ENERGY FIJI LIMITED

TECHNICAL SPECIFICATION FOR SUPPLY OF STAY RODS & SCREW ANCHOR COMPLETE WITH ACCESSORIES BY PREFERRED SUPPLIER

MR 230/2024

Revision History & Document Control

Rev no.	Notes	Prepared By	Reviewed By	Date of Issue
1	Prepared	Sabitesh Pal		15/12/17
2	Reviewed		Rajiv Singh	24/10/18
3	Reviewed		Mohammed Zainal Alim	04/07/24

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1.0 Introduction

Energy Fiji Limited [EFL] is responsible for generation, transmission and distribution of electricity in Viti Levu, Vanua Levu, Ovalau and Taveuni in Fiji. By January 2023, the EFL had 215,515 customers. This included residential, commercial and institutional customers.

The Energy Fiji Limited (EFL) is requesting proposal for the Preferred Supplier for supply of item listed below for EFL's consumption to carryout repair, maintenance and Construction of Power line Network in Fiji.

The preferred Supplier arrangement will be for a period of three (3) years from the date of signing of the contract. The award of this Tender may be split and awarded to more than one successful bidder.

This document outlines the technical requirements for stay rods and screw anchor complete with accessories for use in EFL's distribution and sub-transmission networks.

The items covered under this specification are tabulated below.

No.	Stock Code	Item Description
1	I05331	11kV Stay Rod C/W Accessories
2	I05332	Screw Anchor
3	I05336	33kV Stay Rod C/W Accessories

This Specification covers the general requirements of design, manufacture, testing, supply and delivery of stay rods and screw anchor complete with accessories for use in distribution and sub-transmission systems.

1 INSTRUCTIONS TO BIDDERS

1.1 Eligible Bidders

This invitation is open to all Bidders who have sound Financial Background, and have previous experience in design, manufacture, testing and supply of such pole-mounted and platform-mounted transformers.

Bidders shall provide such evidence of their continued eligibility satisfactory to EFL as EFL shall reasonably request. Bidders who are not manufacturers of such transformers shall provide evidence of agency.

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

1.2 Eligible Materials, Equipment and Services

The materials, equipment, and services to be supplied under the Contract shall have their origin from reputable companies (as specified by EFL where relevant) and from various countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. Upon request, bidders may be required to provide evidence of the origin of materials, equipment, and services.

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

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

The 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.

1.3 One Bid per Bidder

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

1.4 Cost of Bidding

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

1.5 Site Visits

Bidders can visit existing EFL networks by making arrangements to visit existing EFL installations. Bidders are required to familiarize themselves with the existing EFL installations so the solutions they offer does not require modification to existing poles and support infrastructure.

1.6 Contents of Bidding Documents

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

1.7 Clarification of Bidding Documents

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

Jitendra Reddy
Manager Procurement, Inventory & Supply Chain
2 Marlow Street,
Suva, Fiji
Phone: +679 331 3333 Ext 2320 or
Mobile: +679 999 2400
Email: JReddy@efl.com.fj

EFL will respond to any request for clarification which it receives earlier than 10 days prior to the deadline for submission of bids.

1.8 Amendment of Bidding Document

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

1.9 Language of Bid

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

1.10 Bid Prices

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

Bidders shall give a breakdown of the prices in the manner and detail called for in this bidding document, or any issued addenda.

Bids shall be given on CIF basis. The point of delivery shall be EFL’s Navutu Depot in Lautoka. The term CIF shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, Paris.

EFL has a marine insurance cover for items it is required for purchase for its project and operational works. Bidders are required to comment if the marine insurance component is covered in their bids.

1.11 Bid Currencies

Prices shall be quoted in a single currency only.

1.12 Bid Validity

Bids shall remain valid for a period of **120 days** from the date of Deadline for Submission of Bids specified in Sub-Clause 21.1.

1.13 Format and Signing of Bids

The bidder shall provide one electronic copy of the Technical and Financial proposals on EFL's electronic tender hosting website; https://www.tenderlink.com/efl

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

1.14 Sealing and Marking of Bids

Due to the Covid19 restrictions on movements, bidders are encouraged to bid via Tender link Portal.

1.15 Deadline for Submission of Bids

Bids must be received by EFL at the address specified above no later than **1600 hours (Fiji Time) 31st July 2024**.

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

1.16 Late Bids

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

1.17 Modification and Withdrawal of Bids

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by EFL prior to the deadline for submission of bids. No bid may be modified by the bidder after the deadline for submission of bids.

