

# JOB DESCRIPTION

Job Title:	Solar Technician
Company:	Globeleq South Africa Management Services (GSAMS)
Reports To:	Site Supervisor
Direct Reports:	None; may give instruction to an Intern and/or contracted staff
Location:	Soutpan Solar Power Plant - Limpopo
Role Type:	Permanent
No of positions	2

#### **Purpose of Role**

Globeleq is a leading independent power producer operating and developing power projects in Africa. In South Africa, Globeleq owns and operates renewable energy (RE) power plants throughout 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 Site Supervisor and Engineering Manager.

### **Key Responsibilities**

- 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/inverter Station maintenance as per annual maintenance schedule
  - c. General Junction Box (GJB)/String Combiner Box (SCB) 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/SCBs, transformers and inverters
  - g. Inspections as scheduled on substation, E-House, GJBs/SCBs, AJBs and RO plant
  - h. Inspect, test, diagnose and maintain CCTV system
  - i. Inspect, test, diagnose and maintain tracker 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
  - a. Diagnose, test repair and/or replace HV yard equipment
  - h. Diagnose, repair and/or replace switchgear and control gear in PV systems
- 3. Apply root cause analysis techniques on all major and reoccurring faults
- 4. Investigate technical failures and prepare formal technical report
- 5. Generate Work Order (WO) requests for onsite intervention in CMMS/ERP system
- 6. Enforce HSE compliance with contractors



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

### **Skills / Competencies**

- 1. Able to troubleshoot and analyse 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 N4 (or NQF equivalent) with electrical subjects is required.
- Minimum 2 years' utility experience in power plant or industry experience.
- Experience in switching LV, MV and HV systems is required.
- Experience with lock-out tag-out procedures.
- Working knowledge of power system protection.
- SCADA: able to analyse data, investigate and report on trends.
- SCADA systems: knowledge of/experience in SCADA, Automation and process control systems.
- General ERP/CMMS experience.
- Working knowledge of Microsoft Office packages including Outlook, PowerPoint, Word and Excel.
- Code B driver's license is required.
- N6 Diploma or \$4 ND Electrical Engineering is preferred.
- Red Seal qualification preferred.
- 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.
- Working knowledge of PV plants is an advantage.
- Cable jointing qualifications and experience is an advantage.
- PLC troubleshooting and maintenance is an added advantage.

Prepared By	Patrick Govender & Willie Van Niekerk	Date	08/08/ 2019
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Application process	CV and cover letter to be emailed to jobs@globeleq.co.za by Friday,
	23 August 2019.