



## Design Engineer

### Introduction to SOLA

SOLA is a vertically integrated provider of solar technology, project development, 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:

Design Engineers contribute towards most activities within the company, but first and foremost, designing ground-mounted and/or rooftop PV projects according to best practices and South African and international standards. The main requirement for this position is an engineer that is very competent in LV and/or MV electrical principles and design.

Reports to: Senior Design Engineer  
Location: Cape Town or Johannesburg, South Africa

### Summary of Responsibilities:

#### Technical

- Design:
  - Electrical and mechanical design of ground-mounted and/or Rooftop PV projects from the DC PV components, combiner boxes, inverters, solar DBs, AC cable runs, through to grid connection.
  - Simulation of yields using software such as PVSol or PVsyst.
  - Compiling detailed design drawings.
  - Peer-review of design drawings as required.
  - Setting up tender BOQs, specifications, and tender package for project tendering.
- Compile Feasibility studies and Tenders for potential clients/projects.
- Commissioning and construction:
  - Provide site construction support.
  - Complete equipment FAT and SAT testing.
  - Commissioning the communications and protection/SCADA systems of PV projects.
  - Uploading and setting up projects in online monitoring portals
- Operations and Maintenance:
  - Troubleshooting and performance analysis of completed projects under an O&M agreement.

#### Interpersonal

- Establish strong working relationships with a diverse range of internal and external stakeholders.
- Working closely with multidisciplinary teams to solve problems innovatively.
- Operate as a strategic thinker, using your knowledge of energy markets and renewable energy to inform SOLA's strategy and implementation plans over the coming decades.

### Key Performance Indicators

- Achieve Project Score of 80% and above.
- Achieve Tender Strike Rate of at least 40%

### Minimum Requirements:

- At minimum, an Electrical (or Electrical & Electronic) Engineering Degree.
- Must have approximately 2-4 years work experience as an MV or LV electrical engineer.
- Must be fully proficient in English (verbal and written communication);
- Must be fully computer literate (MS Office Suite and Google App Suite);
- Strong desire to learn and grow within a multidisciplinary environment.
- 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.

### Beneficial Skills and Experience:

- Previous experience using applications such as CAD, PVSyst, PVSol.
- Previous experience using simulation software as ETAP, Digsilent, etc.
- Experience in MV design in sizing cables, earthing, breaker sizing, specifying protection equipment.
- Experience developing PLC code for both monitoring and control applications.
- Independent and critical thinker with strong analytical ability and commercial awareness.
- Practical understanding of generator control and integration with microgrid control.
- Comprehension of the South African Grid Code and implementation of Protection and SCADA in renewable energy plants.
- Coding experience using C++, Javascript, Python, SQL, Linux Web Server.
- Pr.Eng registration with ECSA.

SOLA is dedicated to achieving transformation, hence one of our values is “dig diversity”. Our Employment Equity plan and targets will be considered as part of the selection process for this position.

**If you are interested in applying for this vacancy, please submit your CV to [hireme@solagroup.co.za](mailto:hireme@solagroup.co.za) and complete the screening survey [here](#).**