1.18 Rejection of One or All Bids

EFL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the rejection.

1.19 Process to be Confidential

2.19.1. Information relating to the examination, clarification, evaluation 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.

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

2.19.3. Lowest bid will not necessarily be accepted as successful bid.

1.20 Clarification of Bids

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

1.21 Compliance with Specifications

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

2.0 References

2.1 Applicable Standards

The item shall be designed, manufactured and tested in accordance with the latest edition of the Standards specified below and all amendments issued prior to the date of closing of tenders except where varied by this specification.

AS/NZS 3678	Structural steel - Hot-rolled plates, floorplates and slabs
AS/NZS 3679	Structural steel – Hot-rolled bars and sections
AS/NZS 1214	Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series) (ISO 10684:2004, MOD)
AS 1111.1	ISO metric hexagon bolts and screws - Product grade C Bolts
AS 1832	Iron Castings – Malleable cast iron
AS/NZS 1554	Structural steel welding
AS 4068	Flat pallets for materials handling
AS/NZS 4680	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles, Standards Australia, 2006
AS/NZS/ISO 9001	Quality management systems - Requirements

Should inconsistencies be identified between standards and/or this specification, the tenderer shall immediately refer such inconsistencies to EFL for resolution.

3.0 System Conditions

3.1 Environmental Conditions

The stay rods and screw anchor complete with accessories shall be suitable for installation outdoors and shall be designed to withstand the following service conditions.

3.1.1 Underground

Description		Conditions
Soil	:	Variable soil conditions ranging from high resistivity rock to normal clays to areas of acidic soil (ph 4 or less) with resistivities less than 20Ωm
Temperature	:	25^{o}C Maximum 8^{o}C Minimum

3.1.2 Above Ground

Description		Conditions
Atmosphere Pollution Level	:	Very heavy (IEC 815), corrosive and dusty
Ambient Temperature	:	Peak: 40^{o}C 24 Hour Average: 30^{o}C Annual Average: 22^{o}C Minimum: 10^{o}C
Relative Humidity (Average)	:	85%
Rainfall	:	Annual Average: 2663mm
Isokeraunic (Thunder day) 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.

3.2 System Conditions

Nominal Voltage	240V/ 415V	11kV	33kV
System Highest Voltage	660V	12kV	36kV
System Frequency	50Hz	50Hz	50Hz
Number of Phases	1 or 3	3	3
System Earthing	Effectively Earthed	Effectively Earthed	Effectively Earthed
Impulse Withstand Voltage (peak)	-	95kV	200kV
Power Frequency Withstand Voltage (rms)	15kV	28kV	70kV

4.0 Design and Construction

Equipment offered by the bidders will need to conform to this Specification.

4.1 General

Energy Fiji Limited, in its distribution and sub-transmission network uses stay rods for securing the 10.2m, 11m, 15.5m and 17m power poles. The pole are both concrete and wooden types. Stay rods play a major role in staying of electrification poles. Non-adjustable stay rods are mostly used in conjunction with preformed wire products while adjustable stay rods allows for easy re-tensioning during the course of ongoing maintenance.

4.2 General - Stay Rods

The stay rods shall be manufactured in accordance with AS/NZS 3678 and other listed standards in Clause 2.1. If other international standards are used, full details of the standard and test reports shall be submitted with the bidding document.

4.3 Anchor Bolt

The anchor bolt shall have the following properties:

Requirements	**Anchor Bolt Type**	
	Distribution	**Sub-transmission**
Overall Length	1800mm	3000mm
Diameter	20mm	24mm
Threaded Length from Base	230mm	300mm
Washer	50x50x1.6mm	-
Hexagonal Nut (Conforming to AS 1111.1)	1 nut and 1 lock nut to suit anchor rod	1 nut only

Note:

Both washer and nut supplied shall be suitable for the required threaded rod of 20mm and 24mm respectively. The distribution anchor bolt shall be made into a round eye having an inner diameter of 40mm with a small square section underneath with best quality of welding. The square section shall be designed to fit in place with the anchor plate.

The sub-transmission anchor bolt shall have a hexagonal head. The head shall be designed so that when installed with the anchor plate, the bolt does not pass through. The bidders can provide a welded flat washer as an option.

All items (anchor bolt, nut, and washer) shall be hop-dip galvanized to AS/NZS 4680 and AS/NZS 1214.

