SOLA

Senior 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 and Microgrid projects according to company best practices and South African and international standards. Secondly, compiling feasibility studies and tenders for prospective clients. In addition to these Engineers are involved in the commissioning of projects and providing assistance to the operations team.

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

Summary of Responsibilities:

- Microgrid Design
  - Electrical design for microgrid design including electrical reticulation, integration protection, and control
  - PLC programming for microgrid control
  - Ethernet network design and maintenance
  - Close work with the customer to design a project-specific power system
  - Modeling and simulation of microgrid systems
- PV Design:
  - Electrical and mechanical design of Rooftop PV projects from the DC PV components, combiner boxes, inverters, solar DBs, AC cable runs and connection to the building LV circuit.
  - Simulation of yields using software such as PVsol or PVsyst;
  - Issuing drawings, liaising with suppliers, commissioning of equipment;
  - Peer-review of drawings as required
- Feasibility studies and Tenders:
  - Request information about a potential building (Electrical and Structural);
  - Perform high-level microgrid design
  - Compile load and generation document outlining the effect that the PV system will have on the building;
  - Compile feasibility study document;
- Design Drawings:
  - Complete technical, electrical, mechanical and structural drawings for a project.
- Commissioning:
  - Commissioning the communications and protection systems of PV projects as primary commissioning engineer.
  - Uploading and setting up projects in online monitoring portals
- Operations and Maintenance
  - Troubleshooting and performance analysis of completed projects under O&M agreement
  - Will be available to attend to operational requirements of battery and microgrid systems, including being on-call during non-working hours on a rotational basis

CLEAN ENERGY FOR AFRICA

SOLA GROUP (PTY) LTD | T: +27 (0)21 421 9764 | INFO@SOLA.AFRICA | WWW.SOLA.AFRICA
DIRECTORS: C. HAW | D. WILLS | D. CHENNELLS | S. HAW | REG. NO 2012/042769/07

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 a minimum, an Electrical Engineering Degree.
- Experience with automation, programmable logic controllers and related languages required
- Must have approximately 2-4 years' work experience of which at least 1 year has been in PV design and 1 year in micro-grid design
- Previous experience using applications such as CAD, PVSyst, PVSol, Solidworks is required
- 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.

Beneficial Additional Skills:
- Previous experience using applications such as PLSCAD and Digsilent
- Experience in the design and review of MV lines, breakers and substations
- Experience in protection settings and programming of SEL RTAC
- Experience with MV and/or HV protection design
- Experience working with Eskom & Municipalities to implement projects

If you are interested to apply for this vacancy, please submit your CV to hireme@sola.africa