

ENERGY FIJI LIMITED

EFL Headquarters
2 Marlow St
Suva

TENDER NO: MR 156/2020

**SUPPLY OF MULTICORE 110V DC CONTROL CABLES AND AC
CABLES FOR SAWANI SUBSTATION 33KV BUS EXTENSION
AND CUNNINGHAM/VUDA 132KV TRANSFORMER UPGRADE
PROJECT**

INVITATION TO TENDER

The Energy Fiji Limited ("The Employer") invites sealed bids from suitable companies for the supply, packing and transporting (CIF to Suva Depot) of "Multicore 110V DC Control Cables and AC Cables for Sawani Substation 33kV bus extension and new 132kV transformer installation works at Cunningham and Vuda SS".

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

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

The tender submissions close on **Wednesday, 22nd July, 2020 at 1600hrs** (local) Fiji Time.

Further information for this tender may be acquired from:

Mr. Abdul Nasim,
Unit Leader Strategic Procurement,
Inventories and Properties
Supply Chain Office,
2 Marlow Street,
Private Mail Bag, Suva
or email: Abduln@efl.com.fj

Contents

INVITATION TO TENDER.....	2
1 INSTRUCTIONS TO TENDER.....	4
1.1 GENERAL	4
1.2 TYPE OF TENDER.....	4
1.3 COMPLIANCE WITH INSTRUCTIONS	4
1.4 ADDENDUM TO TENDER	4
1.5 COMPLIANCE WITH SPECIFICATION	4
1.6 DELIVERY PERIODS	4
1.7 CURRENCY	4
1.8 SIGNATURE OF TENDERER	5
1.9 INFORMATION FORMING PART OF THE TENDER.....	5
1.10 CONFORMING AND ALTERNATIVE TENDERS	5
1.11 NON CONFORMING TENDERS.....	5
1.12 VALIDITY PERIOD OF TENDERS.....	5
1.13 EXTENSION OF CLOSING TIME FOR TENDERS	5
1.14 MANDATORY LODGEMENT OF TENDER.....	6
1.15 DEADLINE FOR SUBMISSION OF BIDS	6
1.16 ACKNOWLEDGEMENT OF TENDERS.....	7
1.17 TENDER EVALUATION	7
1.18 ADJUSTMENT OF ERRORS	7
1.19 ACCEPTANCE OF TENDERS	7
1.20 LANGUAGE OF TENDER	7
1.21 PAYMENT SCHEDULE.....	7
1.22 CONDITIONS OF CONTRACT	7
1.23 INSURANCE	7
2 SCOPE.....	8
2.1 SUPPLY OF UNARMORED DC CONTROL CABLE	8
2.2 SUPPLY OF UNARMORED AC POWER CABLE (SAWANI AND CUNNINGHAM).....	8
2.2.3 SUPPLY OF UNARMORED AC POWER CABLE (VUDA).....	9
3. SPECIFICATION	10
3.1 CLIMATIC CONDITIONS	10
3.2 DC CABLES	11
3.3 AC CABLES	12
4 FINANCIAL	14
5 QUALITY OF MATERIALS AND WORKMANSHIP.....	16
6 STANDARDS	16
7 PACKING.....	16
8 WARRANTY	16
9 EVALUATION CRITERION	16
10 TENDER SUBMISSION - INSTRUCTION TO BIDDERS.....	18

1 INSTRUCTIONS TO TENDER

1.1 GENERAL

The Energy Fiji Limited (EFL) is a limited liability company vested with the responsibility for the provision of electricity supply in Fiji. EFL is currently implementing its upgrade works for the extension of 33kV outdoor bus at the Sawani Substation and install new 33kV circuit breaker, Disconnector and install new 132kV power transformers at Cunningham and Vuda EFL substations to improve system reliability. The scope for this tender is for the supply of multicore 110V DC control cables and AC cables for Sawani 33kV Cunningham and Vuda 132kV substation.

1.2 TYPE OF TENDER

The Tenderer shall submit a fixed price tender. This requirement shall apply equally to the conforming tender as well as any alternative tender.

1.3 COMPLIANCE WITH INSTRUCTIONS

The Tender shall be submitted in accordance with these Instructions and the letter of invitation to tender. All the necessary forms and schedules need to be completed and submitted with the tender.

1.4 ADDENDUM TO TENDER

Where EFL finds it necessary to make amendments to or clarify the requirements of the tender documents during the period of tendering, an Addendum will be uploaded to the EFL website/tender link.