Dimensional and other details shall be submitted by the bidders for EFLs approval before start of manufacturing. Please refer to EFL drawing number A3 01 E39 123 and A3 01 E39 124 for further details.

4.4 Anchor Plate

The distribution anchor plate shall be of 300mm x 300mm x 10mm (Length x Width x Height) in dimension and have a **22.5mm x 22.5mm square** centre hole. The square hole shall be made to suit the square section underneath the round eye head of the anchor bolt.

The sub-transmission anchor plate shall be of 200mm x 200mm x 6mm (Length x Width x Height) in dimension and have a **26mm circular** centre hole.

The anchor plates shall be hop-dip galvanized to AS/NZS 4680. Please refer to EFL drawing number A3 01 E39 123 and A3 01 E39 124 for further details.

4.5 Turn Buckle & Eye Bolt for Sub-Transmission

The turn buckle supplied shall be designed as per EFL drawing number A3 01 E39 123. The overall length and width shall be 312.5mm and 65mm respectively. The turn buckle shall have one side threaded as right hand and the other as left hand. The thread shall coincide with the 24mm anchor bolt thread.

The eye bolt supplied shall be designed as per EFL drawing number A3 01 E39 123. The eye bolt shall have a diameter of 24mm, overall length of 385mm, threaded to 250mm from the base and the inner and outer eye diameters shall be 40mm and 82mm respectively. The eye bolt shall be supplied with a pre fitted thimble as outlined in EFL drawing number A3 01 E39 123.

The supplied turn buckle and eye bolt shall be hop-dip galvanized to AS/NZS 4680 and AS/NZS 1214.

Note:

The threaded parts of the turn buckle and eye bolt shall also be hop-dip galvanized. EFL has previously identified that the rusting starts from the threaded parts which also makes the use of turn buckle difficult during maintenance works.

4.6 U Bolt with C Channel for Distribution

The U bolt supplied shall be designed as per EFL drawing number A3 01 E39 124. The U bolt shall have a diameter of 16mm, overall length of 360mm, width of 167mm and bending radius of 37.5mm. The U bolt ends shall have permanently mounted flat washer with round/ carriage bolt head finish. The U bolt shall also contain a thimble as shown in EFL drawing number A3 01 E39 123 to cater for installation of dead end.

The U bolt shall have a C channel inserted as described in EFL drawing number A3 01 E39 124. The C channel shall have an overall length of 135mm, width of 75mm and height of 40mm. There are 3 holes that shall be provided, 2 for inserting the U bolt before it is permanently sealed as described above and the 3rd hole for securing the anchor bolt with a nut and lock nut. This details are further described in EFL drawing number A3 01 E39 124 together with hole dimensions.

The supplied U bolt, C channel and other accessories shall be hop-dip galvanized to AS/NZS 4680 and AS/NZS 1214 also considering the threaded parts.

4.7 Screw Anchor – General

The exposed parts of the screw anchor supplied under this specification will be subject to the service conditions as specified under Clause 3.0.

Below ground parts of the screw anchor will be exposed to a range of soil types, including (but not limited to) the following:

- Marine mud
- Clay - soft and compacted
- Granite and gravel;
- Rock, shale and sandstone;
- Sand and Alluvial sediments

Across these ground conditions, the moisture content and the corrosive properties of the soils vary markedly.

4.7.1 Screw Anchors

The screw supplied shall have an overall length of 1800mm and rod diameter of 20mm. The screw anchor shall contain an eye bolt on the head which shall be of one piece and not welded. The internal and external diameter of the eye bolt shall be 50mm and 90mm respectively. A single helix shall be used as the anchor

for the screw anchor with a width of 87mm and height of 8mm. Please refer to EFL drawing number A3 13 E23 005 for further details.

Both cast steel and fabricated type anchors are acceptable. Anchors shall be provided with a sloped lead point. The profile of the anchor helix shall be designed to assist in penetrating rocky soils and to reduce damage during installation. Anchors shall not contain sharp edges that may cause injury to personnel.

Screw anchors shall be designed and manufactured to withstand the following loads when tested in accordance with the tests specified in clause 6.2 below.

Screw Anchor Type	Minimum Torsional Failing Load (KN-M)
Screw anchor single helix 300mm	8.4

The anchors shall be painted with an anti-corrosive paint.

4.8 Galvanizing

The complete assembly for distribution and sub-transmission shall be hot-dip galvanized as per AS/NZS 4680 and AS/NZS 1214.

