, complete and without any changes as Section 2 of these documents.

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat
P.O. Box 86
1000 Lausanne 12
Switzerland
Facsimile: 41 21 653 5432
Telephone: 41 21 653 5003

Section 3 Conditions of Particular Application

Sub-Clause 1.1 Definitions

Amend subpara 1.1.1.3 of Sub-Clause 1.1 by adding the following words at the end:

"The word 'tender' is synonymous with bid'."

Amend subpara 1.1.1.4 of Sub-Clause 1.1 by adding the following words at the end:

"The words 'Appendix to Tender' are synonymous with the words 'Appendix to Technical Proposal' and 'Appendix to Price Proposal'."

Add the following subparagraph to Sub-Clause 1.1:

"1.1.2.7 "EFL" means Energy Fiji Limited ."

Sub-Clause 1.4 Law and Language

Replace the text of Sub-Clause 1.4 and add the following:

"The Contract shall be governed by and construed in accordance with the Laws of Fiji.
The language is the English language."

Sub-Clause 1.5 Contract Agreement

Substitute the wordings in Part I with the following:

"A Contract Agreement in the form annexed, with such modifications as may be necessary to record the agreement reached shall be executed. The costs of stamp duties and similar charges imposed by the law shall be borne by the Employer."

Sub-Clause 1.6 Priority of Documents

Replace the list of documents listed under (a) to (j) and add the following:

- (a) the Contract Agreement;
- (b) the Letter of Acceptance;
- (c) the Employer's Requirements;
- (d) the Bid;
- (e) the Conditions of Contract, Part II;
- (f) the Conditions of Contract, Part I;
- (g) the Schedules;
- (h) the Drawings;
- (i) the Contractor's Proposal; and
- (j) the Correspondences During Tender Evaluation"

Sub-Clause 1.15 Confidentiality	<p>Additional sub-clause:</p> <p>"The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out its obligations under it. The Contractor shall not publish, permit to be published or disclose any particulars of the Contract in any trade or technical paper or elsewhere without the prior consent in writing of the Employer."</p>
Sub-Clause 1.16 Inspections and Audit by the Employer	<p>Add the following sub-clause:</p> <p>"The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contract and to have them audited by auditors appointed by the Employer, if so required by the Employer."</p>
Sub Clause 2.5 Customs and Import Duties	<p>(a) The Contractor shall pay for all customs and import duties including clearing, handling charges, port dues and demurrage except only for customs and import duties in respect of Plant, Neutral earthing resistor and spare parts to be supplied under the Contract which shall be the responsibility of the Employer.</p> <p>(b) Customs and import duties if any in respect of the Contractor's Equipment shall be borne by the Contractor.</p> <p>(c) Notwithstanding Sub Clauses 2.5(a) and 2.5 (b) above, the Contractor shall ensure that all customs and import duties and taxes are paid on time (including making payment for duties and taxes which are the responsibility of the Employer and invoicing the Employer therefor after the fact). For the avoidance of doubt the Contractor shall not be entitled to any extension of time as a result of any delayed payments of import duties and taxes which was within its control.</p>
Sub-Clause 3.1 Employer Representative's Duties and Authority	<p>Add the following clause as required:</p> <p>"The Employer's Representative shall obtain the specific approval of the Employer before taking action under the following clauses of the Conditions of Contract Part I.</p> <ul style="list-style-type: none">(a) approving sub-contracting of any part of the Works under Sub-Clause 4.5.(b) certifying additional cost to the Contract Price.(c) granting an extension of time for completion under Sub-Clause 8.3.(d) suspending progress of part or all of the Works under Sub-Clause 8.8.(e) issuing a variation under Clause 14, except if such a variation would increase the Contract Price by no more than FJD 50,000.(f) issuing Taking-Over Certificate for the whole of the Works

under Sub-Clause 10.1.

- (g) issuing Performance Certificate for the Works under Sub-Clause 12.9.

Notwithstanding the obligation to obtain approval as set out above, if in the opinion of the Employer's Representative, an emergency occurs affecting the safety of life or of the Works or of adjoining property, it may, without relieving the Contractor of any of its duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Employer's Representative be necessary to abate or reduce the risk. The Contractor shall forthwith comply with the instructions of the Employer's Representative despite the absence of approval of the Employer. The Employer's Representative shall determine the extra cost to the Contractor for carrying out of such instruction and obtain the Employer's approval for an addition to the Contract Price."

**Sub-Clause 4.1
General
Obligations**

Add the following sentence to precede the existing text under Sub-Clause 4.1:

"Notwithstanding any other provision to the contrary, the Contractor is required to check the design criteria and calculations (if any) included in the Employer's Requirements, to confirm their correctness, in its bid and to assume full responsibility for them."

**Sub-Clause 4.2
Performance
Security**

Replace the first paragraph of Sub-Clause 4.2 with the following:

"The Contractor Shall provide security for its proper performance of the Contract to the Employer within 28 days after the receipt of the Letter of Acceptance. The performance security shall be in the form of a bank guarantee from a commercial bank and not Financial Service Institution, issued either (a) by a bank located in the country of the Employer or a foreign commercial bank through a correspondent bank located in the country of the Employer, or (b) directly by a foreign bank acceptable to the Employer. The performance security shall be denominated in the types and proportions of currencies in which the Contract Price is payable. When providing such security to the Employer, the Contractor shall notify the Employer's Representative of so doing."

**Sub-Clause 4.3
Contractor's
Representative**

At the end of Sub-Clause 4.3 add:

"The Contractor's Representative must be fluent (both spoken and written) in the English language."

