

## JOB DESCRIPTION

<b>Job Title:</b>	Solar Technician (2 posts)
<b>Company:</b>	Globeleq South Africa Management Services (GSAMS)
<b>Reports To:</b>	Plant Manager
<b>Location:</b>	De Aar Solar Power plant, De Aar (1 post) <b>or</b> Droogfontein Solar Power plant, Kimberley (1 post)
<b>Employment Type:</b>	Permanent
<b>Direct Reports:</b>	None; may give instruction to an Intern and/or contracted staff

### Main Purpose of Role

Globeleq is a leading independent power producer operating and developing power projects in Africa. In South Africa, Globeleq owns and operates three renewable energy (RE) power plants: a 138 MW wind farm in Jeffreys Bay and two 50MW solar photovoltaic plants in Kimberley and De Aar. These projects emanate from the South African government's REI4P programme and are among the first RE plants to be constructed in the country.

The Solar PV Technician is responsible for all preventative and corrective maintenance on the solar plant while making sure all HSE procedures are followed. The Technician must ensure maximum availability and performance ratio of the solar plant and draft technical reports on all events. Root cause analysis, identifying and implementing plant optimisation projects under guidance by the Plant Manager and Engineering Manager.

### Key Responsibilities

1. Plan, prepare for, manage and execute activities pertaining to Preventative Maintenance on the solar plant assuring all HSE procedures are followed, activities include but are not limited to:
  - a. Substation maintenance as per annual maintenance schedule
  - b. E-House maintenance as per annual maintenance schedule
  - c. General Junction Box (GJB) maintenance as per annual maintenance schedule
  - d. Array Junction Box (AJB) maintenance as per annual maintenance schedule
  - e. Reverse Osmoses (RO) plant (Water filter system) maintenance as per maintenance schedule
  - f. Infrared Red scans of panels, AJBs, GJBs, transformers and inverters
  - g. Inspections as scheduled on substation, E-House, GJBs, AJBs and RO plant
  - h. Inspect, test, diagnose and maintain CCTV system
2. Plan, prepare for, manage and execute activities and execute pertaining to Corrective Maintenance on the solar plant assuring all HSE procedures are followed, activities include but are not limited to:
  - a. Respond to all alarms triggered on the solar plant
  - b. Resolve all trips on the solar plant as soon as possible
  - c. Attend to all breakdowns, do fault finding/root cause analysis and resolve, fix or replace faulty equipment with minimal energy loss
  - d. Diagnose and replace PV panels
  - e. Diagnose, test, repair and/or replace cables, cable inter-connections, PV junction/string boxes, connectors and fuses in PV systems
  - f. Diagnose, test, repair and/or replace transformers
  - g. Diagnose, test repair and/or replace HV yard equipment
  - h. Diagnose, repair and/or replace switchgear and control gear in PV systems
3. Maintain solar/diesel Hybrid system, including batteries
4. Apply root cause analysis techniques on all major and reoccurring faults
5. Investigate technical failures and prepare formal technical report
6. Generate Work Order (WO) requests for onsite intervention in CMMS/ERP system
7. Enforce HSE compliance with contractors

8. Work with Power Engineer on Plant optimisation (reliability and future CAPEX projects)
9. Perform standby duties
10. Train/mentor interns
11. Interact with Eskom Control as required
12. Prepare Requests for Quotes as needed
13. Record keeping and management of spare part movements
14. Report significant events to Plant Manager and Power Engineer
15. Any other duties, as assigned by the Plant Manager, in line with the role

#### **Skills / Competencies**

1. Able to troubleshoot and analyze data including following various types of process charts, schematics and single line diagrams
2. Have a good understanding and perception of integrated system and how to apply effect fault finding techniques in such a system.
3. Very good written and oral communication skills
4. Well-organized and responsive in all communications including clear, concise e-mails; adept at writing technical reports and policies
5. Good team player; able to balance team and individual responsibilities
6. Able to communicate effectively, orally and in writing
7. Able to manage stress and high-pressure situation
8. Able to handle multiple projects, prioritize work and work effectively under limited supervision

#### **Experience, Knowledge & Qualifications**

- Minimum of an N3 (or NQF equivalent) with electrical subjects; N6 or ND) or NQF equivalent) is preferred
- Red Seal qualification preferred
- Minimum 2 years' utility experience in power plant or industry experience is desired
- Working knowledge of PV plants is an advantage
- Experience in switching LV, MV and HV systems
- Experience with lock-out tag-out procedures
- Working knowledge of power system protection
- Able to read and interpret single line diagrams and schematics
- Demonstrated experience in the maintenance of LV and 22kV cable, DC cable systems including fault location and diagnostics is an advantage
- Cable jointing qualifications and experience is an advantage
- SCADA: able to analyse data, investigate and report on trends
- SCADA systems: knowledge of/experience in T3000 SCADA and Ellipse experience would be advantageous
- General ERP/CMMS experience
- Working knowledge of Microsoft Office packages including Outlook, PowerPoint, Word and Excel
- Code B driver's license required
- Simotion and Sinamics experience is an added advantage
- PLC troubleshooting and maintenance is an added advantage

#### **Application process**

CV and cover letter to be emailed to [jobs@globeleq.co.za](mailto:jobs@globeleq.co.za) by

**Monday 5 February 2018.** Applications to include:

- Applicant employment equity status (race and gender)
- Current salary details