1.5 COMPLIANCE WITH SPECIFICATION

The tender shall be based on the equipment and work specified and shall be in accordance with the Technical Specification. It should be noted that unless departures from specifications are detailed in Schedule I of the Technical Specification, the tender would be taken as conforming to the Specification in its entirety. Any departures not specifically stated in the departures, but hidden in fine print shall disqualify the tender. The Tenderer shall tender for the whole of the Works included in the Specification.

1.6 DELIVERY PERIODS

The Tenderer shall submit his tender on the basis which will permit the Works to be completed under normal circumstances by the completion dates stated in Schedule 3 of the Technical Specification. Suppliers with delivery of 4 weeks after the signing of the contract and issuance of the PO.

1.7 CURRENCY

The tender shall be in the currency of the Tenderer's home country. All local companies registered in Fiji shall bid in VIP and Duty inclusive. For overseas currencies, bid are to be in DAP to EFL Kinoya Depot and all duties, VAT and customs clearance charges shall be paid by EFL.

1.8 SIGNATURE OF TENDERER

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

1.9 INFORMATION FORMING PART OF THE TENDER

The Tenderer shall supply with each set of the tender copies of the technical, price and information schedules of the Tender Documents duly completed with all missing information and shall also supply requisite drawings. A copy of the Tenderer's covering letter (if any) shall be submitted with each tender and each tender shall be accompanied by a full set of supporting matter which the Tenderer wishes to have considered by EFL as supporting information for his tender. It is a mandatory requirement to submit the following documents as part of the tender proposal:

1. Tender Covering Letter with signature/seal of authorised signatory
2. Price & Payment Schedule
3. List of Experience
4. Confirmation of Insurance Policies

1.10 CONFORMING AND ALTERNATIVE TENDERS

No alternative bids shall be accepted.

1.11 NON CONFORMING TENDERS

A tender which does not comply with the Conditions of Tendering or in which the technical price information schedules requiring information to be inserted by the Tenderer have not been completed in all respects may be considered informal will be rejected for these reasons.

1.12 VALIDITY PERIOD OF TENDERS

Tenders shall remain valid for acceptance within **120 days** from the date of opening of tenders and a Tenderer shall not withdraw or amend his tender prior to the expiration of the Validity Period. In exceptional circumstances prior to expiry of the original tender validity period, EFL may request the Tenderer for an extension in the period of validity. The request and the response thereto shall be in writing. A tenderer agreeing to the request will not be permitted to amend his tender price.

1.13 EXTENSION OF CLOSING TIME FOR TENDERS

The right is reserved to amend the date set for the opening of tenders to any late date. If it is decided to extend the time for submission of tenders all prospective Tenderers to whom tender documents have been issued will be promptly notified.

1.14 MANDATORY LODGEMENT OF TENDER

The tender bids can be submitted via hard copies and a soft copy uploaded on tender link.

Hard copy submissions, the tenderer shall prepare hard copies with one original and one copy of the tender proposal, clearly marking each one as: "ORIGINAL - TENDER PROPOSAL", "COPY NO. 1 – TENDER PROPOSAL", etc. as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.

The original and all copies of the bid shall be typed and signed by a person or persons duly authorized to sign on behalf of the bidder, as the case may be.

All bids shall be typed. Hand written tender bids will be disqualified.

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.

The bidder shall seal the original bids and each copy of the bids in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL" and "COPY".

a) be addressed to the Employer at the following address:

The Secretary Tender Committee
2 Marlow Street,
Suva,
FIJI.
Email: Abduln@efl.com.fj

bear the following identification:

Bid for: Supply of 110V DC Control Cable and AC Cables for Sawani Substation 33kV Bus Extension and Vuda & Cunningham Transformer Upgrade Project.

Bid Tender Number: MR 156 /2020

DO NOT OPEN BEFORE Wednesday, 22nd July, 2020

It is mandatory for the Bidders to include the following at the reverse of the envelope:

Company name
Address

Unmarked envelopes without bidders name and address on the reverse shall be returned to the bidder.

1.15 DEADLINE FOR SUBMISSION OF BIDS

Hard copy of the tender Bids must be received by the Employer at the address specified above no later than 1600 hours (Fiji Time) **Wednesday, 22nd July, 2020**

The Employer may, at its discretion, extend the deadline for submission of bids by issuing an addendum in accordance with Clause 1.12, 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.

1.16 ACKNOWLEDGEMENT OF TENDERS

All tenders received will be acknowledged by email within 7 days after the date set for receipt of tenders.