**Sub-Clause 4.4
Co-ordination
of the Works**

Modify the first sentence of Sub-Clause 4.4 to read:

"The Contractor shall be responsible for the co-ordination and proper execution of the Works, including co-ordination with other contractors and organizations to the extent specified in the Employer's

	Requirements."
Sub-Clause 4.9 Site Data	<p>Modify the last sentence of paragraph 1 of Sub-Clause 4.9 to read:</p> <p>"The Contractor shall be responsible for interpreting all data including data listed elsewhere in the Contract as open for inspection at EFL, Suva, Vatuwaqa and Sawani Substations, Fiji".</p>
Sub-Clause 4.14 Program	<p>Delete the third sentence of Sub-Clause 4.14 indicated below:</p> <p>"Unless otherwise stated and late finish dates".</p>
Sub-Clause 5.2 Construction Documents	<p>In the fifth line of the second paragraph of sub-clause 5.2 replace "21" with "28".</p> <p>In Sub-Clause 5.2 delete sub-paragraph (a) and substitute:</p> <p>"(a) Construction shall not commence until the Contractor receives from the Employer's Representative approval of the Construction Documents relevant to the design and construction of such parts; provided always that:</p> <ul style="list-style-type: none">(i) if the Employer's Representative fails to give his ruling within 21 days, the Contractor shall give written notice (for the purpose of this sub-clause "Contractor's Notice") to the Employer's Representative of such failure; and(ii) if the Employer's Representative fails to give his ruling within 7 days of receipt of the Contractor's Notice, then the Contractor may proceed with the construction as though approval had been given".
Sub-Clause 5.4 Technical Standards & Regulations	<p>Add the following sentence to the end of the Sub-Clause 5.4:</p> <p>"In respect of technical specifications and standards, IEC (International Electrotechnical Commission based in 3, rue de Varembe, PO Box 131, CH-1211 Geneva 20, Switzerland) standards are to be adopted in general. Any national or international standards which promise to confer equal or better quality than the standards specified will also be acceptable. In all instances a copy of the relevant standards should be forwarded to the Employer's Representative".</p>
Sub-Clause 6.7 Health and Safety	<p>To sub-clause 6.7 add the following paragraph:</p> <p>The Contractor must, at all times during the execution of the Work, comply with the Health and Safety at Work Act 1996, the Electricity Act Cap 180, Energy Fiji Limited "Safety Manual" – Safety Rules and First aid For Employees Of EFL.</p>
Sub-Clause 6.8 Contractor's Superintendence	<p>At the end of Sub-Clause 6.8 add:</p> <p>"All the Contractors superintending staff shall have a working knowledge of the English language."</p>

Sub-Clause 6.11 Foreign staff and Labour	<p>"The Contractor may import such staff, and labourers as are required in order to execute the Works. The Contractor must ensure that all such staff and labour are provided with the required visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all persons whom the Contractor recruited and employed for the purpose of or in connection with the Contract and the cost of all business visa requirements. The Contractor shall be responsible for such persons as are to be returned until they shall have left the Site or, in the case of foreign nationals who have been recruited outside the Country, shall have left it."</p>
Sub-Clause 6.12 Measures against Insect & Pest Nuisance	<p>"The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the Site from insect and pest nuisance, and to reduce the dangers to health and the general nuisance occasioned by the same. The Contractor shall provide its staff and labour with suitable prophylactics for the prevention of malaria and dengue fever and take steps to prevent the formation of stagnant pools of water. The Contractor shall comply with all the regulations of the local health authorities and shall arrange to spray thoroughly with approved insecticide all buildings erected on the Site. Such treatment shall be carried out at least once a year or as instructed by such authorities."</p>
Sub-Clause 6.13 Epidemics	<p>"In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities, for the purpose of dealing and overcoming the same."</p>
Sub-Clause 6.14 Alcoholic Liquors or Drug	<p>"The Contractor shall not import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his Subcontractors, agents staff or labour."</p>
Sub-Clause 6.15 Arms and Ammunition	<p>"The Contractor shall not give, barter or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer to the same as aforesaid."</p>
Sub-Clause 6.16 Burial of the Dead	<p>The Contractor shall make all necessary arrangements for the transport, to any place as required for burial, of any of his expatriate employees or members of their families who may die in the Country. The Contractor shall also be responsible, to the extent required by local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the Works.</p>
Sub-Clause 6.17 Festivals and Religious Customs	<p>"The Contractor shall in all dealings with his staff and labour have due regard to all recognized festivals, days of rest and religious or other customs."</p>

Sub-Clause 7.3 Inspection	<p>To sub – clause 7.3 add the following paragraphs:</p> <p>The Employer and the Contractor shall carry out a joint walk through inspection to identify and document any defects/ deficiencies of the Works prior to commissioning, after which the Contractor shall rectify all the identified defects.</p> <p>The Employer and the Employer’s Representative shall be entitled at any time during the term of this Contract to inspect any part of the Works and the Contractor shall give them full opportunity and access to conduct such inspection.</p>
Sub-Clause 7.7 Restriction on Eligibility	<p>(a) Any materials, equipment, services or design services which will be incorporated in or required for the Contract, as well as the Contractor’s Equipment and other supplies, shall have their origin from reputable source countries acceptable to the Employer.</p> <p>(b) For the purpose of this clause, "services" means the works and all project-related services including design services.</p> <p>(c) For the purposes of this clause, "origin" means the place where the materials and equipment were mined, grown, produced, or manufactured, or from which the services are provided.</p> <p>(d) The origin of Goods and Services is distinct from the nationality of the Supplier."</p>
Sub-Clause 13.2 Advance Payment	<p>Modify the third sentence of this Sub-Clause to read:</p> <p>"The Employer’s Representative shall issue an Interim Payment Certificate for the first instalment after (i) execution of the Contract Agreement by the parties hereto (ii) provision of the Performance Security in accordance with Sub-Clause 4.2 by the Contractor and (iii) provision of an unconditional commercial bank guarantee by the Contractor in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment."</p>
Sub-Clause 13.15 Calculation of Payments in Foreign Currency	<p>Delete Clause 13.15 and add the following:</p> <p>"The Contract shall be paid in the currencies stated in the Appendix to Bid and shall be in accordance with Schedule of Prices and Conditions of Payment.</p> <p>The foreign and local currency portions of the balance of the Contract Price shall be amended by agreement between the Employer and the Contractor to reflect any substantial changes in the expected foreign and local currency requirements of the Contractor during the execution of the Works, provided that:</p>

**Sub-Clause 13.15
Calculation of
Payments in
Foreign Currency**

- (a) the Contractor shall inform the Employer and the Employer's Representative whenever any such substantial change may occur; or
- (b) the Employer's Representative may recommend a review of such expected requirements if in its judgment there is evidence of a change in the country of origin of equipment, materials, plants, or services to be provided under the Contract which should result in any substantial change of such expected requirements.

Any such amendment shall be affected by comparing the amounts quoted in the bid with the amounts already used in the Works and the Contractor's future needs for imported items."

To sub-clause 13.15 add the following paragraph:

The local (Fijian) and foreign component of the Contract Price shall not be subjected to any currency exchange rate variation.

