

Total Nigeria Plc

Expression of Interest for Design and Construction of Photovoltaic Power systems on Total Service Stations in Nigeria

Total Nigeria wants to install photovoltaic power systems on eight (8) Service stations in Nigeria in 2015. It calls for expressions of interest from turn-key solution provider (EPC) for the study, supply and construction of these PV systems from 30 to 80 kWp with capacity for Power storage and energy management. The PV modules will be supplied by SunPower, the solar company of Total.

The competences expected from the vendors are:

- (1) Experience in design and construction of PV systems on roof and/or car ports including Building Integrated Photovoltaic (BIPV) solutions.
- (2) Engineering capabilities to size PV systems and battery storage systems with respect to the local climate and installed loads. Integration of international and local standards and regulations.
- (3) Engineering capability to design and calculate mechanical structure (weight, wind, seismic).
- (4) Engineering capabilities to design electrical solutions regarding Photovoltaic, Power storage, grid connection, diesel generator control, safety devices and energy management operating all these devices. Integration of international and local standards and regulations.
- (5) Engineering of remote monitoring solutions for PV and storage system status, power flows, local weather (irradiance, temperature).
- (6) Capability to integrate different suppliers' solutions (mechanical, electrical) with competences to define the most adaptable equipment.
- (7) Capacity to integrate local suppliers with quality qualification process
- (8) Competences in construction and installation of PV systems on roof including planning, work follow-up, execution validations, management of workers and safety. The

internal workforce and the close management of contractors are essential evaluation elements.

(9) Competences in safety management during preparation, installation, commissioning and operation of PV system. Safety processes and equipment.

(10) Competences in tests and validations for PV system commissioning

(11) Capability to provide Operations and Maintenance solutions for the PV and storage system for 5-10 years.

(12) Experience in managing similar projects in Africa and particularly in Nigeria (Photovoltaic, power plants, construction, infrastructure, buildings etc.)

The Evaluation of Vendors Will be Done On:

- Technical competencies (PV engineering, structure, electrical) on photovoltaic Projects
- Qualification of management and workers to drive project, design and build PV Systems
- References in PV installations (rooftop, car ports)
- Safety processes
- Experience in Nigeria or Africa
- Operations & Maintenance experience on PV systems

Organizations interested in this Expression of Interest must express their interest **on / before March 24, 2015** to Mrs. Olabisi Uwaoma (solarproject@total.com.ng) by sending a dossier detailing their competences and experiences in the criterias stated above and including evidence of previous projects, key people and internal processes