1.17 TENDER EVALUATION

After a preliminary analysis to ascertain whether or not the tender is in accordance with the requirements of the tender documents, each tender will be considered with particular reference to its eligibility as being a manufacturer, offer testing facilities in its workshop, price, completion date, design capability, evidence of past performance on contracts of a similar nature, supply of reliable quality equipment and all other matters affecting the Tenderers ability to complete the Contract in accordance with EFL's requirements.

1.18 ADJUSTMENT OF ERRORS

EFL reserves the right to adjust arithmetical or other errors in the Tender. Any adjustments made by the Authority to a Tender will be stated to the Tenderer prior to acceptance of the Tender. In the event of discrepancies appearing between words and figures in the Tender, the words shall prevail.

1.19 ACCEPTANCE OF TENDERS

EFL shall not be bound to accept the lowest bid or assign any reason for the rejection of a tender and reserves the right to waive any informality in a tender. No tender shall be deemed to have been accepted unless such acceptance is notified to the Tenderer by notice in writing either by handing such notice to the representative of the successful Tenderer or by sending such notice by e-mail. Such notice shall include any essential identifying details of the tender. The date of acceptance of Tender shall be the date on which the above mentioned notice is given or e-mailed.

1.20 LANGUAGE OF TENDER

All Tenders together with any documents submitted by the Tenderer as part of any Tender shall be typed in the English language. **Hand written tender submissions will be disqualified.**

1.21 PAYMENT SCHEDULE

The contract shall be on a lump sum fixed price basis. 100% of the payment will be made upon receipt of goods by EFL in Fiji.

1.22 CONDITIONS OF CONTRACT

The Conditions of Contract shall be the AS/NZS 4911:2003 – General Conditions of Contract for the Supply of Equipment without Installation.

1.23 INSURANCE

The Contractor is to confirm that they have in effect the insurance policies below:

1. Public and Products Liability Insurance
2. Industrial Special Risk Insurance
3. Insurance for Workmen's Compensation

2 SCOPE

The scope of works for contract is for the Supply, packing and shipping (DAP to EFL Kinoya Deport) including de-vanning of the following:

2.1 Supply of Unarmored DC Control Cable (Sawani)

The contractor shall supply the following quantity of unarmored DC cables with the following sizes.

Cable Description	Cable Size	No. of Cores	Voltage rating	Operational Voltage	Cable length (metres)
Unarmoured DC Cable	4.0 mm ²	2	0.6/1kV	110V DC	500
	2.5 mm ²	2	0.6/1kV	110V DC	500
	2.5 mm ²	4	0.6/1kV	110V DC	500
	2.5 mm ²	12	0.6/1kV	110V DC	500
	2.5 mm ²	20	0.6/1kV	110V DC	500

2.2 Supply of Unarmored AC Power Cable (Sawani and Cunningham)

The contractor shall supply the following quantity of unarmored AC cables with the following sizes. Please note, for “2 + E”, there shall be two cores of copper wire plus a core of earth wire separately. Same for “3 + E”, there shall be three cores of copper wire plus a core of earth wire separately. Similarly for “4 + E”, there shall be four cores of copper wire plus a core of earth wire separately.

Cable Description	Cable Size	No. of Cores	Voltage rating	Operational Voltage	Cable length (metres)
Unarmoured AC Cable	2.5 mm ²	2 + E	450/750V	240/415V	500
	2.5 mm ²	3 + E	450/750V	240/415V	500
	4.0 mm ²	2 + E	450/750V	240/415V	500
	4.0 mm ²	4 + E	450/750V	240/415V	500

2.2.3 Supply of Unarmored AC Power Cable (Vuda)

The contractor shall supply the following quantity of unarmored AC cables with the following sizes. Please note, for “2 + E”, there shall be two cores of copper wire plus a core of earth wire separately. Similarly for “4 + E”, there shall be four cores of copper wire plus a core of earth wire separately.

Cable Description	Cable Size	No. of Cores	Voltage rating	Operational Voltage	Cable length (metres)
Unarmoured AC Cable	4.0 mm ²	2 + E	450/750V	240/415V	2000
	4.0 mm ²	4 + E	450/750V	240/415V	4000

Please note:

The supply of Unarmored AC Power Cable for Vuda to come in 1000 meters in steel drums. Thus, 2 X steel drums of 2 Core + E summing to 2000 meters and 4 X steel drums of 4 Core + E summing to 4000 meters.

2.2.4 List of Documents

Supplier to provide the below list of documents together with the bid submission:

1. ISO certifications of the factory where the conductor is sourced
2. ISO certification of the factory where the insulation is sourced
3. Cable testing report and certificate
4. NATA Certification or equivalent for the testing facility where the conductor is sourced
5. NATA Certification or equivalent for the testing facility where the insulation is sourced
6. NATA certification or equivalent for the testing facility where the control cable is manufactured
- 7.
8. List of standards applicable for cable construction.