**Sub-Clause 13.17
Taxation**

"(i) The prices bid by the Contractor shall include all taxes, duties and other charges imposed outside the Employer's country on the production, manufacture, sale and transport of the Contractor's equipment, Plant, materials and supplies to be used on or furnished under the Contract, and on the services performance under the Contract.

(ii) The prices bid by the Contractor shall include all customs duties, import duties, with Holding Tax, business taxes, income and other taxes that may be levied in accordance to the laws and regulations in being as of the date 28 days prior to the closing date for submission of bids in the Employer's country on the Contractor's Equipment, Plant, materials and supplies (permanent, temporary and consumable) acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from its responsibility to pay any tax that may be levied in the Employer's country on profits made by it in respect of the Contract."

**Sub-Clause 15.5
Corrupt or
Fraudulent
Practices**

Delete the existing Sub-Clause 15.5 and substitute the following:

"If in the judgment of the Employer the Contractor has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract, then the Employer may, after having given 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel the Contractor from the Site, and the provisions of Clause 15 shall apply as if such expulsion had been made under Sub-

**Sub-Clause 17.3
Employer's
Risks**

Clause 15.2."

This sub-clause is amended to read as follows:

"The Employer's risks are:

- (a) insofar as they directly affect the execution of the Works in the country where the Permanent Works are to be executed:
 - (i) war and hostilities (whether war be declared or not), invasion, act of foreign enemies in the Country;
 - (ii) rebellion, revolution, insurrection, or military or usurped power, or civil war in the Country;
 - (iii) ionizing radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or hazardous properties of any explosive nuclear assembly or nuclear component thereof in the Country;
 - (iv) pressure waves caused by aircraft or other aerial devised travelling at sonic or supersonic speeds in the Country;
 - (v) riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of its Subcontractors and arising from the conduct of the Works in the Country;
- (b) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract;
- (c) any operation of the forces of nature (insofar as it occurs on the Site) which an experienced Contractor:
 - (i) could not have reasonably foreseen, or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken appropriate measures to prevent loss or damage to physical property occurring."

**Sub-Clause 18.2
Insurance for
Works and
Contractor's
Equipment**

- (i) Amend the second sentence of the first and second paragraphs to read:

"This insurance shall cover loss or damage from any cause other than the Employer's risks listed in amended Sub-Clause 17.3 paras. (a)(i) to (iv) in Part II of the Conditions of

Contracts".

(ii) Amend the fourth sentence of the first paragraph to read:

"Such insurance shall cover the Employer and the Contractor from the first working day after the Commencement Date until the date of issue of the Taking-Over Certificate for the Works."

Section 4 Employer's Requirements – Scope of Works and Specifications

1 Scope and Specifications

1.1 Applicable Standards

Neutral Earthing Resistor (NER) shall be designed, manufactured and tested in accordance with the following International Standards and all amendments issued prior to the date of closing of tenders except where varied by these specifications.

IEC 60529	Degree of protection provided enclosure (IP code)
IEEE Std.32	Requirements, terminology and test procedures for neutral grounding devices

Should inconsistency be defined between standards and this specifications, this specification will take precedence. However, significant inconsistencies shall be referred to EFL for resolution.

1.2 Service conditions

1.2.1 Environmental conditions and mounting

The neutral earthing resistor shall be suitable for mounting outdoors on structures provided by the Contractor and on concrete footing provided by the supplier. It shall be designed to withstand the following service conditions

Height above sea level	Not exceeding 1000m
Atmosphere	Saliferous, corrosive and dusty
Ambient temperature	Peak : 50°C
	24 hour average : 35°C
	Annual average: 30°C
	Minimum: 10°C
Relativity Humidity (Average)	85%
Rainfall	Annual Average: 1900mm
Wind speed	Sustained: 70m/s
	Gusts : 70 – 110m/s
Isokeraunic level	60 thunder days per year
Seismic	To a maximum of 7 on the open-ended Richter Scale

Note: Fiji is situated in a region where cyclones are experienced frequently. All plant and equipment shall be designed and constructed to withstand these extreme conditions. All plant and equipment shall be rust proof, vermin proof and weather proof and designed to be suitable for a damp, tropical climate, which may be experienced simultaneously.

1.2.2 Scope of works

The following is the scope of works covered by this tender :

1. Manufacture of neutral earthing resistor as per tender specification
2. Shipping of the NER from place of manufacture to EFL site at Suva Substation, Vatuwaqa Substation and Sawani Substation.
3. Construction of pad for NER and isolator
4. Installation of NER and isolator
5. Removal of existing neutral cable from transformer, install and lay new cable (supplied by EFL at Kinoya depot). Termination at both ends will be carried out by EFL.
6. Test and commission new NER.

7. Removal of decommissioned NER and transport Cunningham Substation for storage

1.2.3 System Conditions

The rated frequency of EFL's power system is 50Hz. Each unit shall be suitable for use on its respective system positions

Highest (Equivalent) System voltage	15kV
Nominal system voltage	11kV

1.3 Design and manufacturing Criteria

1.3.1 General

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

All work shall be carried out and completed in a neat and professional manner to the approval of the purchaser.

1.3.2 Neutral earthing Resistor (NER)

The Neutral Earthing Resistor (NER) shall comply with IEEE standard 32 – 1972. NER shall be of the dry, outdoor and metal grid type. It shall be manufactured of edge wise wound, stainless steel strips or other approved metal or alloy not prone to embrittlement or corrosion and shall be suitable for outdoor service on 33kV system. Liquid resistors are not accepted.

Each resistor shall consist of a number of element assemblies electrically grouped so as to form parallel paths without cross connections to ensure that the time rating is not reduced if one of the paths become open circuit.

Cross-connections between paths shall not be made, so the overall s=resistor does not have its time rating reduced in the event of a resistor element assembly becoming open circuit.

The tolerance of each resistance and the temperature coefficient of resistance shall be such that at the maximum temperature rise of the element, after the application of rated voltage for 10 seconds, the total resistance variation shall be not greater than 10% of the normal value.

Suppliers shall state the minimum time which must elapse, after application of rated voltage for 10 seconds, before re-application of rated voltage for 10 seconds. The resistor enclosures shall be clad from GR316L stainless steel and have an IP rating of IP54.

