



MR 22/2021

**SUPPLY OF ONE 11kV/0.415kV, 100kVA GROUND-
MOUNTED DISTRIBUTION TRANSFORMER FOR
33kV/11kV ZONE SUBSTATION AT WAITOLU,
NAITASIRI**

RETURNABLE SCHEDULES

ENERGY FIJI LIMITED

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SCHEDULE A: LIST OF EXPERIENCE, PERSONNEL & FINANCIAL STATEMENTS

A.1 Previous Experience

The Tenderer is to submit a list of Projects worked under with a similar scope, involving the design and manufacture of transformer, in chronological order of year completed.

Client	Project Scope and Description	Approx. Project Value	Year Completed

Authorized Signatory of Tenderer:

Signature:

Name:

Date:

A.2 Project Personnel

The Tenderer is to submit list of personnel who will work on this project and also provide their resumes in its bid.

Name	Designation	Duration of Employment with Company	Years of Experience

Authorized Signatory of Tenderer:

Signature:

Name:

Date:

A.3 Financial Statements

The Tenderer shall also submit past three years audited financial statements and records showing its financial ability to undertake this project.

SCHEDULE B: PRICE AND PAYMENT SCHEDULE

Currency of Tendered Price:

Component	Unit Price	Quantity	Total Price
Design, Manufacture, Testing and Supply of 1x 100kVA, 11kV/0.415kV Ground-mounted transformer		1	
(Tenderer to add other items as required)			
Total			

The Payment Schedule shall be as per the table below:

Milestone	Percentage	Amount in Dollars
Receipt of Goods by EFL	95%	
Expiry of Warranty period (12 months after receipt of Goods)	5%	

Total Contract Price (in Words):

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Authorized Signatory of Tenderer:

Signature:

Name:

Date:

SCHEDULE C: AS 4911 ANNEX A (TO BE SUBMITTED BY TENDERER)

All Tenderers are required to complete and submit a copy of this form with their bid submissions.

Item		
1	Purchaser (Clause 1)	Energy Fiji Limited (EFL)
1A	Purchaser's Representative (Clause 1A)	To be nominated by EFL at time of contract.
2	Purchaser's Address	2 Marlow Street, Suva
3	Supplier (clause 1)	Supplier to provide
4	Supplier's Address	Supplier to provide
5	Stated purpose for equipment (clause 1 definition of acceptable)	As stated in tender specifications and/or purchase order
6	Period of time for delivery (Clause 1 and Sub-clause 19.1)	Supplier to provide
7	Delivery Place (Clause 1 and Sub-clause 19.1)	EFL's Kinoya Depot, Kinoya, Suva
8	Mode of Delivery (Sub-clause 19.1)	Supplier to provide
9	Governing Law (Clause 1(h))	Laws of Fiji
10	a) Currency (clause 1(g))	Supplier to provide
	b) Place for payments (clause 1 (g))	Supplier to provide
	c) Place of Business of bank (clause 1(d))	Supplier to provide
11	Limits of Quantities to be supplied and delivered (clause 2.2)	As stated in tender specifications and/or purchase order
12	Suppliers security	Not applicable
13	Purchaser's security	Not applicable
14	Purchaser supplied documents (sub-clause 6.2)	Tender specifications and addenda (where issued).
15	Supplier Supplied documents (sub-clause 6.3)	Supplier to provide
16	Time for Purchaser's direction about documents (sub-clause 6.3(c))	14 calendar days
17	Sub-contract work requiring approval (sub-clause 7.2)	All work.
18	Legislative Requirements, those excepted (sub-clause 10.1)	Not applicable
19	Reference date (clause 1, sub-clause 10.2(b))	Deadline for Submission of Bids, as defined in tender specifications

