

**Fiji Electricity Authority**

**Tender for Design, Manufacture and Supply  
of Concrete Spun Power Poles**

**June 2017**

Quality Assurance Statement	
<b>Fiji Electricity Authority</b> Private Bag Suva Fiji Tel: 679-3311133 Fax: 679-3311882	<b>Project Manager:</b>
	<b>Prepared by:</b> Mohammed Anees Khan
	<b>Reviewed by:</b>
	<b>Approved for issue by:</b>

Revision Schedule					
Rev. No	Date	Description	Prepared by	Reviewed by	Approved by
1	May 17	Initial Draft	M.A. Khan	B. Kumar	
2					
3					



**Definitions:**

TOR Terms of reference for the tender

Tenderer: The company or consortia that is providing a submission in response to this Tender document

FEA: Fiji Electricity Authority, 2 Marlow Street, Suva, Fiji

Works The project, assignment

## 1. Scope

This document serves as Terms Of Reference for the design, manufacture and supply of reinforced, fully or partially pre-stressed concrete Spun poles manufactured by centrifugal spinning or cast methods, to be used in overhead electrical lines by FEA.

## 2. Referenced Documents

The primary standard for the design, manufacture, testing, handling and transportation shall comply with **AS 4065 – 1992/2000**.

Other relevant standards, but not limited to:

- AS1170.2-2002 Structural Design Actions (Wind Actions).
- AS/NZ4676-2000 Structural design requirements for utility services poles.
- AS4065-2000 Concrete Utility Poles.
- AS1313 Steel tendons for pre-stressed concrete.

The successful Tenderer shall provide structural certificate to assure compliance to the above standards. The designer shall be a registered corporate engineer or engineering firm, and recognized by the Insurance Council of Fiji, or equivalent internationally recognized institution if the Tenderer is based overseas, for FEA's insurance purposes.

## 3. Design and Construction Features

All design and construction methodology shall strictly comply with the above specified referenced documents, or any other relevant international standard.

(a) The following information is provided as guideline:

	Length (m)	Tip Strength (kN)	Design Mass (kg)	Tip Diameter (mm)	Base Diameter (mm)
Conventionally Reinforced Poles	15.5	16	To be declared by manufacturer	240	473
Pre-Stressed Poles	15.5	16	To be declared by manufacturer	240	473

(b) The following information is provided as guideline:

	<b>Length (m)</b>	<b>Tip Strength (kN)</b>	<b>Design Mass (kg)</b>	<b>Tip Diameter (mm)</b>	<b>Base Diameter (mm)</b>
Conventionally Reinforced Poles	11.0	12.0	To be declared by manufacturer	250	410
Pre-Stressed Poles	11.0	12.0	To be declared by manufacturer	250	410

(C) The following information is provided as guideline:

	<b>Length (m)</b>	<b>Tip Strength (kN)</b>	<b>Design Mass (kg)</b>	<b>Tip Diameter (mm)</b>	<b>Base Diameter (mm)</b>
Conventionally Reinforced Poles	10.2	12.0	To be declared by manufacturer	250	410
Pre-Stressed Poles	10.2	12.0	To be declared by manufacturer	250	410

(d) The following information is provided as guideline:

	<b>Length (m)</b>	<b>Tip Strength (kN)</b>	<b>Design Mass (kg)</b>	<b>Tip Diameter (mm)</b>	<b>Base Diameter (mm)</b>
Conventionally Reinforced Poles	17.0	24.0	To be declared by manufacturer	270	525
Pre-Stressed Poles	17.0	24.0	To be declared by manufacturer	270	525

As additional information, the poles will be carrying electrical conductors with the following properties:

<b>Conductor Codename</b>	<b>Grape</b>	<b>Lime</b>
Stranding & Wire Diameter no./mm	Al 30/2.50 Fe 7/2.50	Al 30/3.50 Fe 7/3.50
Nominal Overall Diameter mm	17.5	24.5
Cross-sectional Area mm <sup>2</sup>	182	356
Approximate Mass kg/km	677	1320
Breaking Load kN	63.5	122
Modulus of Elasticity GPa	88	88
Coeff of Linear Expansion 10 <sup>-6</sup> /°C	18.4	18.4

#### 4. Quality Control

A production drawing shall be provided for each type of pole designed and manufactured, and a quality control technician shall approve each stage of manufacture before proceeding to the next. Concrete cylinder tests shall be performed for concrete poured in the required manner. A final quality control check shall be carried out on each pole after manufacturing is completed. All quality control procedures shall be mandated in a written manual and be available for inspection.

