



Fiji Electricity Authority

MR 38/2015

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

March 2015

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

Revision Schedule					
Rev. No	Date	Description	Prepared by	Reviewed by	Approved by
1	4 Mar 15	Initial Draft	M.A. Khan		
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 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.

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	16-40	2270-3810	240-360	473-593
Pre-Stressed Poles	15.5	16-40	2270-3810	240-360	473-593

For a Factor of Safety range 2 - 2.5 ranges; and the pole top point loading of 12 kN; the anticipated UTS (Ultimate Tensile Strength) shall be 24 kN – 30 kN.

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

Conductor Codename	Grape	Lime
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 ²	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 ⁻⁶ /°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.

Insert any requirement for FEA witnessing of the testing.

6. Tender 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. Background of proposed personnel.
4. CV's of personnel.
5. Evidence of Professional Indemnity/Insurance cover for the designer and manufacturer.
6. Pricing Structure: (please insert)
7. 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. A 60% weighting shall be given for the firm and/or personnel background and performance and 40% for the price/rates (review and amend as necessary).

8. Additional Information to tenderers

Submission of Tender

Two (2) hard copies of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the FEA Head Office, 2 Marlow Street, Suva, Fiji.

Courier charges for delivery of Tender Document must be paid by the bidders.

This tender closes at 4:00pm, on Wednesday 25th of March, 2015.

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

Tender- MR 38/2015 – Design, Manufacture and Supply of Concrete Spun Power Poles.

The Secretary, Tender Committee
Fiji Electricity Authority

Supply Chain Office

Private Mail Bag, Suva

It must also indicate the name and address of the tenderer on the reverse of the envelope.

All late tenders, unmarked Envelopes and envelopes without bidder's name and address on the reverse of the envelope.

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224360 or (+679) 9991587.**

Costs

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

Enquiries

All enquiries shall be directed to:

Tuvitu Delairewa
General Manager Corporate Services
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