20	Time by which insurance cover for the Equipment is to be effected (sub-clause 13.1)	Prior to tender award.
21	Public and product liability insurance (sub-clause 13.2)	Supplier to provide
22	Qualifying cause of delay, causes for which EOTs will not be granted (page 3, subparagraph (b) (iii) of Clause 1 and sub-clause 17.2)	None.
23	Liquidated damages, rate (subclause 17.5)	0.5% per day upto 10% of the purchase order value
24	Delay Damages	As assessed by EFL
25	Date for completion of acceptance testing (subclause 18.1 and 21.1)	As stated in tender specification
26	Party responsible for unloading the <i>Equipment</i> (subclause 19.1)	Supplier
27	When risk in the <i>Equipment</i> passes (subclause 20.1)	At time of acceptance by Purchaser.
28	Time at which ownership of the <i>Equipment</i> passes to the Purchaser (subclause 20.2)	At time of acceptance by Purchaser.
29	Period for <i>Purchaser's</i> notice that <i>Equipment</i> are rejected (subclause 21.1)	14 calendar days
30	Period for <i>Purchaser's</i> notice accepting or rejecting <i>Supplier's</i> proposal (subclause 21.4)	14 calendar days
31	Defects liability period (clause 22)	12 months
32	Claim for Payment (subclause 24.1)	Within 5 days of delivery
33	Period for Payment (subclause 24.1)	30 calendar days from time of acceptance by Purchaser
34	Equipment for which prepayment may be claimed (subclause 24.2)	Nil.
35	Interest rate on overdue payments (subclause 24.5)	Nil.
36	Arbitration (subclause 28.3)	
	a) Person to nominate an arbitrator	President of Fiji Institute of Engineers
	b) Rules for arbitration	Laws of Fiji
37	The Supplier's liability is limited as follows (clause 29)	The contract sum as adjusted pursuant to the Contract
38	The Purchaser's liability is limited as follows (clause 29)	The contract sum as adjusted pursuant to the Contract

Authorized Signatory of Tenderer:

Signature:

Name:

Date:

SCHEDULE D: GUARANTEED PARTICULARS

Tenderers shall complete and submit technical particulars below.

Technical Parameter	Units	Required	Offered
Rated Power	kVA	100	
Number of Phases	3	3	
Country of Manufacture of complete transformer			
Standard to which it is manufactured		Sect. 5 & 7 of Specs	
Rated Voltage HV Windings: LV Windings:	V V	Sect. 5, 6 & 7 of Specs	
Impedance Voltage at rated current on principal tapping	%	<4%	
No Load Loss	kW	<0.2kW	
Load Loss @ 75 DegC	kW	<0.8kW	
Category of Insulation		Uniform	
Power Frequency Insulation Level (HV/LV)	kV - rms	28/15	
Impulse Withstand Voltage (1.2/50 micro-sec)	kVp	95	
System Prospective Fault Level			
HV		25kA/3sec	
LV		15kA/2sec	
Maximum Flux Density (for all tap positions, at Um)		1.9T	
Winding Conductor Type			
High Voltage:			
Low Voltage:			
Magnetizing Current (% of full load)	%	<0.05%	
Sound Power Level dB (A)	dB	<56dB	
Tan Delta Measurement		<0.005	
Pressure Test			
Volume of Insulation Oil	Litres		
Does insulating oil comply with AS 1767/IEC 60296 and non-corrosive?	Yes or No		
Brand of oil used			
Method of Filling			
PCB in oil detection limit	Ppm		
Oil Preservation System – Type			
Maximum Total Mass	Kg		
Offload tap Changer	Required		
Manufacturer			
Type/designation			

Tappings			
Maximum Dimensions: Width (including Base) Length Height (including base) maximum, interchangeability requirements have changes-	mm mm mm		
Guard provided over transformer radiators			
All bolts (Fasteners, Studs, etc.) nuts and washers 316/304 grade stainless steel?			
Tamper proof bolts used for all unenclosed components accessibility to the public?			
Serviceable life expectancy	Years	>35yrs	
Inspection free interval	Years	>5yrs	
Maintenance free interval	Years	>5yrs	
Minimum insulation resistance at 20 °C (1 kV test after 1 minute) for HV Winding: LV Winding:	MΩ		
Continuous permissible overvoltage at any tap	%	110% Ur	
Continuous Max. Temp Rise			
Top oil by Thermometer		60deg C	
Windings (by resistance)		65deg C	
Windings hot spot			
Localised tank, core, frames & fittings			
Power efficiency at 50% load	%		
Clearance in air (minimum) LV Phase – Phase LV Phase – to – earth (and Neutrals)	mm mm		
HV Phase – phase HV Phase to earth (and neutral)	mm mm		
Material Thickness			
Tank sides/floor	mm		
Lid	mm		
Fins	mm		
Maximum deflection of side walls	mm		
Terminals and Bushings			
(a) HV Winding			
Bushing type			
Manufacturer			
Bushing rating (kV/Amps)			
Pollution performance		31mm/kV	
Bushing terminal type detail/drawing			
(a) LV Winding & Neutral			
Bushing type			

