Design 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:

Design Engineers perform two core roles at SOLA. Firstly, designing rooftop and/or ground-mounted PV projects according to company best practices and South African as well as International standards. Secondly, compiling feasibility studies and tenders for prospective clients. In addition to these Engineers are involved in commissioning of projects and providing assistance to the operations team.

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

Summary of Responsibilities:

- PV Design:
  - Electrical and mechanical design of Utility and/or Rooftop PV projects from the DC PV components, combiner boxes, inverters, solar DBs, AC cable specification and connection to the electrical reticulation system (LV or MV)
  - Simulation of yields using software such as PVsol and PVsyst
  - Issuing drawings, liaising with suppliers, commissioning of equipment
  - Peer-review of drawings as required

- Feasibility studies and Tenders:
  - Request information about a potential projects(Electrical, civil, Structural and Legislative)
  - Perform high-level PV design for both rooftop and ground-mounted projects
  - Compile load and generation study outlining the effect that the PV system will have on the client's grid supplied e;ectricity consumption
  - Compile feasibility study document and tender returnables
- Design Drawings:
  - Complete technical, electrical, mechanical and structural drawings for a project
- Commissioning:
  - Commissioning the communications and protection systems of PV projects.
  - Uploading and setting up projects in online monitoring portals
- Operations and Maintenance
  - Troubleshooting and performance analysis of completed projects under O&M agreement
- Legislative
  - Be familiar and comply with all National and International standards

Key Performance Indicators

- Achieve Yield Prediction Accuracy (Test Week) of <2%
- Achieve Project Score of 75% and above.
- Achieve Tender Strike Rate of at least 40%

Minimum Requirements:

- At minimum, a National Diploma (Electrical Engineering), however an Engineering Degree (Electrical) will be highly beneficial
- Must have approximately 2-4 years' work experience of which at least 1 year has been in PV design
- Previous experience using applications such as CAD, PVSyst, PVSol, Solidworks is required
- Previous experience with power system simulation tools as Digsilent would be highly beneficial
- Must be fully proficient in English (verbal and written communication)
- Must be fully computer literate (MS Office Suite and Google App Suite)
- 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