The enclosure shall be fabricated with louvers in the vertical surfaces if required, and the whole enclosure shall be weather proof and vermin proof. Adequate insulating barriers shall be provided to prevent internal flashover. All external enclosure shall be stainless steel 2mm grade 316 marine.

Doors, fitted with restraining devices when open, shall be fitted to the enclosures to provide access to the resistor element, internally mounted equipment and the cable termination area. The doors shall be capable of being locked closed with a Lockwood type 234B padlock, 45mm wide and 19mm opening.

Fitting for hinged doors shall be suitable for outdoor use and fully corrosion resistant.

Hinges shall be stainless steel, door catches shall be manufactured of stainless steel or non-ferrous metal.

To allow measurement of the resistor fault current, the ground end of the resistor shall be brought out from the enclosure via an insulating bushing of appropriate current rating. The bushing external palm shall be vertical at a height 600mm from the enclosure floor and drilled to allow the connection of a 40mm x 4mm copper earth bar with off 12mm galvanized steel bolts at 40mm center distances. An internal earth bar of cross section dimension not less than 40mm x 4mm shall be provided. All accessible metal parts containing or supporting high voltage conductors and all parts which are designed to function at earth potential shall be joined or bonded so that they are effectively connected to the main earth bar. Hinged doors shall be bonded to the main cubicle by flexible copper braid of at least 40sq. mm cross section. Items of auxiliary equipment such as switched, relays, motors and heaters shall, unless connected by effective continuous metal panels, be bonded to the main cubicle earth by means of a stranded conductor of at least 4.5sq.mm. Adequate insulating barriers shall be provided to prevent internal flashover,

The main cubical earth bar shall be connected to the station earth grid bar with 2 off 12mm galvanized steel bolts at 40mm centers, via holes drilled into one of the base channels.

The resistors shall be complete with lifting and jacking lugs, access holes, earth terminals, connections and bushings suitable for the system phase to neural voltage.

The specified resistance is to be that at the design ambient temperature and it shall be capable of passing the specified current for 10s with a maximum temperature rise as specified.

A rating plate shall be affixed on the NER enclosure with the following information:

- Name of the NER manufacturer
- Place and year of manufacture
- Standards to which the NER complies to
- Manufacturer's serial number
- Resistance value at 20deg C and tolerance
- Enclosure IP rating
- Rated voltage

The rating plate shall be stainless steel to grade 316, and shall be securely fitted at eye level.

EFL also requires single phase motorized isolators to be installed with the neutral earthing resistors. The bidder shall provide recommendations if single phase motorized isolators can be provided with the neutral earthing resistor in the quantities given in section 1.3.3.

Preference will be given to a package solution of neutral earthing resistor and motorized isolators.

1.3.3 Motorized Isolators

EFL also requires two (2) single phase motorized isolators to be installed with the neutral earthing resistors at each site.

The isolators shall be suitable for continuous operation out doors in tropical areas and shall be designed and manufactured in accordance with the standards under section 5.1. The breaking medium shall preferably be air. The isolators shall be a single pole type. Each isolators shall be capable of carrying 630Amps continuously and have a short time rating of 31.5kA for 3 seconds.

Each isolator switch shall be equipped with local manual operating device. It shall be possible to pad lock the operating handle both in the open and close position of the switch.

The operating mechanism of the isolator switch shall be constructed of corrosion resistant metals and shall include no ferrous parts other than stainless steel. All current carrying parts shall be of a high electrical conductivity, corrosion resistant metal. All nuts, bolts and washers other than those associated with then mounting bracket shall be stainless steel in accordance with AS 2837 or equivalent IEC or BS standard.

The isolator shall be clearly marked with the year of manufacture and in accordance with AS 62271.102, or equivalent IEC or BS standard.

The isolators shall have provision to be operated remotely (either from inside the substation or from National Control Centre).

The isolators shall be provided with sufficient auxiliary contacts for EFL to wire to tis equipment to provide local and remote indication on open and close status of the isolators.

Indication and control circuits for the isolators shall be operated on nominal voltage stated above.

Isolators must come complete with all required steel structures, housing and any other fitting that will enable complete installation on site.

1.3.4 Control Wiring

All internal wiring in the NER enclosure shall be carried out with 600V/1000V grade, single core, stranded copper conductor wired with PVC insulation and shall be fire retardant. In selecting cable and wire size, due regard shall be paid to the appropriate de-rating factors in relation to the climatic conditions on site.

All cables and wires shall continuously carry their rated currents under the worst temperature conditions, and shall withstand maximum fault currents without damage or deterioration. The minimum cross sections of the conductors are to be:

- a. 2.5mm^2 for current transformers and voltage transformers circuits and all power consumers such as motors, heaters, lighting, etc. up to 10A.
- b. 2.5mm^2 for all instrumentation and control wiring, however, the maximum permissible voltage drop is 5% for the furthest point at load
- c. 4mm^2 for heavy power consumers up to 20A

All control wiring shall be securely supported, neatly arranged, readily accessible and connected to equipment terminals and terminal blocks. The wiring shall be neatly run in PVC rigid base ducting. Both ends of every wire core and all secondary panel wiring (at the screwed terminal side for external connection as well as at the screwed device sides in the panel) shall be fitted with numbered slip-on ferrules of moisture and oil-resisting insulation material having a glossy finish, and with their identification numbers clearly engraved, each being the same as for the relevant terminal. Ferrules, of white color with black letters (printed on wire markers and placed inside plastic sleeves), shall be fitted in such a way that they cannot become detached when the wire is removed from the terminal (i.e. end crimps shall be provided).

The individual wires shall be pulled tight at the termination as a small amount of slack wire shall be provided so that the termination can be relocated to an adjacent terminal, or so that the lug can be replaced if required. The slack wire shall be accommodated neatly within the wiring duct.

Inline joints in any control wiring are not permitted under any circumstances. All terminations shall be crimped with a tool designed specifically for this purpose. All crimped terminations shall comply with the tensile strength and contact resistance type test requirements of AS/NZS 4437, or IEC or BS standard equivalent.

The crimp jaw shall be suitable for both single and double grip lugs. The tool shall ensure that the correct crimping pressure has been achieved before the tool can be released from the crimp.

1.3.5 Pad construction

Depending on the product offered, the Contractor is required to construct the required concrete pad for installation of the NER and isolators. The pad must be a minimum of 300mm above ground level. The location of the pads will be in the vicinity of the current NER. A new pad would be built at a new location, NER with isolators installed and transformer neutral cable cut over from the current NER.

