



Job/Role Description

Senior Substation Engineer

1. Introduction

MPAMOT is a multisector consultancy providing engineering, management, and development services on projects. With over 200 of the best people working on a diverse range of challenges, we're helping our clients deliver sustainable infrastructure and development solutions. We have a collegiate and collaborative culture which values equality and diversity, and we take proactive steps to create an inclusive workplace.

Owing to continued growth and high demand for our services, we are looking for a Senior Substation Engineer to join our energy team in our office in Johannesburg, South Africa.

By joining our team, you will have access to the largest, most challenging and innovative projects worldwide. The work is extremely varied as will be your role.

2. Role Description

The Senior Substation Engineer provides specialist advice, designs, reports, and delivers engineering advice and input across a portfolio of projects. Specifically, you will manage, and complete design work associated with transmission and distribution substation design.

The incumbent will coordinate with the wider team for successful completion of the deliverables.

The Senior Substation Engineer should be able to complete complex projects or assignments autonomously and provides technical solutions to problems with little or no precedent. English proficient with Francophone capability as an advantage.

Some duties entail:

- Perform, review and approve High Voltage substation designs (primary and secondary plant) complying to relevant international standards
- Ensure designs approved for delivery comply with relevant legislation, standards, policies and procedures;
- Update or create design standards and related documentation to ensure continued compliance to standards and industry best practice;
- Experience with all aspects of a substation to be able to produce principal specifications for Primary Plant, Transformers, SCADA and communication, metering systems, protection schemes and civil and structure works;
- Proficient in producing drawings, schematics and diagrams for Substation works
- Prepare, review and manage specifications and other design documentation;
- Provide information as required to determine the best approach for the successful completion of the project in complex multi-disciplinary issues involving other groups;
- Investigate and implement innovative design solutions to meet business and project needs;
- Provide competitive design solutions to support the achievement of MPAMOT's client objectives;
- Deliver engineering projects in accordance with client requirements and in line with company and industry best practice;



- Management of construction activities by contractor, lead project and design review meetings.
- Ability to chair meetings, communicate to project team and produce reports;
- Provide technical input into proposals;
- Ability to lead and manage multidisciplinary teams, taking ownership, leading and coordinating designs and deliverables to meet client requirements.
- Familiarity with IEC 61850 communication protocols and digital substation technology

3. Candidate Specification

The ideal candidate will boast the following credentials:

- BSc or post-graduate qualification in Electrical or Structural Engineering or equivalent with 15 – 20 years relevant experience;
- Experience in a substation environment including significant scheme and project / design management and proven track record of scheme delivery;
- Working knowledge of appropriate British and International Standards and Codes of Practice relevant to the design of transmission and distribution substations;
- Knowledge and understanding of relevant legislation, policies and procedures applicable to the preparation of designs and specifications;
- Knowledge of HSE;
- Able to perform Risk Assessments and develop mitigation strategies;
- Working knowledge of design quality assurance processes to ensure that designs meet quality requirements;
- Working knowledge and demonstrated experience in the requirements and application of Safety design requirements;
- Ability to promote a high standard of professionalism, effective communication and personal integrity within the design team;
- Mentor junior staff;
- Proactive, and proficient in working with clients both internally and externally
- Ability to work in a team environment.

4. Desirable

- Professional Registration with the Engineering Council of South Africa (ECSA)
- Experience in consultancy environment, and in a client facing role.
- Willingness to travel both locally and globally.

5. Package

To be negotiated: Competitive salary plus benefits

6. Location:

South Africa – Johannesburg