



Operations and Maintenance Engineer

Introduction to SOLA

SOLA is a vertically-integrated provider of solar technology, finance and engineering expertise in Africa. SOLA grows businesses, connects communities and helps people prosper by advancing the adoption of clean energy throughout the African continent. Our team is committed to powering Africa with clean, affordable energy.

The 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: Joburg

Summary of Responsibilities:

Strings

- Troubleshooting string faults - helping O&M technicians to quickly identify string faults
- Use string tester on site, understand and interpret string tester readings, record results and relay to engineer colleagues
- 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 components 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 data loggers
- 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

Key Performance Indicators

- Turnaround time for faults at solar plants
- Actively help to maintenance Performance Ratio and Energy Yield guarantees
- Increase proficiency and solar engineering knowledge (electrical, communications, remote computer diagnostics)

Minimum Requirements:

Technical

- At minimum, have BTEch or Bachelors Degree in Electrical Engineering, 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 the solar energy industry will be advantageous
- Must be physically able to work at heights (completed certification will be beneficial)
- Must be excellent at finding faults and solving them
- Must be fully computer literate (MS Office and Google App Suite) and general understanding of communications software
- Must be fully proficient in English (verbal and written communication)
- Must have a valid driver's license and his/her own reliable transport; should also be willing to use your own vehicle for business travel

Behavioural

- Must be conscientious, and able to take initiative
- Willing to travel nationally to other sites as needed
- The ideal candidate will be passionate about the renewable energy industry and the company's contribution to the future of energy; He/she will embody respect and responsibility in the full sense of the word, and will enjoy contributing to a team of highly knowledgeable professionals.

If you are interested to apply for this vacancy, please submit your CV to hireme@sola.africa