4.9 Welding

The minimum strength of welding provided on various components of 16mm and 20 mm diameter stay sets shall be 3100 kg & 4900 kg respectively. Minimum 6mm filet weld or its equivalent weld area should be deposited in all positions of the job i.e. at any point of the weld length. The welding shall be conforming to AS/NZS 1554 or its latest amendment.

The welding used for screw anchors shall conform to AS/NZS 1554.

4.10 Threading

The threads on the Anchor Rods, Eye Bolts and Nuts shall conform to AS 1111.

5.0 Quality Assurance

The manufacture shall submit evidence that the design and manufacture of the stay rods and anchor screw are in accordance with AS/NZS ISO 9001 and shall include the Capability Statement associated with the Quality System Certification.

6.0 Performance and Testing

6.1 General

The type test certificates are to be submitted with the offer with the relevant tests conducted.

The type test shall clearly indicate the name of the manufacturer and the technical parameters of the items tested and should confirm to the test results stated in the technical requirements section of this document.

For galvanized items, the zinc coating shall be uniform, clean, smooth and as free from spangle as possible.

A “Certificate of Compliance” must be submitted with each order Delivery. Batch Test Certificates for Mechanical Properties, Dimensions and Galvanizing of each item should be held by the manufacturer and provided to EFL with the bid submission.

6.2 Stay Rods

The stay rod shall be tested on the following and test certificates submitted with the bid:

1. Breaking/ tensile load test
2. Dimensional test

3. Hardness test
4. Charpy impact test
5. Fracture mechanics test

6.3 Screw Anchor

The screw anchor shall be tested as follows:

Torque Test:

a) The screw anchor shall be mounted on a test rig such that the hub is rigidly locked preventing rotation. Helix is then subjected to a rotating force evenly applied along the leading edge. Commence with an initial torque of 3.0kNm, mark the anchor so that any permanent deformation could be measured. Increase the torque to 6kNm and hold it for 1 minute and then reduce it to 3kNm and measure the permanent set. The maximum deflection should be 3 degrees.
b) Then increase the torque in steps of 0.5 kNm, measure and record the deflection until failure of the shaft occurs. Record the results.
c) A minimum of three samples each shall be subjected to the above test. The results of the tests shall be included in the tender documentation.

Also the following tests shall be conducted on the screw anchor:

1. Breaking/ tensile load test
2. Dimensional test
3. Hardness test
4. Charpy impact test
5. Fracture mechanics test

6.4 Routine Tests

Routine test are intended to eliminate defective units and shall be carried out during the manufacture of stay rods and screw anchor.

The vendors shall supply duly certified copies of the routine test preformed on the supplied items.

6.5 Witnessing of Tests

The EFL reserves the right to witness all testing. The Supplier shall give EFL reasonable notice of when testing will be carried out and one (1) EFL engineers to be invited to witness the testing.

6.6 Compliance

The Supplier shall state in writing that their offer complies with the relevant Standards and this specification. If the Supplier is offering equipment manufactured to an equivalent standard, full details of that standard must be given including a copy written in English.

7.0 Additional Requirements

7.1 Packaging

The supplied stay rods and screw anchor complete with accessories shall be appropriate packaged to avoid damage during transportations and storage and fit for use. The vendor shall be responsible for nominating standard pack quantities and standard packs shall be clearly marked with the following:

a) Manufacture’s name
b) Manufacture’s part reference number
c) EFL stock code
d) Compliance standards
e) Batch number
f) Item description

g) Package weight

7.2 Storage

The equipment shall be capable of being stored without deterioration within the temperature range of 10^{o}C to 40^{o}C for no less than 24 months.

8.0 Technical Information to be supplied

The following information shall be supplied with the offer:

a) Catalogue describing the items and indicating the model number
b) Constructional features and material used for components
c) Complete dimensional drawing (This needs to be provided with the bid)
d) Quality assurance certificate as per clause 5.0
e) Duly completed schedule of guaranteed technical particulars
f) Manufacturing experience and list of purchasers
g) Type and routine test certificates as per clauses 6.1 and 6.2

Offers of vendors who fail to furnish above particulars shall be rejected.

9.0 Stock Availability

The bidder is required to show the size of his/her stock holding and the ability to meet the required estimate quantity per annum. The movement of the stay rods and screw anchor will depend on EFL's project works and for operation and maintenance purposes. An estimate movement of the item are outlined in the table below but it will not be purchase as a lump sum quantity at once. Hence, the successful bidder will be required to carry a consignment / safety stock at times to meet EFL's demand within the three year contract period.

