

Supply and Installation of Fuel Level Sensors for Residential Generators

The work consists of supply and installation of fuel level sensors into day tanks of diesel in standby power generators in various US Embassy owned and leased residential properties in Colombo city limit. All the work shall be in accordance with recognized US and International codes on power generators. This project work shall be abided by all the Embassy rules and regulations including security and safety.

The methods that the contractor will use need to provide continuous progress on the job site according to the projected timeline of two days for a single residential property. Any changes in this Scope of Work shall be approved in advance in writing by the Contracting Officer.

All work described in this Scope of Work shall be completed by the contractor. The contractor shall provide qualified engineering, supervisory, technical and labor personnel capable of meeting the embassy requirements. The labor force shall possess skills for this project and sufficient staff to accomplish the work in a timely manner. The contractor shall provide all necessary material, tools, equipment, labor, and vehicles required for this work.

Contractor should ensure the minimum disturbance and no damages to the existing property of the premises and inside the building

Requirement

1. Vendor shall develop the system to monitor the level of diesel in each residential generator remotely.
2. This project will be a complete system having all hardware, software, monitoring system, data transferring system (may be Wi-Fi device for each location to get internet connection)
3. Any cost associate to the internet Wi-Fi connection (or other reliable method) to be included for a period of one year in the proposal.
4. Vendor shall do all trouble shooting and technical support services at the end of the period of commissioning.
5. The monitoring system should have robust and nonmaintainable level sensors and the effective mechanism of transmitting the details of the diesel level in any given generator in various locations in Colombo.
6. Level sensor should be of UL or CE certified and made in US or European country . It is not required to read the tank diesel level in terms of liters but simple % of the available tank level is what really need.

7. The system should have indicator method when the level of the tank drop below 50% and warning signal if it goes below the 40% level. Total five level indication should be fine – proposal 100%, 80%,60% 50% and below 40%
8. Vendor shall forward the sensor details with the proposal
9. Day tanks heights are varied from 6” to 16”. Sensor should be able to work for such range. Extra heat level around generator and its impact on day tank should also be consider when selecting the sensor.
10. The metal day tanks will have ½” or ¾” hole in top cover near the diesel inlet spout and the sensor can installed without drilling extra hole.
11. Vendor shall develop the schematic diagram or the flow diagram for the proposed monitoring system.
12. This should be a very simple monitoring system without complex technical parts or system
13. System should be able to work in extreme weather conditions, expose of element and protected from lightening to a great extent.
14. Vendor shall forward the project schedule for the work. It shall show all the details of lead time for offshore purchasing.
15. System should be able to initially track 20 Generators as a pilot project and it should be able to expand to 40 plus generators after evaluating the success of the project.
16. This is a supply, installation, commissioning, trouble shooting and maintaining contract with all necessary hardware and software, if any.
17. First year of the full service should be included and afterward we will see the possibility of service contract to maintain as applicable.
18. Should have warranty of two years for all hardware, software, and workmanship.

The Embassy reserves the right to inspect the quality of installation works and to order corrections or replacement, at no additional expense to the Embassy, of items determined as not meeting the minimum standards.

The contractor shall clean up left over materials from the site(s) prior to the project's being determined as complete. No trash or installation/fabrication debris shall be left in the project area prior to acceptance by the Embassy. The contractor shall make every reasonable effort to keep the job site clean during the duration of the project. Must provide a function warranty for 2 years for material, hardware, software, data transfer system, sensor and workmanship.