The pad must be approved by a certified civil engineer of the contractor. Evidence of civil engineer local registration in Fiji, and evidence of Fiji Institute of Engineers membership, must be provided with the bid.

Design of the pads are to be submitted with the tender bid. Construction to be as such to support the weight of the installation.

1.3.6 Technical Requirements

There are two power transformers at each site, Suva, Vatuwaqa and Sawani Substation. Thus, the scope requires supply and installation of one NER that will connect with both power transformers at one site via isolators.

Substation	Number of NER required	Number of power transformers	Voltage of transformer	Isolators	Operation
Suva	1	2 x 20/25MVA	11/33kV	Yes, one for each transformer	Manual and motorized
Vatuwaqa	1	2 x 15/18 MVA	11/33kV	Yes, one for each transformer	Manual and motorized
Sawani	1	2 x 15/18 MVA	11/33kV	Yes, one for each transformer	Manual and motorized

	Suva	Vatuwaqa	Sawani
Supply Voltage	15kV	15kV	15kV
Phase Voltage	7kV	7kV	7kV
Current rating	500A	300A	300A
Resistance at 20°C	39 ohms	64 ohms	64 ohms
Tolerance	±10%	±10%	±10%

Maximum temperature rise	760°C	760°C	760°C
Rating (Time)	10s	10s	10s
Power frequency withstand voltage test to earth	70kV	70kV	70kV
Rated BIL	35kV	35kV	35kV
Method of cooling	Natural	Natural	Natural
Degree of protection	IP 54	IP 54	IP 54
Number of motorized off load isolators	2 (two)	2 (two)	2 (two)
Nominal control voltage	110 Volts DC	110 Volts DC	110 Volts DC
Nominal low voltage supply voltage	240 Volts AC	240 Volts AC	240 Volts AC

1.4 Installation on site/ Civil works

Gantt chart - The contractor must provide a detailed Gantt chart showing the schedule of works.

Control and indication wiring - All control and indication cable works from the NER and isolator to the EFL RTU panel is to be undertaken by the contractor. All required material including conduits, trench works and cables etc. are to be supplied and carried out by the contractor.

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

Crush metal - The contractor must reinstate all crush metal that are to be removed for construction works or have been contaminated with soil and other material due to construction activity. 150mm of depth crushed metal (40mm) to be applied on weed control mats. All materials to be supplied by contractor and to be approved by EFL Engineer before application. Attached drawings shows area of crush metal works required.

Earthing - Steelworks and supporting structures shall be bonded and earthed to the substation earthing system.

Neutral cable - The contractor must remove the existing transformer neutral cable and run new cable (Supplied by EFL, contractor to pick up cable from EFL Kinoya stores). Cable removed to be transported and scrapped at EFL Kinoya stores. Neutral cable termination from transformer to the isolator will be carried out by EFL. All other cable termination is the responsibility of the contractor. Cable conduits for neutral cable from transformer to NER isolator will be provided by EFL. All required trenching works is the contractor's responsibility. All trench must be reinstate after completion of works.

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

Electricity, water, gas and other services - Electricity and water will be provided on site by EFL. Any other services required for the completion of this works The Contractor shall at his expense, provide any other services necessary to execute and complete the Works on site.

Work hours - The Contractor is not to execute any work without direct supervision from the EFL representative. The times for work are 8am to 4.30pm Monday to Thursday, and 8am to 4pm on Fridays.

1.5 Inspection and testing

The Contractor shall be responsible for carrying out test to demonstrate the equipment and its components supplied, complies with the technical requirements in this specification.

The type, special and routine test shall be carried out on the equipment and its components in accordance with the specification, prior to approval being granted for use by EFL.

All type test shall be carried out by a testing authority holding accreditation.

All type test reports shall be accompanied by copies of the accreditation certificate(s) issued to the testing laboratory. The accreditation certificate(s) shall be valid for the relevant test(s) and for the duration of the test(s).

1.5.1 Routine tests

The following routine test shall be carried out for each NER

- i. Measurement of resistance at 20°C
- ii. Insulation test
- iii. Applied high potential test at 70kV for 1 minute

1.5.2 Witnessing of tests

The Contractor shall make allowance for one EFL Engineer to witness the routine test which shall be requested to be preformed. All costs for the witnessing of such type test shall be borne by the supplier.

Where applicable, the Contractor shall give EFL not less then four (4) weeks notice when each and every type test will be carried out.

1.6 Reliability

1.6.1 Service life

Suppliers are required to comment on the reliability of the equipment and the performance of the materials offered for a service life of 45 years under the specified system and environmental conditions.

1.6.2 Evidence in support of Reliability

Such comments will include evidence in support of the reliability and performance claimed including information on Failure Mode and Effect Analysis.

1.7 Environmental Considerations

Suppliers are required to comment on the environmental soundness of the design and material used in the manufacture of the items offered. In particular, comments should address such issues as recyclability and disposal at end of service life.

1.8 Packaging and marking

The packaging of the item by the Contractor must ensure that they are capable of being delivered undamaged giving due consideration to the quantity, distance of transportation and the preferred method of handling at each location.

The Contractor shall take all necessary precautions to ensure safe handling of the NER and associated accessories.

1.9 Quality Requirements

Suppliers are required to submit evidence that the design, manufacture and testing of the NER are in accordance within a quality framework.

1.10 Product Warranty period

The Contractor is required to provide the warranty period as part of the proposal. A minimum warranty period of twenty- four months from time of commissioning on site shall be provided.

1.11 Site Conditions

The site is located at the EFL 33kV/11 Suva, Vatuwaqa and Sawani Substations, Fiji. The Contractor shall be deemed to have visited the site of the works to satisfy him/her as to the accuracy of all information supplied to the Tenderers and to the feasibility of construction of the works.

The proposed location is in a Substation equipped with therefore all necessary Safety Gear must be worn by the Contractor's Staff at all times.

The Contractor may only enter the site upon provision of access by an Authorized EFL representative.

