

Fiji Electricity Authority Generation 25th May 2017

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2 Scope of Works

Fiji Electricity Authority invites potential bidders to bid for the supply, installation and commissioning of a new fuel service tank sensor for FEA's Labasa Power Stations. A complete fuel sensor monitoring system to be installed at tank site and mimic display at the controller both inside the power station via wireless/cabled monitoring system with all required accessories. The Sensor is to be connected to the existing fuel service tanks at power stations. Recommend using an Ultrasonic transducer based sensor.

- 1. Fuel storage sensor to be supplied inclusive of the automatic control system to be installed in the designated areas of the storage tanks (2 x Service 21,000L tanks)
- 2. The sensor shall detect the level of fuel in the fuel tank, process data and send information in the form of digital code via GSM/GPRS wireless data transmitting system or similar means as well as integrated in our SCADA system and not through internet so that it can be accessed from any FEA PC.
- 3. The display screen should be present at the Tank site and a mimic at the station controller booth, displaying the fuel level in litters.
- 4. Alarms indications are of paramount such as:
 - High High Alarm
 - High Alarm
 - Low Alarm
 - Low Low Alarm.
- 5. Integrate auto shutdown protocols for supply pumps on "High High Alarm".
- 6. Self-diagnostics feature to monitor data validity and diagnostic software to be provided.
- 7. 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.
- 8. All other required accessories and spares including bolts and nuts for commissioning purpose and also for mountings must be supply by the contractors.
- 9. Provide operational and maintenance training of the new system
- 10. Provide two copy of the following manual for system;
 - O&M manual
 - Parts manual
- 11. Provide a copy of the program for review and maintenance purpose.



Figure 1 Service Tanks





Figure 1 Current Sensor Unit



Figure 3 Sensor Probe

4 Price Schedule

MR 144/2017 - Supply, Install and Commission Level Sensor for Fuel Service Tank at Labasa Power Station

| ltem | 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 | Program sensor units' control system and integral it into station system. A second read out must be display in the station control booth. | | |
| 3 | Installation and commissioning Sensor controls and monitoring unit | | |
| 4 | Supply of 2 x of each; O&M manual Parts manual | | |
| 5 | Supply of Operational Critical parts (If Any) | | |
| 6 | Accommodation & Mobilization to Site | | |
| 7 | Transportation of Materials to Site | | |
| | TOTAL (VEP) | | |
| | VAT 9% | | |
| | TOTAL (VIP) | | |

Notes:

- 1. Ensure site HSE rules are followed at all times.
- 2. Contractor to verify all drawing measurements onsite
- 3. All Sub-contractors to be used for any part of the works are to be declared.
- 4. Contractor shall provide all materials, tools equipment and labour necessary to perform works.
- 5. A detailed work plan to be provided with expected date for the works.
- 6. FEA financial terms are applicable for these works. Any advance payment will require a bank guarantee.
- 7. The bidder shall provide information in the similar types of works

- 8. The quotes shall include commissioning spares, additional materials and furnish details of special tools required for commissioning of the pump on site.
- 9. Bidder shall furnish along with the technical bid all the list of commissioning spares.
- 10. Contractor shall provide a calibration certificate of the sensors.
- 11. Bidder shall provide a work timeline as 2 of the sites are unmanned.
- 12. The contractor shall arrange for the communication channel between the sensor and the monitoring unit.
- 13. The system must be reliable and maintenance free if possible.
- 14. Provide all drawings
- 15. Site Visit is mandatory!

Submission of Tender

<u>Two (2) hard copies</u> 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 p.m. (16.00hrs Fiji time) on Wednesday 12th July, 2017

Site Visit: FEA's Labasa Power Station at 10.00 am on Wednesday 28th June, 2017

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

TENDER No. MR 144/2017

Supply, Installation and Commissioning of Level Sensor Unit for Fuel Service Station at FEA's Labasa 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 on the envelope will be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act and must have the most current Tax Compliance Certificate.

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