The Tenderers shall furnish documentary evidence of Quality Assurance processes and forms with the tender submissions.

#### 5. Testing

All required testing shall be carried out in accordance to the procedures outlined in the referenced documents. Certified copies of all test results shall be submitted by an independent accredited testing authority at an accredited testing facility.

FEA Engineer to witness testing of poles, with 7 days advance notice provided if manufactured locally. If manufactured overseas, then the supplier shall pay for travel, accommodation and meals for FEA Engineer to witness the pole testing at the overseas facility.

## 6. EOI Submission

### *Submission Requirements*

The Tender shall include the following:

1. A covering letter including the complete name and address of the firm(s)/individuals performing the services, if applicable, the designing principal firm including the name and title of person principally responsible.
2. Company/Individual background and evidence of similar works/services undertaken by the firm/individual over the last five years including client name, summary of work/services carried out, contact name and address.
3. CV's and background of proposed personnel involved in design and manufacture.
4. Quality Control and Assurance sample documents.
5. Evidence of Professional Indemnity/Insurance cover for the designer and manufacturer.
6. Evidence of compliance to required standards.
7. Proposed Pricing Structure.
8. Prices to include design, manufacture, testing and transportation and delivery to FEA's Navutu and Kinoya Depots.

## 7. Evaluation Methodology

Tender submissions will be checked for completeness, firms/individuals that fail to submit all information required above may not be considered for award.

## 8. Additional Information to tenderers

### ***Closing Date***

Submissions close at **4.00 pm (Fiji) Time on Wednesday 28<sup>th</sup> June, 2017** at FEA's Suva office. Submissions are to be received at this location in an envelope prior to the specified time and marked:

### ***EOI 01//2017***

### **Supply of Concrete Spun Power Poles**

*Secretary Tender Committee  
Fiji Electricity Authority  
2 Marlow Street  
Suva, Fiji*

- Facsimile submissions will not be accepted.
- Late submissions will not be accepted
- All submissions shall be in the English language.
- Electronic copies will be accepted if the hardcopy is received prior to closing date.
- All proposals shall be in a single bound hard copy.

### ***Costs***

All costs of preparing the submission shall be borne by the tenderer.

### ***Enquiries***

All enquiries shall be directed to:

*Tuvitu Delairewa  
General Manager Commercial  
2 Marlow Street, Suva  
Phone: + 679 331 1133  
Facsimile:+ 679 331 1882  
Email: TDelairewa@fea.com.fj*



***Notification and Award***

Following FEA board approval, tenderers will be advised, by letter, whether they have been successful or not. Tenderers will be able to debrief with the evaluation team should they so request, however the scoring information will not be released to any of the tenderers at any time.

Notwithstanding any other provision of this document, FEA reserves the right to:

- Accept or reject any proposal
- Seek clarification of any aspect or information provided in a Tender document and to seek further information from any party
- Amend the closing date for submission of Tender or any other date referred to or implied in this invitation for Tender
- In whole or in part, suspend or cancel this Invitation for Tender process and/or the overall process
- Re-advertise this invitation for Tender

## **EOI Submission - Instruction to bidders**

It is mandatory for Bidders to upload a copy of their **EOI submission** in the **TENDER LINK** Electronic Tender Box no later than **4:00pm, on Wednesday 28<sup>th</sup> June, 2017**.

To register your interest and tender a response, view 'Current Tenders' at:  
<https://www.tenderlink.com/fea>

For further information contact The Secretary Tender Committee, by e-mail  
[TDelairewa@fea.com.fj](mailto:TDelairewa@fea.com.fj)

In additional, hard copies of the **EOI**, one original and one copy must be deposited in the tender box located at the FEA Head Office, 2 Marlow Street, Suva, Fiji no later than **4:00pm, on Wednesday 28<sup>th</sup> June, 2017**- Addressed as

### **EOI 01/2017 – Supply of Concrete Spun Power Poles**

**The Secretary Tender Committee  
Fiji Electricity Authority  
Head Office  
Suva  
Fiji**

- **Hard copies of the EOI Submission 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 28<sup>th</sup> June, 2017**.

- will not be considered.
- **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 EOI submission including any Duties/Taxes. Hard copies of the EOI submission via Post Box will not be considered.**