1.12 Information to be supplied by the bidder

To enable EFL to fully evaluate NER offered, the bidder will submit the following information with the tender :

- List showing similar equipment supplied to or on order for the other utilities
- Catalogues describing the equipment and including the model number
- Constructional feature material used for components and relevant technical literature
- Installation, commissioning, operation and maintenance instruction
- Overall dimensional drawings
- Complete Guaranteed Technical Particulars (appendix A)
- Performance certification with regard to manufacture, supply and utilization of the earthing resistor of similar type
- Detailed foundation drawing
- Following type test certificate

- Resistance at 20°C
- Insulation test
- Duty test
- Evidence of quality management systems

Suppliers may be asked to provide additional information during tender assessment period or following award of contract.

Section 5 Form of Proposals and Appendices

Form of Tender

To: Mr. Tuvitu Delairewa,
General Manager Commercial,
Energy Fiji Limited
2 Marlow St, Suva, Fiji

Contract No: _____

Gentlemen:

We have examined the Conditions of Contract, Employer's Requirements, Schedules, Addenda Nos _____ and the matters set out in the Appendix hereto. We have understood and checked these documents and have not found any errors in them. We accordingly offer to design, execute and complete the said Works and remedy any defects, fit for purpose in conformity with these documents and the enclosed Proposal, for the fixed lump sum of (in currencies, of payment) _____ or other such sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules herewith and are made part of this bid.

We confirm our agreement with the appointment of *(name proposed in Bid Data Sheet or during the clarification meeting of the First Stage bid)* as the Adjudicator.

We agree to abide by this Bid until _____ and it shall remain binding upon us and maybe accepted at any time before that date. We acknowledge that the Appendix forms part of our Bid.

If our bid is accepted, we will provide the specified performance security, commence the Works as soon as reasonably possible after receiving the Employer's Representative's notice to commence, and complete the Works in accordance with the above-named documents within the time stated in the Appendix to Technical Proposal.

Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and Address of Agent	Amount and Currency	Purpose of Commission or Gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none").

We are, Gentlemen
Yours faithfully

Signature _____ in the capacity of _____ duly authorized to sign bids for and on behalf of _____

Address

Date

Appendix A: Specifications Requirement

	Item	Units	Required	Tendered		
				Suva	Vatuwaqa	Sawani
1	Name of Manufacture					
2	Manufacture's address					
3	Country of Origin					
4	Type/Model No.					
5	Current Rating	Amps				
6	Resistance at 20°C	Ohms				
7	Resistance after carrying the rated current for rated time	Ohms				
8	Temperature raise after carrying rated current for rated time	°C				
9	Maximum permissible temperature of:					
	Resistor	°C				
	Insulator	°C				
	Enclosure	°C				
10	Dimensions:					
	Length	mm				
	Width	mm				
	Height (including bushing and support structure)	mm				
11	Material of					
	Resistor					
	Support insulator					
	Enclosure					
12	Type of insulator					
13	Rated voltage	kV				
14	Power frequency withstand	kV				

	voltage					
15	Minimum dry flash over voltage	kV				
16	Minimum wet flash over voltage	kV				
17	Impulse withstand voltage against casting	kV Peak				
18	Impulse withstand voltage against grounding	kV Peak				
19	Gross Weight	Kg				
20	Isolator motor voltage rating	V				

Section 6 Sample Forms

Form of Contract Agreement

This Agreement made this ____ day of _____ 20 ____ between _____ of Energy Fiji Limited (hereinafter called "the Employer") of the one part and _____ of _____ (hereinafter called "the Contractor") of the other part

Whereas the Employer desires that the Works known as Supply and Installation of Neutral Earthing Resistors should be designed and executed by the Contractor, and has accepted a Bid by the Contractor for the design, execution and completion of such Works and the remedying of any defects therein.

The Employer and the Contractor agree as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - (a) The Letter of Acceptance dated _____
 - (b) The Employer's Requirements
 - (c) The Addenda nos. _____
 - (d) The Bid dated _____
 - (e) The Conditions of Contract (Parts I and II)
 - (f) The completed Schedules, and
 - (g) The Contractor's Proposal.
- 3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to design, execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor, in consideration of the design, execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 5. This Agreement shall come into effect on signing by both parties.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws.

Authorized signature of Contractor
SEAL
(if any)

Authorized signature of Contractor
SEAL
(if any)

in the presence of:

in the presence of:

Name _____
Signature _____
Address _____

Name _____
Signature _____
Address _____

Form of Performance Security (Bank Guarantee)

To: Energy Fiji Limited
2 Marlow st, Suva
Fiji

Tender Name: Supply and Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa and Sawani Substations.

Tender No: _____

WHEREAS _____ [name and address of Contractor]
(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____
dated _____ to execute _____ [name of Contract and brief
description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of
Guarantee] _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the date of issue of the Performance Certificate.

Signature and Seal of the Guarantor _____
Name of Bank _____
Address _____
Date _____

Form of Advance Payment Security (Bank Guarantee)

To: _____ [name of Employer]
_____ [address of Employer]
_____ [name of Contract]

Tender Name: Supply and Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa and Sawani Substations.

Tender No: _____

Gentlemen:

In accordance with the provisions of the Conditions of Contract, Sub-Clause 13.2 ("Advance Payment") of the above-mentioned Contract, _____ [name and Address of Contractor] (hereinafter called "the Contractor") shall deposit with _____ [name of Employer] a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of _____ [amount of Guarantee] _____ [in words].

We, the _____ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on its first demand without whatsoever right of objection on our part and without its first claim to the Contractor, in the amount not exceeding _____ [amount of Guarantee] _____ [in words].

We further agree that no change or addition to or other modification of the terms of the Contract or of Works to be performed thereunder or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly, _____
Signature and Seal: _____
Name of Bank/Financial Institution: _____
Address: _____
Date: _____

Section 7 Schedules - Part I

Schedule of Prices

1 NOTES ON SCHEDULES

The Schedules are intended to provide the Employer with essential supplementary information in an organized format. Examples of more commonly used Schedules are given herein. Others may be devised and added in accordance with the requirements of the Instructions to Bidders. All the Schedules are essential for bid evaluation and some in contract execution; they should all be incorporated in the Contract, and appropriate changes introduced with the approval of the Employer or its representative.

The schedules are to be completed and submitted as part of the Tender submission in accordance with the Instructions to Bidders Clause 13, Documents Comprising the Bid.

2 SCHEDULE OF PRICES & CONDITIONS OF PAYMENT

2.1 CONTRACT PRICE

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

- i. Part A: Supply and Install New Neutral Earthing Resistor

2.2 BASIS OF SCHEDULES

Descriptions of various items contained in the Schedule of Prices are intended to be a complete definition of the scope of the Contract Works, for which reference shall be made to the Specification, Drawings, Basis of Payments and other Contract Documents. The items descriptions on the Schedule of Prices shall be used only for the purpose of calculating progress payments and for valuing variations.

