
STATEMENT/SCOPE OF WORK

PROJECT TITLE: FUEL MONITORING AND MANAGEMENT SYSTEM

LOCATION: EMBASSAY BUJUMBURA- BURUNDI

REFERENCE: 2019 - CHANCERY - 10000

CLOSING DATE: ~~17-SEP-2019~~~~19-SEP-2019~~~~13-SEP-2019~~

1. Introduction

US embassy Burundi operates a fuel station on its compound and manages fuel for its fleet, bowzers and equipment/generators installed in residential properties and functional/commercial properties. The fuel pump is installed at the Embassy fuel station. Currently the fuel service station is operated automatically, and reports are compiled from meter readings and daily dips to assist in billing different agencies totaling 13 in number. There is an electronic probe that is installed in the fuel station tank, which measures fuel level in the tank and alarms when fuel is contaminated or when the fuel levels are low.

1.1 Objective

The objective of this project is to assist the Embassy Bujumbura to be able to manage fuel on tanks at residential areas and embassy vehicle fleet, fuel issued to different agencies and to produce a report that Finance Section can use to bill different agencies using ICASS fuel, this will also include:

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- Generator and Vehicle Fuel Monitor/trucking
- Basic central reporting for generators and vehicles
- Fuel Bowser monitor
 - monitors fuel into generators
 - monitors fuel if tampered with – Theft.

1.2 Scope of Work

The project entails:

1. Installation of electronic dipping probes inserted into bowzers, above ground storage tanks (ASTs), components fitted on the diesel consuming equipment (vehicles, generators) amongst others.
2. Installation of front-end fuel controller (which will be controlled from the Embassy)
3. Installation of sensor in the fuel truck pump nozzles that will be able to recognize a sensor/tag in the ASTs and start the pump to fuel authorized equipment/tank.
4. Installation of sensors/tags in vehicles/equipment which will pump operation.
5. Vehicles/equipment defined in the system for easy identification and billing by any of the following: Tag/Number plate, cost center/fund site, fleet owners.

6. Install Fuel management system which will capture all data and compile daily, weekly and monthly activity reports, from receiving fuel into the fuel tank/farm, fueling of vehicles/equipment, consumption of fuel by vehicles/equipment, monthly billing report for fuel consumed by vehicles/equipment.
7. Additional residential generators requirements reporting via cell phone;

The following information to phone via SMS.

- Fuel Level % (Low fuel message below 30%)
- Fuel tank tampered with - theft
- Running / Stopped Timestamp
- Running hours
- Alarm conditions (Common Alarm)
- Battery Voltage
- Battery Charger failure
- Notify up to 10 user telephone numbers
- Weekly Status message every Monday 07:00
- Professional DIN rail enclosure
- Compatible with all generator controllers
- Emergency stop active

1.3 Requirements

Operation: The US Embassy Bujumbura has approximately Nos. 50 vehicles (running on either diesel or petrol), 1 fuel truck Nos bowsers (designed to transport diesel fuel) that are refueled at embassy fuel station and 33Nos. standby power generators. The generators in houses and functional/commercial properties are fueled from the bowsers. The system has to automatically identify the vehicle and/or equipment when the fuel nozzle is inserted into the vehicle's fuel filler inlet via vehicle sensor. The system should also capture vehicle data such as odometer reading, and quantity of fuel filled into a centralized management and reporting system. Vehicle sensors should also be attached to bowsers/equipment (identifiable by registration number) and generators identifiable by Embassy number & RPA code, and authorize the fueling transaction upon successful verification. A self-service fuel dispensing system will be employed at the fuel truck to allow use of an employee card or tag to identify the employee fueling. This system will require the employee to enter a personal identification number or swipe card details prior to initiating a fueling transaction. The system should automatically suspend fueling if the wireless fuel nozzle is removed from the fuel filler inlet at the truck. The system should electronically lock fuel truck pump nozzle ensuring that only authorized equipment/generators receive the required fuel, and only authorized employees are allowed to dispense fuel. The software consolidates data from individual transaction and generates reports used for tracking and billing back to various departments.

2. Compliance

This Statement of Work requires the awarded contractor to provide a qualified technician at the time of installation of this fuel management system supplied with factory training/experience. The

contractor shall furnish all tools, test equipment, required PPE, and properly supervise all site personnel. The contractor should be authorized or licensed to use software or any equipment thereto this project.

3. Project Deliverables

All site visits and scope work must be completed no later than 3 months from contract awarded date. This includes subsequent paperwork, and all final site visit reports. The final inspection report must outline site conditions, noted discrepancies, operational functionality, and related safety concerns. Deliver the report electronically or by hand to:

Drilling, Veronique at DrillingVK@state.gov

Jean Munyarurembo at MunyaruremboJB@state.gov

Isaac K. Andebe at AndebeIK@state.gov

Eric Chiedo at ChiedoEK@state.gov

The report format should follow the guidelines listed below:

1. Provide a one-page Executive Summary noting Scope of Work completion, equipment status at project completion, and note any outstanding discrepancies that were not corrected under this site visit.
2. Provide both recommended and required follow up items accordingly. Provide photos as necessary.
3. Provide a section on test and commissioning results.
4. Provide a section of acceptance document to be signed off by post Facility Manager (FM) and General Services Officer (GSO).
5. Provide a section noting the training given, and the names of the site personnel that attended.
6. Provide all necessary Bill of Materials (BOMs) for spare parts as outlined in the work requirements.

4. TRAINING.

After installation and commissioning is complete, a training session shall be provided by the contractor for all interested Post facilities section employees. Training shall include fueling of vehicles and equipment a sequence of operation configuration, the layout of the newly configured control system, discussion of spares on site, and details on maintenance intervals. Detailed as-built standing operating procedures for the new system shall be laminated and posted in the installed room, and additional copies shall be provided to the Post during the training session

5. WARRANTY

The contractor shall provide one-year warranty on all equipment, parts and or material installed for the operation of the fuel monitoring management system. The contractor shall provide, at his cost, for onsite repairs within 3 days of notification of an operational problem or failure within the warranty period.