

FIJI ELECTRICITY AUTHORITY



TENDER SPECIFICATIONS

TENDER

TENDER NO: MR 172/2017

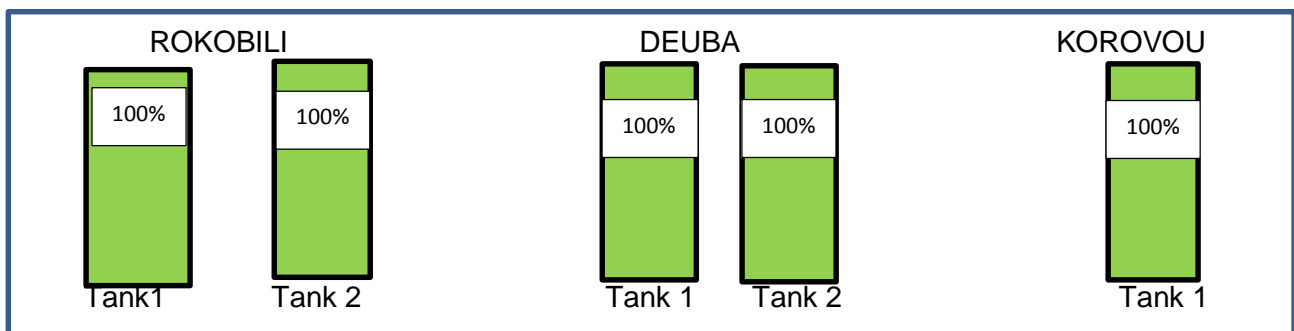
**Design, Supply, Installation and Commissioning of New Fuel  
Storage Tank Sensor for Rokobili, Korovou and Deuba Power  
Station**

## **Scope of Work – New Fuel Storage Tank Sensor for Rokobili, Korovou and Deuba Power Station**

Fiji Electricity Authority invites potential bidders to bid for the supply, installation and commissioning of a new fuel storage tank sensor for FEA's Rokobili, Korovou and Deuba Power Stations. A complete fuel sensor monitoring system to be installed at Rokobili for the respective power stations via wireless monitoring system and all required accessories is to be supplied. The Sensor is to be connected to the existing fuel storage tanks based at respective power stations.

### **Supply and Installation Specifications:**

1. Fuel storage ultrasonic sensor to be supplied inclusive of the automatic control system to be installed in the designated areas of the storage tanks ( 2 storage tanks in Rokobili, 2 storage tanks Deuba and 1 storage tank in Korovou)
2. The ultrasonic sensor shall detect the level of fuel in the fuel tank, process data and send information in the form of digital code via fixed cable [Ca16] to the control module with the display screen (displaying fuel level in percentage) to be mounted beside the tank so that it is visible to the fuel receiver.
3. From the Control module, a fixed cable [Ca16] to run to the ICT server located inside the power station of the FEA intranet so that it can be accessed from any FEA PC.
4. The Graphical User Interface to be designed for the three central power stations namely Rokobili, Deuba and Korovou which will display the fuel tank level in percentage on the screen. The GUI shall be similar to the figure 1 below:



The figure 1 shows the preferred GUI for the system when viewed on any FEA PC.

5. Alarms indications are of paramount such as:
  - a. High High Alarm (add a supply pump to trip and stop sub-routine)
  - b. High Alarm
  - c. Low Alarm
  - d. Low Low Alarm.

*Activate pump shutdown after "High High" alarm.*

6. All equipment should handle tropical climate and have IP66 and IK10 rating for protection from dust, sunlight and rain. ( if necessary provide mechanical protection for the sensor)
7. Self-diagnostics feature to monitor data validity and diagnostic software to be provided.

8. A thorough inspection of sensor and communicating unit shall be conducted before commissioning with monitoring screen real time remote fuel level with necessary valuable data.
9. All other required accessories and spares including bolts and nuts for commissioning purpose and also for mountings.

**Note:**

- The bidder shall provide information in the similar types of works
- Bidder shall provide a calibration certificate of the sensors.
- Bidder shall provide a work timeline as 2 of the sites are unmanned.
- The bidder shall arrange for the communication channel between the sensor and the monitoring unit.
- The system must be reliable and maintenance free if possible.
- Provide all drawings
- Site inspection is **mandatory!**



Supply, Installation and Commissioning of New Fuel Storage Tank Sensor for Rokobili, Korovou and Deuba Power Station

ITEM	ITEM DESCRIPTION	UNIT PRICE	TOTAL PRICE (\$) Currency: _____
1	Supply of new Fuel Storage Tank Sensor with all required monitoring and accessories and all necessary fittings		
2	Installation and commissioning Sensor controls and monitoring unit		
3	Supply of : <ul style="list-style-type: none"> <li>• 2 x Parts Manual</li> <li>• 2 x Operation &amp; Maintenance Manual</li> <li>• Diagnostic Software</li> </ul>		
4	Installation and commission		
5	Mounting		
6	Warranty		
	<b>TOTAL (VEP)</b>		
	<b>VAT 9%</b>		
	<b>TOTAL (VIP)</b>		

## **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 4.00 pm (Fiji Time) on Wednesday 26<sup>th</sup> July, 2017**

### **Site Visit:**

**FEA's Rokobili Power Station at 10.00 am on Wednesday 19<sup>th</sup> July, 2017**

**FEA's Korovou Power Station at 11.00 am on Thursday 20<sup>th</sup> July, 2017**

**FEA's Deuba Power Station at 11.00 am on Friday 21<sup>st</sup> July, 2017**

**Site visits are listed above. Please note date and time. Team leaders of various stations will be facilitating the visit.**

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

### **Tender- MR 172/2017 – Supply, Installation and Commissioning of New Fuel Storage Tank Sensor for Rokobili, Korovou and Deuba Power Station**

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. (Bids via e-mail or fax will not be considered).**

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

**Bidders are requested to submit a:**

- **Valid Tax Compliance Certificate**
- **FNPF Compliance Certificate**