Bidders must not base their price on EFL to buy the entire quantity mentioned below within the contract period.

No.	Stock Code	Item Description	Approximate 3 year Stock Movement
1	I05331	11kV Stay Rod C/W Accessories	5029
2	I05332	Screw Anchor	125
3	I05336	33kV Stay Rod C/W Accessories	281

10.0 Product Warranty Period

The bidder is required to provide the warranty period as part of the proposal. A minimum warranty period of **twenty-four (24) months** from time of dispatch from factory shall be provided.

11.0 Environmental Considerations

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

12.0 Reliability

Suppliers are required to comment on the reliability of the equipment and the performance of the materials tendered for a service life of 35 years under the specified system and environmental conditions.

13.0 Samples

13.1 Production Samples

Samples of items may be required during the tender assessment period. Samples would normally only be required from tenderers who have previously not supplied the items to the Purchaser.

13.2 Sample Delivery

When samples are required, production samples shall be delivered freight free, suitably packaged and labelled including reference to the Contract Number.

The EFL may at its discretion either purchase the samples at the tendered price or return the samples to the respective tenderer after the contract has been awarded. Samples shall be supplied within 7 days of official request.

14.0 Training

Training material in the form of drawings, instructions and/or audio visuals shall be provided for the items accepted under the offer.

This material shall include but is not limited to the following topics:

- Handling
- Storage
- Application
- Installation
- Maintenance
- Environmental performance
- Electrical performance
- Mechanical performance
- Disposal

15.0 Appendix

15.1 Price Schedule

Bidders are required to complete the price schedule below and submit a copy with the offer.

No.	Stock Code	Item Description	Price
1	I05331	11kV Stay Rod C/W Accessories	
2	I05332	Screw Anchor	
3	I05336	33kV Stay Rod C/W Accessories	

15.2 Technical Data – Stay Rods

All tenderers are required to complete and submit a copy of this form with their bid submissions.
A separate schedule is to be provided for each item offered.

Particulars	Units	Bidders Response	
		Distribution Stay Rods	Sub-transmission Rods
Manufacturer's Name & Address			
Place of Manufacture			
Origin of materials used for manufacturing			
Type Test Report/Certificate No.			
Anchor Bolt:			
Grade of steel			
Tensile strength/ breaking load	kN		
Overall length of rod	mm		
Diameter of rods	mm		
Threaded length from base	mm		
Galvanizing details:			
Method			
Applicable standard			
Coating material			
Minimum costing thickness			
Anchor Plate:			
Grade of steel			
Dimensions of plate			
Dimensions of washer			
Dimension of square hole			
Galvanizing details:			
Method			
Applicable standard			

Coating material			
Minimum costing thickness			
Turn Buckle & Eye Bolt:			
Grade of steel:			
Turn buckle			
Eye bolt			
Tensile strength/ breaking load	kN		
Overall length:			
Turn buckle	mm		
Eye bolt	mm		
Overall width for turn buckle	mm		
Eye bolt rod diameter	mm		
Eye bolt inner and outer diameter	mm		
Threaded length for eye bolt	mm		
Does the eye bolt contain a thimble as per EFL drawing # A3 01 E39 123 (Yes/No)			
Galvanizing details:			
Method			
Applicable standard			
Coating material			
Minimum costing thickness			
U Bolt with C Channel:			
Grade of steel:			
U bolt			
C Channel			
Tensile strength/ breaking load	kN		
Rod diameter of U bolt	mm		
Overall length of U bolt	mm		
Overall width of U bolt	mm		
Bending radius of U bolt	mm		
Does U bolt have permanently mounted flat washer with round/ carriage bolt head finish (Yes/No)			
Does the U bolt contain a thimble as per EFL drawing # A3 01 E39 124 (Yes/No)			
Overall dimensions of C channel (L x W x H)	mm		

Are hole details of the C channel as per EFL drawing # A3 01 E39 124 (Yes/No)			
Galvanizing details:			
Method			
Applicable standard			
Coating material			
Minimum costing thickness			
General:			
Are type test reports/documents submitted as per clause 6.1(Yes/No)			

Name of Tenderer: _____

Signature of Tenderer: _____

Date: _____

15.3 Technical Data – Screw Anchor

All tenderers are required to complete and submit a copy of this form with their bid submissions.
A separate schedule is to be provided for each item offered.