2.3 BASIS OF PAYMENTS

The rate or cost of the items shall represent the total cost of designing (where appropriate), checking, approving, purchasing, constructing, installing, commissioning, training the Employer's staff, testing and providing as-built drawings and O&M manuals for the works unless separate items have been included for some of these activities.

2.4 PAYMENTS TERMS

All payments shall be due and payable by the Employer in accordance with the payments terms detailed below. The payments shall be made on completion of milestones as identified and agreed by both the Employer's Representative and the Contractor.

	Particulars	Milestone	Payment (%)
SUPPLY AND INSTALL NEW NER			
1	Advance payment	As per clause 13.2 of Section 3 - Conditions of Particular Application	NIL
2	Design Approval	Upon design review and sign-off acceptance of the specifications	30%
2	Delivery of Plant	Upon FAT and shipment to Fiji with Bill of Lading	40%
3	Installation and commissioning of new NERs	Upon completion of commissioning, rectification of defects and issuing of performance certificate	20%
4	Retention	12 months after issuing of performance certificate	10%
TOTAL			100%

Note: The retention amount will be deducted from the total value of each payment made (Each invoice has to include the 10% retention deduction).

Offshore payment for **all services provided on-shore** (such as installation and commissioning) by the contractor is liable for taxation under the laws of Fiji. If the contractor is not a registered entity in Fiji, then a **withholding tax of 15%** will be levied by the Government of Fiji on all work carried out by the contractor related to installation and commissioning in Fiji. This amount will be deducted from the outward payments being made to the contractor. **The contractor shall therefore specify in the price schedules whether the bid price is inclusive of the 15% withholding tax.** Note that this will not be levied on the design, manufacture or supply of any plant or equipment.

3 SCHEDULES OF RATES & PRICES

3.1 NOTES ON SCHEDULES OF RATES AND PRICES

1. The Schedules are divided into seven separate sections as follows:
 - 3.2 Plant and Equipment Including Mandatory Spare Parts
 - 3.3 Installation and Other Services
 - 3.4 Grand Summary
 - 3.5 Alternative Offer
 - 3.6 Bidders Tools & Equipment
 - 3.7 Recommended Tools and Spare Parts
 - 3.8 Rates for Variation
2. The Schedules do not generally give a full description of the plant and equipment to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other section of the bidding documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rate and prices shall be deemed to include for the full scope as aforesaid including overheads and profit.
3. Bid prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Bidders in the bidding documents. For each item, bidder shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in the Employer's Requirements, Drawings or elsewhere in the bidding documents.
4. Items left blank will be deemed to have been included in other items. The TOTAL for each Schedule and TOTAL of the Grand Summary shall be deemed to be the total price for executing the facilities and sections thereof in complete accordance with the Contract.
5. These schedules are intended primarily to provide information for bid evaluation but not intended to be used for the evaluation of work done for the purpose of interim payment. They may however, be used as a reference for the adjustment of the Schedule of Payment should the need arise.
6. These schedules can also be used as a basis to value variations of work done under the Proposal Sum.

3.2 PLANT AND EQUIPMENT INCLUDING MANDATORY SPARE PARTS

ITEM NO.	DESCRIPTION	ESTIMATE		DDP FIJI F/C		DDP FIJI FJD		LOCAL TRANSPORT & ERECTION ON SITE FJD		TOTAL AMOUNT (Excluding Taxes & Duties)	
		Qty	Unit	Unit Rate	Amount	Unit Rate	Amount	Unit Rate	Amount	F/C	FJD
				1		2		3		4=1	5=2+3
A	NEW NER										
A.1	Supply of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa and Sawani Substations	3	Nos.								
A.3	Witness testing by EFL staff (1) at the Factory for Factory Acceptance Witness testing										
A.4	Mandatory Spares and other accessories	3	Set								
TOTAL FOR PART A											

3.3 INSTALLATION AND OTHER SERVICES

ITEM NO.	DESCRIPTION	ESTIMATE		F/C		FJD		TOTAL AMOUNT (Including VAT)	
		Qty	Unit	Unit	Total	Unit	Total	F/C	FJD
				6		7		8=6	9=7
A	NEW NER								
A.1	Construction of Civil works	3	Nos						
A.2	Installation of Neutral Earthing Resistors Complete with Motorised Isolators, Enclosure and Pad at Suva, Vatuwaqa and Sawani Substations	3	Nos						
A.3	Site Testing and commissioning of the new NER	3	Nos.						
TOTAL FOR PART A									

3.4 GRAND SUMMARY

ITEM	DESCRIPTION	TOTAL PRICE	
		F/C	FJD
3.2	<i>Plant and Equipment Including Mandatory Spare Parts</i>		
3.3	<i>Installation and Other Services</i>		
GRAND TOTAL (3.2 + 3.3)			

3.5 BIDDERS TOOLS & TEST EQUIPMENT

During the pre-commissioning and commissioning tests, specialised tools and equipment will be required to carry out the testing mentioned in Section 4 Technical Requirements section 6.3.3 of this tender. The bidders shall provide a list of such tools and equipment that they will use and the associated cost including cost of freight. These are the tools and equipment which will be used for commissioning the neutral earthing resistor.

Item No.	Description	Model No.	Manufacturer	Cost

3.6 RECOMMENDED TOOLS & SPARE PARTS

As per clause 1.11 of the technical specifications, the bidder is required to provide a list of spare parts as recommended by the Manufacturer. These shall be divided into two categories i.e. Mandatory and Optional. Thus the bidders are required to provide two separate tables for the two categories.

Item	Description	Qty	Unit Price		Total Price	
			F/C	FJD	F/C	FJD

3.7 RATES FOR VARIATION

The Contractor shall aim to carry out the project without any variations. However, if unforeseen circumstances and event warrant any variation, the Contractor shall only proceed with a written approval from the Employer’s Representative. The agreed price variation shall be documented.

The rates stated in this schedule shall be applicable to variations ordered by the Employer’s Representative and not covered by the Schedule of Prices. These rates shall be deemed to include the cost of construction facilities, professional and technical services, royalties, taxes, transport of equipment, labour and other changes necessary to perform the work. The Contractor shall not be entitled to any allowance above unit rates stated in the schedule by reason of any amount of work being required under such items during the currency of the Contract.