3. Specification

3.1 Climatic Conditions

The Service Conditions applicable in Fiji Islands, at the location of substation site are given below:

Height above sea level	Not exceeding 1000m
Atmosphere	Saliferous, corrosive and dusty
Ambient temperature	Peak : 40°C
	24 hour average : 35°C
	Annual average: 30°C
	Minimum: 10°C
Relativity Humidity (Average)	85%
Rainfall	Annual Average: 1900mm
Wind speed	Sustained: 55m/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. Cables will be installed in cable trenches and conduits and will be exposed to weathering conditions as stated above.

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.

3.2 DC Cables

The bidder shall comply with the following specifications of the DC Cables. This is for unarmored cables.

Unarmored DC Cable	Cable Size		4.0 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²
	No. of Cores		2	2	4	12	20
	Construction Characteristics	With Green Yellow Core	Yes	Yes	Yes	Yes	Yes
		Color	Black	Black	Black	Black	Black
		Outer Sheath	PVC	PVC	PVC	PVC	PVC
		Insulation	V-90	V-90	V-90	V-90	V-90
		Number of Earth Cores	1	1	1	1	1

All the DC cables shall comply with AS/NZS 1125 and AS/NZS 5000.1 standard. All the standard applicable to the above items shall be clearly showed in the bidding document.

All DC cables, Unarmored, shall have one core of earth wire with yellow and green color code.

For the above table, bidders shall clearly show if all the required specifications are compiled or not.

For the below table, bidders shall fill in the data for each required specifications for each size of the cables.

Unarmored DC Cable	Cable Size		4.0 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²
	No. of Cores						
	Construction Characteristics	With Green Yellow Core					
		Color					
		Outer Sheath					
		Insulation					
		Number of Earth Cores					

Unarmored DC Cable	Cable Size		4.0 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²
	No. of Cores		2	2	4	12	20
	Dimensional Characteristics	Nominal Overall Diameter					
		Approximate weight					
	Electrical Characteristics	Inductive reactance at 50Hz					
		Max. DC resistance of the conductor at 20 degrees					
		Conductor AC resistance at 50Hz					
		Insulation resistance at 20 degrees					
		Rated Voltage (Um)					

3.3 AC Cables

The bidder shall comply with the following specifications of the AC Cables. This is for unarmored cables.

Unarmored AC Cable	Cable Size		2.5 mm ²	2.5 mm ²	4.0 mm ²	4.0 mm ²
	No. of Cores		2	3	2	4
	Construction Characteristics	Conductor Material	Copper	Copper	Copper	Copper
		With Red/Black core	Yes	Yes	-	-
		With Red, White, Blue, Black	-	-	red, black + earth	red, white, blue, black + earth
		Outer Sheath	PVC	PVC	PVC	PVC
		Type of Conductor	Stranded Copper	Stranded Copper	Stranded Copper	Stranded Copper
		Number of Earth Cores	1	1	1	1

All the AC cables shall comply with AS/NZS 1125 with PVC sheathed to AS/NZS 5000.1 standard. All the standard applicable to the above items shall be clearly showed in the bidding document.

All AC cables, Unarmored, shall have one core of earth wire with yellow and green color code.

For the above table, bidders shall clearly show if all the required specifications are compiled or not.

For the below table, bidders shall fill in the data for each required specifications for each size of the cables.

Unarmored AC Cable	Cable Size		2.5 mm ²	2.5 mm ²	4.0 mm ²	4.0 mm ²
	No. of Cores		2	3	2	4
	Construction Characteristics	Conductor Material				
		With Red/Black core				
		With Red, White, Blue, Black				
		Outer Sheath				
		Type of Conductor				
		Number of Earth Cores				

Unarmored DC Cable	Cable Size		2.5 mm ²	2.5 mm ²	4.0 mm ²	4.0 mm ²
	No. of Cores		2	3	2	4
	Dimensional Characteristics	Nominal insulation thickness				
		Nominal outer sheath thickness				
		Earth conductor cross section				
		Nominal Overall Diameter				
		Approximate weight				
	Electrical Characteristics	Inductive reactance at 50Hz				
		Max. DC resistance of the conductor at 20 degrees				
		Conductor AC resistance at 50Hz				
		Insulation resistance at 20 degrees				
		Rated Voltage (Um)				

4 Financial

The bidders shall fill the details in the below table for the financial information of the required scope of work. Items are to be delivered to EFL Kinoya Depot and Navutu Depot excluding devanning cost.

