Position Description



Position Title Senior High Voltage Systems Engineer

Position No 00015544

Delegation Level 008

Job Designation Engineer Electrical
Organisational Unit HV Systems Engineering

SEQ Assets

Work Centre Brisbane Position Type Permanent

Rail Safety Worker Yes

Medical Fitness Standard NHS Cat 4 Other (No Medical Required)

Performance Plan Type Tech Professional Expert

Shiftworker No

Classification (Range) PT4 .1 - PT4 .4

Pay Scale Type ASPT

Reports to Position Prin Engineer - Power Systems Desig

QUEENSLAND RAIL VALUES:

1 Queensland Rail - We do better together

Treat others with respect - We appreciate everyone's contributions and differences

Empower our people - We have confidence in our people

Act Safely - We work safe, to go home safe

Make a positive difference - We learn from today, to improve tomorrow

Position Purpose

Provide advanced electrical engineering services to deliver quality, commercially focused electrical engineering solutions across Queensland Rail.

Position Responsibilities

- Provide advanced electrical engineering services to achieve project and asset management objectives, taking into account scope, quality and safety considerations, allocated budgets and timeframe to deliver valuable commercial outcomes.
- 2. Provide engineering solutions that aligns with industry norms, and complies with relevant Queensland Rail, Australian and international standards.
- 3. Maintain a strong understanding of power systems theory and traction power principles, whilst gaining hands-on experience with the primary and secondary systems of medium voltage substations. Actively stay informed about emerging technologies and advancements in the field to ensure expertise remains current and applicable.
- 4. Effectively communicate complex technical concepts to a non-technical audience through clear written and verbal communication. Prepare high-quality engineering documents that meet professional standards, including specifications and scopes of work for use between contracted parties.
- 5. Support knowledge development by providing guidance and mentoring to junior and graduate electrical engineers. Foster a collaborative and inclusive environment that encourages learning, skill development, and the effective application of theoretical knowledge.
- 6. Uphold the standards and obligations as a registered professional engineer, by taking responsibility for your work and for the activities of unregistered engineers and technical staff under your



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direct supervision. Ensure all engineering designs and documents comply with relevant safety, operational, and environmental legislation, regulations, and Queensland Rail's quality management system.

Additional Factors

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;
- Conduct the training, self-development and mentoring required to maintain (RPEQ) registration. At the time of writing, this is 150 hours per three years, to BPEQ requirements consisting of formal training or workshops, informal training, on-the-job learning, self-learning, and mentoring junior staff.

What is the key selection criteria

- 1. High level of analytical skill in electrical engineering design, (specifically in medium voltage traction power systems), including applying these skills to both conceptual and detailed designs, as well as solving technical challenges related to asset management.
- 2. High level of skill in relationship management including negotiating critical outcomes, problem solving and networking with and influencing key stakeholders.
- High level of skill in writing engineering documents, and effectively communicating complex concepts and designs to key stakeholders with sufficient detail and without ambiguity.
- 4. High level of skill in troubleshooting and testing new and existing equipment and systems.
- 5. High level of skill in meeting statutory, regulatory and policy obligations, particularly in relation to satisfying the safety, environment, contract processes and human resource requirements in a commercially focused business.
- 6. Knowledge of and willingness to commit to and work within Queensland Rail's Values and Behaviours.

Pre-employment Checks:

Not Applicable

Pre-employment Qualifications:

What qualifications do I need to hold prior to applying for the position?:

20100204 Prof Eng (Qld) Registered

20100220 Bach Eng - Elec

Mandatory Qualifications (If not already held, I will gain these when in position)

40007588 Wunya Induction

30000908 Safely Access the Rail Corridor (QNRP) 40006426 Apply Fatigue Management Strategies 40001627 Building Emergency Procedures

40010410 Safety Comes First Always Workshop
 40009729 Delivering a Pre-Start Briefing Network
 40008876 Working in the Electrified Territory

40008658 NHS Cat 4 Other (No Medical Required)

Enterprise Qualifications (If not already held, I will gain these when in position)

40009601 Code of Conduct Refresher



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40013480 Fraud Awareness Induction

Health, Safety and Environment Responsibilities

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

Personal Protective Equipment needs:

Head and Face protection Eye Protection Hearing Protection High Visibility Clothing Safety Footwear Sunscreen SPF 15+ UV Blockout

Safety Publications

QR Weekly Notice QR SMS - Specifications (Complete Set) Annual Safety Plan Alcohol and Drug Policy Card Chief Executive's Safety Statement QR SMS Policy (Complete Set) QR SMS Standards (Complete Set)

Please Note:

Queensland Rail has a random alcohol and other drug testing program.

Testing can occur anywhere, at any time, on any day.

