

Senior Design/Project Engineer - Renewables, Electrical Plant Transmission and Distribution, Overhead Lines, Substations

Sector: All

Location: South Africa

Posted: 04/10/2021

Reference: MJ1725

Description

Job Location: Office based in Midrand, Gauteng

Reports to: Engineering Manager

Job Purpose:

Apply modern engineering practices in power systems development, covering protection, control and automation.

Our client is a 100% black female owned, operated and managed renewable energy developer and strategic investor. Developing, owning, constructing and operating utility scale and small scale renewable energy projects. Has successfully bid, built and operated projects under South Africa's Renewable Energy Independent Power Producer Procurement Programme and is building a portfolio in Africa with the goal of being Africa's largest black female owned independent power producer.

Job Specifics:

- National Diploma – Electrical Engineering with minimum of 5 – 8 years' experience of substations (heavy electrical environment – min 11KV is essential/electrical reticulation) OR B.Eng. Electrical Engineering with Minimum 3 yrs. experience in substations.
- Project Engineering / Project Management experience advantageous but not essential.
- Professional Engineering (Pr.Eng or Pr.Tech Eng.).
- Membership with ECSA is preferred.
- Project Management Knowledge.
- Industry Specific Knowledge.
- Risk Management Knowledge.
- OSH Act & other applicable Health & Safety Acts based on environment.
- Tender & Project process & procedure.
- Detailed understanding of design and operation of modern protection relay technology and substation automation and its application through to commissioning.
- Detailed understanding of design of primary electrical plant in transmission and distribution substations.
- Detailed understanding design and operation of substation control systems through to SCADA systems (Supervisory, Control and Data Acquisition).
- A working knowledge of the civil and mechanical engineering aspects of substations and overhead power lines.
- Planning, Prioritising, Organised and Structured
- Project Management
- Financial Management
- Time Management

- Analytical Skills
- People Management
- Problem Solving Skills
- Strong Initiative
- Team Player with ability to work on your own
- Technical Skills
- Excellent Verbal & Written Communication skills
- Negotiation Skills
- Computer Literacy
- MS Word
- MS Excel
- MS Outlook
- MS Project
- BuildSmart

Business Processes:

Stakeholder Management: To always ensure that stakeholders well informed and to establish a free-flowing information.

- Managing relationships with Business Unit Personnel, Services Departments, Customers and Suppliers.
- Controlling the flow of information and documentation between the Company and Clients, Suppliers and other related third parties to maintain good relations.
- Offer assistance to Substations to peruse drawings and make recommendations when applicable and appropriate.
- Assist with tenders and site visits as and when required.

Designs: To ensure that quality designs are delivered on time and according to specification.

- Prepare detailed designs for ICAP applications in substations and transmission substations.
- Timely execution and preparation of designs and design verification of existing projects.
- Obtain authorization for designs from Business Unit Manager, Engineering Manager as well as the customer.
- Assist in the Factory acceptance testing of designed ICAP systems.

Management & Execution: To ensure a well-managed project, monitored closely in terms of execution.

- Manage the execution of technical and design components of projects in the fields of HV electrical infrastructure.
- Assist with maintenance and fault finding on installations.
- Project planning of order / contract from start to finish.
- Responsible for equipment procurement.
- Continuously check quality of deliverables for assigned projects.
- Responsible for design calculations of primary equipment (technical requirements).
- Verify setting calculations and reports.
- Check and verify primary and secondary equipment designs.
- Oversee the process of delivering completed panels to the customer.
- Monitor and report on financials relating to overall Project: Cash flow, Supplier Invoices, Customer Invoices, Debtors, Sureties Bonds, Guarantees.

- Manage financial specs of projects by updating and maintaining PCM.

Project Management: To ensure a well-managed project running on time and satisfying all communicated expectations.

- Manage all aspects of at least (but not limited to) 3 or more large scale complex, or significant engineering projects from start to finish.
- Manage projects in the specialist field of expertise.
- Responsible for the accurate filing of all project related correspondence and documents.
- Keep a continuously updated project schedule.
- Arrange a detailed hand over meetings with Drawing Office, production, commissioning, FAT, SCADA, etc.
- Perform project postmortem meetings.

Customer Perspective:

Communication to Internal Customers: To ensure a high level of accuracy & integrity of information.

- Provide Drawing Office, Substation, Renewable Energy, Overhead Lines, Finance and other relevant Divisions with accurate information, specifications and designs, to enable deliverance of accurate relevant information for the tender and high-quality designs.

Communication to External Customers: To ensure a high level of accuracy & integrity of information.

- Provide outsourced service provider with accurate specifications and designs, to enable deliverance of accurate price and data information for the tender and high-quality designs (supplier function).

Cost effectiveness: To contribute towards the financial health of the company.

- Eliminate unnecessary expenses:
- Ensure operating costs are in balance with expected outcome thereof.
- Keep waste to absolute minimum.
- Implement cost saving initiatives as and where possible and applicable.

Project Budget: To ensure a profitable project.

- Adherence to project budgets for design, manufacturing and commissioning.
- Ensure equipment procured is within budgeted amounts.
- Keep track of all budget commitments in planning procedures.
- Plan for delivery the final project such as to minimize site work and time spent on site to save costs.
- Do variation orders for parts, infrastructure and communication components not tendered for.
- Improve on or at least achieve tendered profit.

Learning, Growth & Innovation:

Performance Management: To establish an acceptable standard of work throughout the organisation and that leadership is lived daily.

- Own career management by:
- Partaking in the performance management process in a positive way and follow -up actions when applicable.
- Fulfil "acting" role and responsibilities in absence of Engineering manager.

Learning & Growth: Individual

To ensure own individual growth, both as an employee and as a member of the training team.

- Create own personal growth in the team context.
- Suggest appropriate training and learning opportunities for own development.

Innovation: To ensure that innovation is embraced throughout the organisation.

- Suggest innovative ideas on how to improve processes in own areas of work, and in other areas where it could be beneficial.

People Management: To provide continued support and guidance to junior employees.

- Mentor and train Design Engineers and other staff as required.

Please send your Resume & Dedicated Motivational letter QUOTING THE REFERENCE NUMBER

MJ1725 to: macey.johnson@shawenergyltd.com