Manufacturer			
Bushing rating (kV/Amps)			
Pollution performance			
Bushing terminal type detail/drawing			
LV Fuse Link Type			
LV Fuse Link Manufacturer			
LV Fuse Link Rating			
Positive sequence impedance as vector coordinates: (Rectangular form: $Z(\Omega)=R(\Omega)+jX(\Omega)$)			
Zero sequence impedance as vector coordinates: (Rectangular form: $Z(\Omega)=R(\Omega)+jX(\Omega)$)			
Sample Routine Test Reports Provided and complying with AS2374 or AS60076:			
Type of Corrosion Protection / Protective Coating Layer Details?			
Thickness of Layer of Protective Coating			

SCHEDULE E: PROGRAMME OF WORK

The Tenderer is required to state the commencement and completion dates for different components of the project schedule given below. The Tenderer is required to also submit a Gantt chart showing the timelines in weeks for supply of the transformer. The expected date for issue of a purchase order is 1st April 2021.

Component or Work	Commencement Date	Completion Date
1. Receipt of Official Purchase Order		
2. Submit Design Drawings and Design Report		
3. Manufacture of Transformer		
4. Factory Testing of Transformer		
5. Dispatch from Factory and Shipping to designated delivery point		
Total Duration of Project in Weeks (from time Purchase Order is issued)		

Authorized Signatory of Tenderer:

Signature:

Name:

Date:

SCHEDULE F: EVALUATION CRITERIA

Tender Evaluation Criteria	
Category	Criteria
Bid Responsiveness	General responsiveness of bid, compliance to submission requirements and documentation
Health, Safety & Environment	Assessment of Tenderer's compliance to health, safety and environmental requirements detailed within the technical specification. Past performance of Tenderers. Manufacturer holds third party accreditation to ISO 14001, ISO 45001
Quality Assurance	Tenderer holds third party Quality Assurance accreditation to ISO/AS/NZS 9001:2015. Tenderer has Quality Management systems in place that are acceptable to Energy Fiji Limited.
Technical Compliance	Does the Tender meet Energy Fiji Limited's minimum technical requirements as outlined in the Technical Specification? <ul style="list-style-type: none"> • Equipment and all components • Performance of equipment and all components • Sustainability and ease of operation • Reliability data • Past experience • Ability to deliver on time / delivery timeframe
Commercial Compliance	Tenderer holds the required current insurance provisions and has provided evidence through valid insurance certificates of currencies. Has the Tenderer submitted Departures to the Terms and Conditions? If so is it likely that Energy Fiji Limited will be able to negotiate agreement without undue delay? Assessment of the Tenderers operational risks including conflicts of interest. Tenderer must comply with statutory requirements, such as that enforced by FRCS, FNPF, FNU, etc. and provide evidence of compliance as required in the specifications.
Energy Fiji Limited Procedures	Tenderer must comply with all relevant Energy Fiji Limited safety and environmental procedures. This is indicated by the Tenderer signing the Form of Tender Schedule, acknowledging all applicable procedures. Tenderer must also comply with the requirements of Electricity Act (2017), Electricity Regulations (2019).
Financial Stability	Assessment of Tenderer's current financial stability and ability to remain financially stable.
Price Evaluation	<ul style="list-style-type: none"> • Base tendered prices; • Other value adding options.

SCHEDULE G: DEPARTURE FROM SPECIFICATIONS

The Tenderer shall nominate the Clause or relevant section of the tender specification and describe the departure.

Tender Specification Reference ⁱ	Departure

ⁱ The Tenderer shall refer to the specific clause of the tender specification.