

# **JOB DESCRIPTION**

Job Title:	Junior Power Engineer		
Company:	Globeleq South Africa Management Services		
Reports To:	Power Engineer		
Direct Reports:	None		
Location:	Cape Town with frequent travel to GSAMS' renewable energy power plant sites		
Role Type:	Permanent		

### 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 Junior Power Engineer will assist in the development and execution of power engineering and project-related tasks within the engineering department. Together with the Power Engineers, the Junior Power Engineer will focus on the development, implementation and maintenance of sound engineering practices through Globeleq's existing assets, assets under development and assets under construction, with the intention of optimising life-cycle performance. The role will require frequent travel for onsite activities.

## **Key Responsibilities**

- 1. Grid code support
  - a. Assist in developing and maintaining plant electrical, protection and ArcFlash models
  - b. Assist and perform grid code studies
  - c. Assist in managing grid code compliance of the Globeleq power plants
  - d. Assist in analysing power quality data and assist in power quality assessments of the Globeleq assets
  - e. Assist in improving electrical plant control systems
- 2. Plant engineering support
  - a. Assist in studies to identify appropriate changes to improve plant reliability and performance
  - b. Conduct internal technical audits of Globeleq assets, systems and maintenance plans
  - c. Assist with transfer of knowledge through technical coaching and training
  - d. Support plant technician's in fault finding activities
  - e. Assist Plant and Engineering teams in root cause analysis investigations to failures
  - f. Evaluating electrical systems, products, components, and applications by conducting research and applying knowledge of electricity and materials to assist the operation teams
  - g. Participating in ISO 55 000 related activities
- 3. Engineering systems development
  - a. Administer the StationWare configuration management system
  - b. Assist in developing and implementing engineering systems to improve support to the Globeleq assets
- 4. Engineering projects
  - a. Manage engineering projects from conceptual through to operations



- b. Confirms system's and components' capabilities of each project requirement
- c. Assist in developing technical specifications and scope of work packages for engineering projects
- d. Manage the CAPEX process for new projects in the pipeline
- e. Conduct feasibility studies for proposed new capital projects
- f. Participate in the evaluation, review and recommendation of suitable suppliers and contractors
- g. Assist with the delivery of projects on time, within budget and to agreed contractor quality
- 5. And any other duties, as assigned by the Power Engineer in line with the role

### Skills and Competencies

- 1. Very good written communication in English, including writing clear and concise reports
- 2. Very good verbal communication skills, comfortable presenting to technical audiences and training colleagues
- 3. Able to establish and maintain professional working relationships with internal and external parties
- 4. The ability to converse in Afrikaans would be an advantage
- 5. Able to handle multiple projects and prioritise work effectively
- 6. Responsive to pressure and able to manage changing priorities
- 7. Must be a self-starter and able to work independently when required
- 8. Good team player; able to balance team and individual responsibilities.
- 9. Very good organising skills and attention to detail.

# Experience, Knowledge & Qualifications

- 1. B.Sc Eng/B.Eng or MTech in electrical engineering (heavy current) (or NQF equivalent)
- 2. Ideally 2 years' experience in power system operation (or similar industrial plant) or experience in power system studies in a consulting role (to internal or external clients)
- 3. Understands LV, MV and HV electrical systems; practical exposure to these would be an advantage
- 4. Very good MS Word and MS Excel skills; exposure to MS project (or similar) and MS PowerPoint would be an advantage
- 5. Experience in wind and photovoltaic plants would be an advantage
- 6. Exposure to/knowledge of RMS/EMT dynamic simulations and electrical protection systems
- 7. Formal training in power system digital simulation packages is required. DIgSILENT PowerFactory and StationWare would be an advantage
- 8. Able to read and understand the IEC/SANS technical standards
- 9. Working knowledge of NERSA grid codes would be an advantage
- 10. Able to read and understand schematics
- 11. A valid light vehicle driver's license is a requirement

Prepared By	Michael Rainey, Zaid Omardien & Glen Medlin	Date	17 May 2019		
Application process	CV and cover letter, together with certificates, driver's license and current salary details, to be emailed to jobs@globeleq.co.za by <b>Monday 10<sup>th</sup> June 2019</b> .				