Cable Description	Locations	Cable Size	Number of Cores	Cable length (metres)	Price (VIP FJD for local company or DAP to Kinoya Depot for overseas company)
Unarmored DC Cable	Sawani Substation	4.0 mm ²	2	500	
		2.5 mm ²	2	500	
		2.5 mm ²	4	500	
		2.5 mm ²	12	500	
		2.5 mm ²	20	500	
Unarmored AC Cable	Sawani Substation	2.5 mm ²	2 + E	500	
		2.5 mm ²	3 + E	500	
	Cunningham Substation	4.0 mm ²	2 + E	500	
		4.0 mm ²	4 + E	500	
	Vuda Substation	4.0 mm ²	2 + E	2000	
		4.0 mm ²	4 + E	4000	
	Total Cable Cost				

Please note:

The supply of Unarmored AC Power Cable for Vuda to come in 1000 meters in steel drums and shall be delivered to Navutu Depot respectively. Thus, 2 X steel drums of 2 Core + E summing to 2000 meters and 4 X steel drums of 4 Core + E summing to 4000 meters. Apart from this, other cables to come in wooden drums.

General Information

1	Name and Address of the Bidder:	
2	Contacts:	
3	Telephones:	
4	E-Mail:	
5	Mobile No:	
6	Name of Chief Executive Office	
7	Sales Tax/Commercial Tax/CST nos.	
8	Service Tax No.	
9	Income Tax No.	
Name of Authorized Person		
Signature of the Bidder		
Company Stamp		
Date		

Please note, all the required tables shall be filled in order for thorough evaluation purpose. Failure to do so may result in disqualification of the bid.

5 QUALITY OF MATERIALS AND WORKMANSHIP

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

6 STANDARDS

IEC, IEEE and AS/NZS Standards are to be adopted in general. Any other national or international standard may be used if such standards are not less exacting than corresponding IEC Standard. In such an instance a copy of the relevant standard should be forwarded. The following standards (or the current revision of it) shall apply to this tender, but not limited to:

AS/NZS 1125:2001	Conductors in insulated electric cables and flexible cords
AS/NZS 5000.1	Polymeric insulated For working voltages up to and including 0.6/1 (1.2) kV
ISO 9001 Certification	Certification of manufacture and that of raw material supplier

This standard must be specified in the submission.

7 PACKING

Cables shall be carefully packed for transport and shipment in such a manner that it is protected from all dust and climatic conditions during loading, transport, unloading and subsequent storage in the open. For unarmoured AC cables with 2000m (2+E) and 4000m (4+E) in length to come in 1000m in steel drums. Apart from this, other cables to come in 500m in wooden drums.

8 WARRANTY

The Contractor shall provide warranty for cables supplied for a Period of twenty four [24] months after delivery of the equipment.

9 EVALUATION CRITERION

The evaluation shall be based on all the data bidders provide in the above given tables and the data given regarding the product itself.

TENDER SUBMISSION CHECK LIST

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

Tender Number _____

Tender Name _____

1. Full Company Name: _____
(Attach copy of Registration Certificate)
2. Director/Owner(s): _____
3. Postal Address: _____
4. Phone Contact: _____
5. Fax Number: _____
6. Email address: _____
7. Office Location: _____
8. TIN Number: _____
(Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only)
9. Company Registration Number: _____
(Attach copy of the Business License)
10. FNPF Employer Registration Number: _____

(For Local Bidders only)
11. Contact Person: _____

I declare that all the above information is
correct.

Name: _____

Position: _____

Sign: _____ Date: _____

10 TENDER SUBMISSION - INSTRUCTION TO BIDDERS

It is mandatory for Bidders to upload a copy of their bid in the TENDER LINK Electronic Tender Box no later than **1600hrs, Wednesday, 22nd July, 2020.**

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 abduln@efl.com.fj

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the EFL Head Office, 2 Marlow Street, Suva, Fiji no later than **1600hrs, Wednesday, 22nd July, 2020.**

Addressed as:

Tender – MR 156/2020 – Supply of Multicore 110V DC Control Cables and AC Cables for Sawani Substation 33kV Bus Extension and Cunningham/Vuda 132kV Transformer Upgrade Project

**The Secretary Tender Committee
Energy Fiji Limited
Head Office
Suva
Fiji**

Hard copies of the Tender bid will 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 **closing time 1600hrs, Wednesday, 22nd July, 2020.**

- 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.**

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

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