

## O&M Engineer

### Introduction to SOLA Future Energy

At SOLA, we believe that Africa's future relies on affordable, clean and accessible energy. Solar energy – a distributed power source that can run a building, factory, or even an island for 25 years – can pay itself off in just 5 years. We drive an inclusive economy in Africa through our clean and reliable energy systems, that create sustainable savings for commercial and industrial properties. SOLA has an established track record of successful projects in South Africa.

### Overall purpose of the position:

To ensure that all contracted Solar PV sites operate properly and efficiently, and to keep energy production and demand savings for each site in line with the expectations of the client and also within contracted performance guarantees. To troubleshoot and solve engineering problems on solar sites.

**Reports to:** Operations and Maintenance Manager

**Location:** Cape Town, South Africa.

### Sample of Key Performance Areas (KPA's):

#### *Strings*

- Troubleshooting string faults.
- Use string tester on site, understand and interpret string tester readings, record results and relay to engineers.
- Identify downed strings and be able to physically fix the strings – walk the line, remove panels, etc.

#### *Communications*

- Conduct fault finding on comms board; identifying which component is malfunctioning and why and determine how to correct the fault. Reset board or replace component as necessary.
- Checking data on 3G.
- Checking health of inverters online; Understand and interpret yield deviations and relate these to real site conditions (e.g. shading or likely problems).
- Identify when inverters are malfunctioning (understand and interpret error codes; identify when to call in the supplier or whether we can fix in-house).

#### *Inverters*

- Operate and work with inverters.
- Check for and perform firmware updates on inverters either remotely or on site, using various protocols.
- Log into inverters, download logs and use inverter manufacturer software/interface at inverters.
- Check, read and understand emails from inverters and dataloggers.
- Working with Support and manufacturers to fix errors.
- Replace inverters: liaising with inverter manufacturers, and physical replacement of the unit.

#### *General*

- Supervising replacement of damaged inverters, solar panels, breakers and any other faulty equipment.
- Troubleshooting various issues on site, and rectifying them.
- Other relevant duties as assigned from time to time.

**Requirements:**

- Qualified electrical engineer, specialising in communications;
- Competent with Ethernet Networking;
- Able to install power meters and troubleshoot them;
- Understand and competent with serial communication networks;
- Familiar with inverters and their monitoring systems ie. SolarEdge, SMA, ABB;
- Working understanding of power system protection, relays and breaker operation, troubleshoot these items;
- Experience in SQL, Python/Javascript code;
- Experience and competent in PLC Coding;
- Must be able to work safely with electricity;
- Demonstrate an understanding of the layout and function of a communications board.
- Must be comfortable using solar string testers, multimeters etc.
- Must have proven experience with electronics and communications hardware.
- Previous experience in solar energy industry will be advantageous.
- Must be physically able to work at heights (completed certification will be beneficial).
- Must be conscientious, and able to take initiative.
- Must be excellent at find faults and solving them.
- Must be fully computer literate (MS Office) and general understanding of communications software.
- A driver's license, as well as own reliable transport. Must also be willing to use your own vehicle for business travel.
- Willing to travel nationally to other sites as needed.

If you are interested to apply, please submit your CV to [hr@solafuture.co.za](mailto:hr@solafuture.co.za)