3.7.1 Materials

Materials required for variations or day work shall be paid for on the basis of the net quantities actually used in accordance with the Employer’s Representatives. Payment will be at the cost on site based on evidence of purchased prices after deductions of all trade and bulk discounts, transport, and any other charges applicable to the materials plus the percentage stated below to cover contractor’s profit and overheads. Materials supplied by the Contractor will be at prices to be agreed, due regard being paid to the prices for similar materials if supplied from outside sources.

3.7.2 Labour

Payment of labour shall be in accordance with the table of hourly rates below which shall include Contractor’s profit, overheads, superintendence, insurance, time keeping and all clerical and office work and use of hand operated tools and all incidental chargers whatsoever. The time of technicians or leading hands working with the crews will be paid for at rates stated but the time of the supervisors and foremen shall be covered by the overhead component of the hourly rates.

Item No.	Grade of Officer/Workman	Rate/hour F/C	Rate/hour FJD

% for Cost of Materials

Section 7 Schedules - Part II

Schedule of Supplementary Information

1 TIMES FOR DELIVERY & COMPLETION AND CONTRACT COMPLETION TIMES

1.1 TIMES FOR DELIVERY & COMPLETION

The individual dates are all contractually binding.

The times given include all necessary equipment to enable the respective circuit or item of plant to be completely commissioned and put into commercial operation, well ensure that subsequent shut-downs are unnecessary or at least only of a temporary or short time nature.

The dates assume an order is placed by Week No. 1.

Key to dates be provided as follows.

- D - Target completion dates planned by EFL
- C - Construction (installation and commissioning) date guaranteed by contractor.
- B - Shipping completion dates guaranteed by contractor.
- A - Earliest date by which access is required by the contractor.

Site	A	B	C	D
	Earliest access permitted Week No.	Week No.	Week No.	Week No.
Suva NER				
Vatuwaqa NER				
Sawani NER				

2 DEPARTURES FROM SPECIFICATIONS

(To be completed by the Contractor)

All deviations shall be forwarded in the format given below. Any details that will lead to deductions of final Bid price shall not be inserted.

Section	Clause No.	Proposed Deviations

3 MANUFACTURERS' STATEMENT OF EXPERIENCE

Bidders are to complete this schedule giving details of substation contract of the same type of construction as this contract and which they have completed or which are in the course of completion by them.

Country		
System Voltage kV		
Type of Construction		
Employer		
Consultant		
Contract Award Date		
Contractual Completion Date		
Actual Completion Date		
Contract Value		

4 CONTRACTOR HEALTH & SAFETY PLAN

The bidder shall complete the following sub-sections to provide details in relation to the Health and Safety plans for the project.

4.1 CONTRACT DETAILS

Contractor Name: _____
 Contractor Address: _____
 Contractor Representative: _____
 Contract Description: _____
 Location of Works: _____
 Timing of Works (approximate): Start Date: _____ End Date: _____

4.2 RESPONSIBILITIES

Name	Position Held	Safety Responsibilities	Contact Number (Direct)

4.3 EMERGENCY CONTACT DETAILS

Contact	Name	Position	Contact Number (Direct)
First Contact			
Second Contact			
Third Contact			
Forth Contact			

4.4 SCOPE & TASK DETAILS

<i>List Major Tasks</i>

4.5 RISK ASSESSMENT

Risk assessment is a fundamental tool in management of risk. It Involves the identification of hazards and control measures. Describe how you plan to carry out this process for this particular application contract.

4.6 SAFE WORK PROCEDURES

After completing the risk assessment, you must compile a safe system of work describing how you plan to control the hazards you have identified. Complete the following section outlining how you will ensure that all employees and subcontractors understand the Safe Work Procedures (SWP). Also attach copies of the relevant SWP.

4.7 PERSONAL PROTECTIVE EQUIPMENT

Where risk assessment identifies the need for personal protective equipment (PPE), then PPE must be made available. List down below the PPE you will require for this project.

4.8 ACCESSING SITE/TIMES OF WORK

If work is going to be carried out at EFL premises, then it is important to determine when you will be accessing the Site. You may need to sign a PASS and sign in and out. This will avoid conflicts with other activities which may be continuing on site during contract works. Describe below your site access requirements.

4.9 FENCING & SEPARATION OF WORK

In order to protect our employees as well as general members of the public, the work areas should, so far as is possible, be physically isolated with barriers like bollards, cones, tapes, netting, etc. Describe below how you will fence or separate your work.

4.10 SIGNS AND WARNINGS

Sufficient signs should be erected or placed so that adequate warning is afforded around the worksite. Describe the kinds of notices you will be putting up and places where you will be putting this.

4.11 GENERAL STORAGE & DISPOSAL OF WASTE

Describe below what waste you anticipate producing and how you plan to store and/or dispose off waste. You must take into account the nature of the waste e.g. hazardous/flammable.

4.12 FIRST AID & INJURY MANAGEMENT

A first aid program for contractors is outlined in EFL Safety Manual. Please describe below any additional first aid needs and specific Injury management process for this contract.

4.13 EMERGENCY PROCEDURES

Identify specific emergency procedures or equipment required for the contract.

4.14 INCIDENT REPORTING & INVESTIGATION

Describe how incidents will be reported and investigated during the contract.

4.15 SPECIALISED WORK OR LICENSING

List any special licences required for the contract.

4.16 TRAINING & INDUCTION REQUIREMENTS

Training and inductions for contractors are to be completed in accordance with the EFL Training requirements. List any training required for the contract works in relation to safety, for example safe procedure training and attach training certificates:

4.17 SAFETY MONITORING

List any ongoing inspections, hazards management or incident reporting or investigation processes to be used during the works, if relevant.

Describe below your site access requirements.

4.18 SUBCONTRACTOR MANAGEMENT

Complete the attached Subcontractor List detailing the subcontractors to be used and the details of the subcontractor management:

Sub Contractor Name	Sub Contractor Representative Name	Description of Work	Date of Local Induction

2 Submission to Tender

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 25th 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 addition, 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 25th July, 2018** – Addressed as

Tender – MR 256/2018 – Supply, Construct Pad & Installation of Neutral Earthing Resistors at Suva, Vatuwaqa & Sawani Substations

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 25th 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.