Particulars	Units	Bidders Response
Manufacturer's Name & Address		
Place of Manufacture		
Origin of materials used for manufacturing		
Type Test Report/Certificate No.		
Anchor Rod Diameter	mm	
Single helix material details and dimensions		
Head eye bolt internal & external diameters	mm	
Tensile strength/ breaking load	kN	
Anchor installation torque rating	kN.m	
Charts for installation torque/holding capacity		
Galvanizing details:		
Method		
Applicable standard		
Coating material		
Minimum costing thickness		
Are the anchors painted with anti-corrosive paint (Yes/No)		
Complete dimensional drawing provided (Yes/No)		
Are type test reports/documents submitted as per clause 6.2(Yes/No)		
Is the design as per EFL design # A3 13 E23 005 (Yes/No)		
Pack size		
Pack weight	kg	

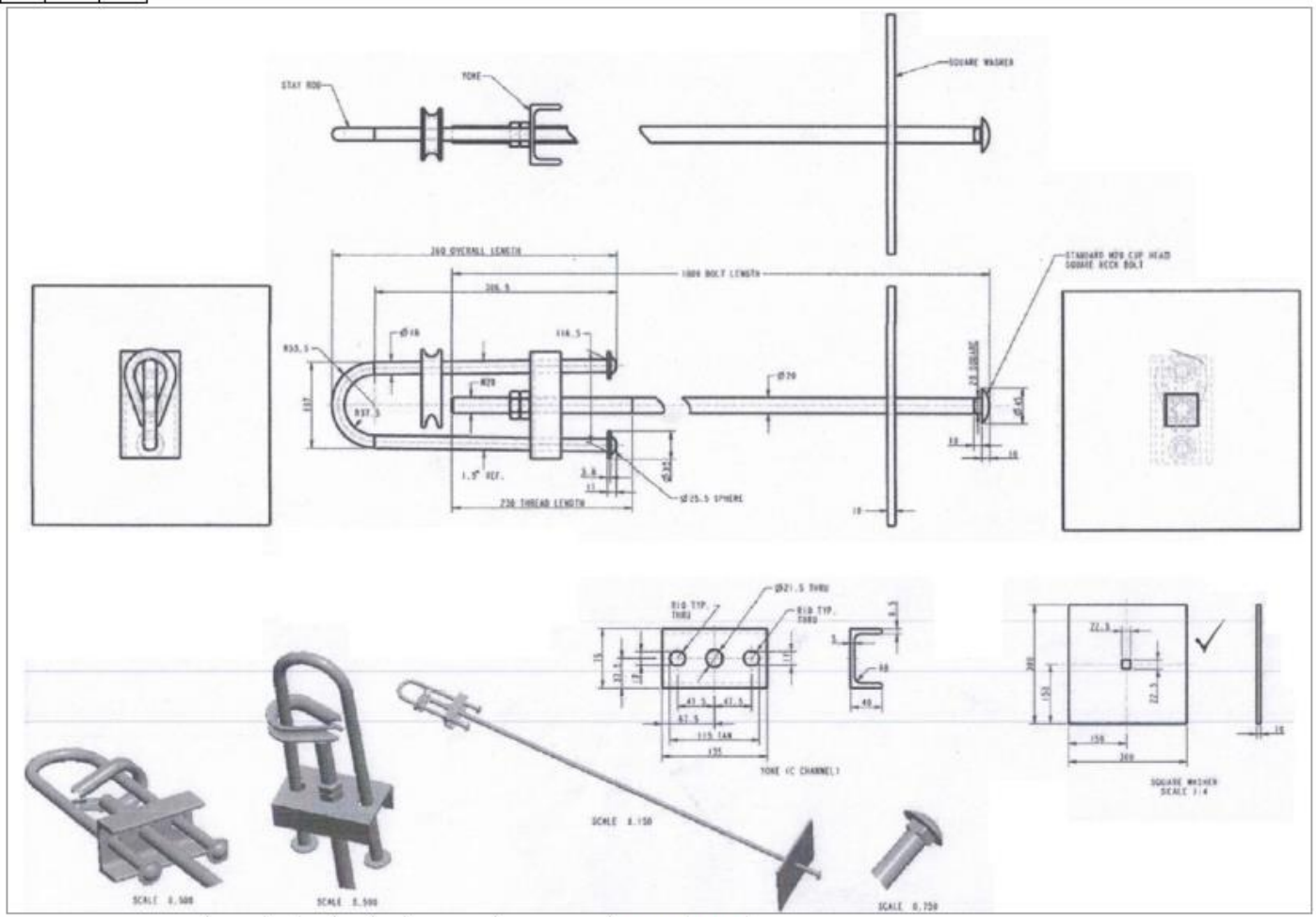
Name of Tenderer: _____

Signature of Tenderer: _____

Date: _____

15.4 Typical Layout Drawing for Distribution Stay Rod

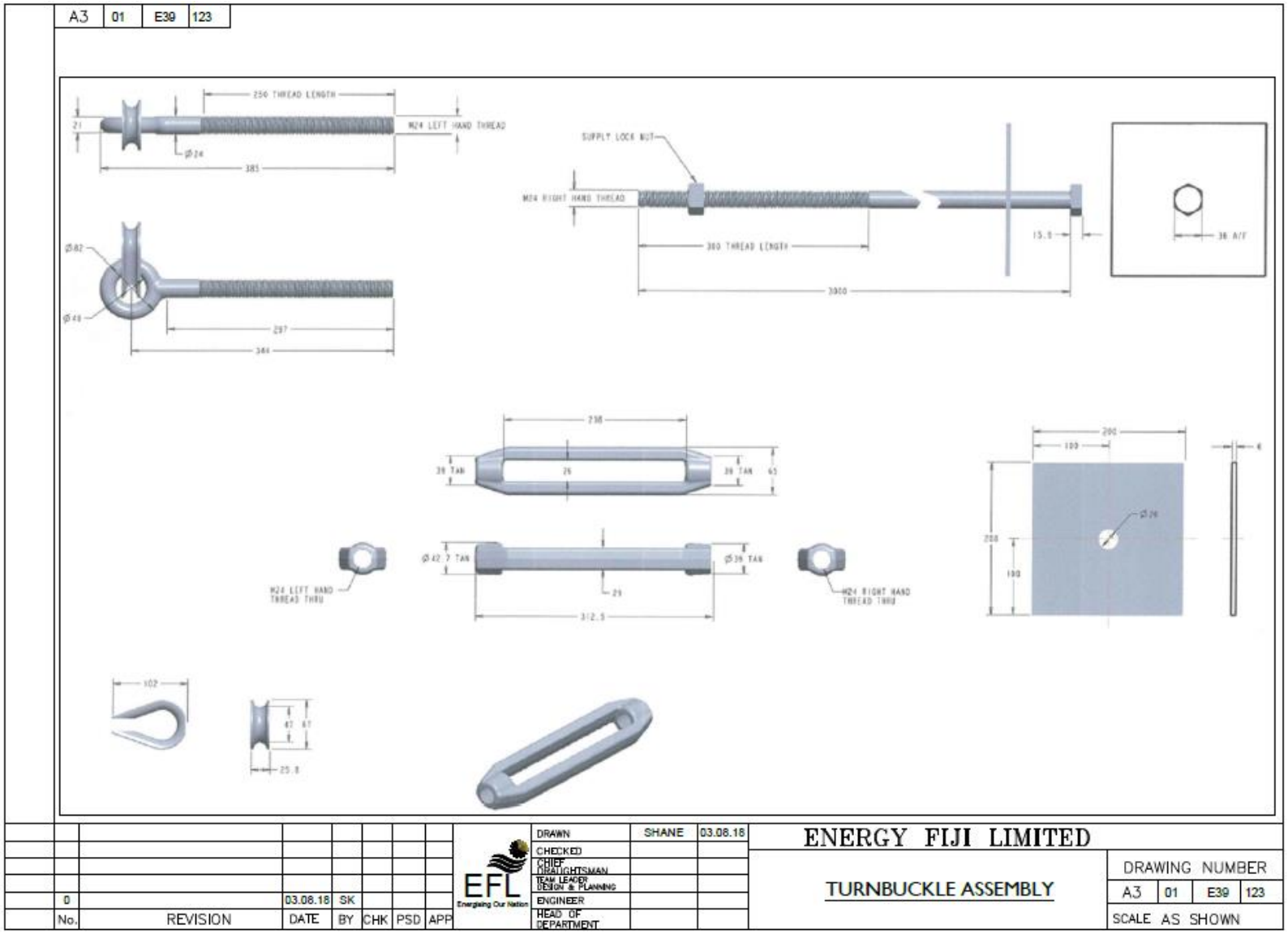
A3	01	E39	124



								DRAWN	SHANE	03.08.18	ENERGY FIJI LIMITED
								CHECKED			
								CHIEF DRAUGHTSMAN			
								TEAM LEADER DESIGN & PLANNING			STAY ROD & BOW ASSEMBLY- Cup Head Sqaure Neck Bolt
	0		03.08.18	SK				ENGINEER			DRAWING NUMBER: A3 01 E39 124
	No.	REVISION	DATE	BY	CHK	PSD	APP	HEAD OF DEPARTMENT			SCALE AS SHOWN

EFL Energising Our Nation

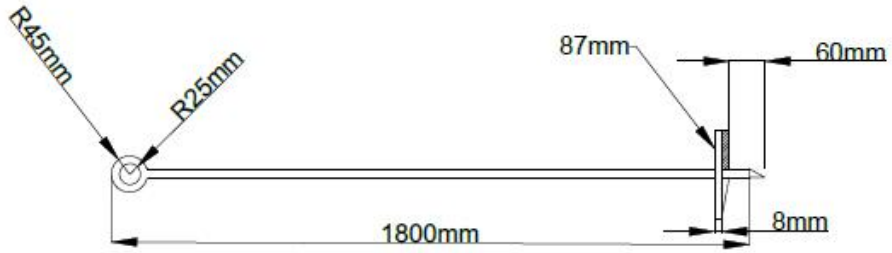
15.5 Typical Layout Drawing for Sub-transmission Stay Rod



								DRAWN	SHANE	03.08.18	ENERGY FIJI LIMITED	
								CHECKED				
								CHIEF DRAUGHTSMAN				
								TEAM LEADER DESIGN & PLANNING			TURNBUCKLE ASSEMBLY	DRAWING NUMBER
	0		03.08.18	SK				ENGINEER				A3 01 E39 123
	No.	REVISION	DATE	BY	CHK	PSD	APP	HEAD OF DEPARTMENT				SCALE AS SHOWN

15.6 Typical Layout Drawing for Screw Anchor

A3	13	E23	005



No.	REVISION	DATE	BY	CHK	PSD	APP
0	ORIGINAL ISSUE	23.10.18	JV			

DRAWN	JONE	24.10.18
CHECKED		
CHIEF DRAUGHTSMAN TEAM LEADER DESIGN & PLANNING		
ENGINEER		
HEAD OF DEPARTMENT		

ENERGY FIJI LIMITED

GROUND STAY DESIGN

DRAWING NUMBER: A3 | 13 | E23 | 005

SCALE 1:2000

15.7 Submission Requirements

All tenderers are required to complete and submit a copy of the submission requirements with their bid submissions.

Requirements	Response from Bidders
Completed price & technical schedules (Clause 15.1 to 15.3) (Yes/No)	
Witnessing included as part of bid. (Yes/No)	
Validity of bid (120 days required) (Yes/No)	
Payment conditions.	
Delivery Term. (CIF preferred)	
Price review period after award of tender. (months)	
Bidders company profile outlining financial, technical and production capabilities.	
Detailed reference list of customers already using equipment offered during the last 5 years with particular emphasis on units of similar design and rating.	
Quality management system used in the production of item, attached certificate.	
Detailed receiving, handling and storage details.	
Minimum warranty period from time of acceptance of item.	
Typical installation manuals.	
Disposal method after service life.	
Complete dimensional drawing.	
List of Type test certificates provided. (As per Clause 6.1)	
Sample routine test certificates.	

Name of Tenderer: _____

Signature of Tenderer: _____

Date: _____

TENDER CHECKLIST

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

Tender Number _____

Tender Name_____

1. Full Company / Business Name: _____

   (Attach copy of Registration Certificate)

2. Director/Owner(s): _____
3. Postal Address:_____
4. Phone Contact:_____
5. Fax Number:_____
6. Email address: _____
7. Office Location:_____
8. TIN Number: _____

   (Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only (Mandatory)

9. FNPF Employer Registration Number: _____ **(For Local Bidders only) (Mandatory)**
10. **Provide a copy of Valid FNPF Compliance Certificate (Mandatory- Local Bidders only)**
11. **Provide a copy of Valid FRCS (Tax) Compliance Certificate (Mandatory Local Bidders only)**
12. **Provide a copy of Valid FNU Compliance Certificate (Mandatory Local Bidders only)**
13. Contact Person: _____

I declare that all the above information is correct.

Name: _____

Position: _____

Sign: _____

Date: _____

Tender submission

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

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

This tender closes at 4.00pm (1600hrs) on Wednesday 31st July, 2024.

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224360 or (+679) 9992400** or email us on tenders@efl.com.fj

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

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

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

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

Tender Submission via email or fax will not be accepted.