

# Position Description



Position Title	<b>Principal Engineer - Power Systems Design</b>
Position No	00071637
Delegation Level	006
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)	PT5 .1 - PT5 .4
Pay Scale Type	ASPT
Reports to Position	Manager HV Systems Engineering

## **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**

To provide expert power systems design services ensuring professional standards for scoping, specification, design, construction, verification and validation are met in order to deliver commercially focused traction power engineering solutions across Queensland Rail.

## **Position Responsibilities**

1. Provide expert electrical engineering services to complete projects against specified Key Performance Indicators (KPI), taking into account scope, quality and safety considerations and allocated budgets and timeframe to deliver valuable commercial outcome.
2. Ensure work by staff and contractors is carried out in accordance with best engineering practice and within time and cost constraints.
3. Carry out engineering studies and investigations related to Power Systems deficiencies, anomalies, type testing, interfaces, protection and incidents as required.
4. Certify, as a professional engineer, electrical engineering works and monitor and manage compliance of the team with the requirements of professional practice and/or the Quality Management System to provide consistent output of electrical engineering services, ensure compliance with safety, operational and environmental legislation, regulations and practices.
5. Manage power systems primary and secondary systems equipment configurations to ensure traceability and auditability.
6. Provide expert advice for power systems technology development, design and innovation including co-ordination with other engineering disciplines and railway operations.

## **Additional Factors**

The appointee will be required to :-

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- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;

## What is the key selection criteria

1. Extensive knowledge of electrical requirements of AC electrified railway systems with particular focus on control, protection and power SCADA systems.
2. Extensive knowledge of Australian standards, associated technical specifications and the design, test and commission procedures with respect to AC electrified railways.
3. High level of conceptual, analytical and innovative problem solving skills.
4. High level of interpersonal, oral and written communication skills and team leadership.
5. High level of skills in planning, programming, managing and reporting of work projects.
6. High level of skill in providing investigations and advice regarding traction system safety and related operational performance.
7. 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?:

An equivalent qualification to that listed below will also be acceptable.

20100204 Prof Eng (Qld) Registered  
20100220 Bach Eng - Elec

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

40007588 All Aboard  
30000908 Safely Access the Rail Corridor (QNRP)  
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

## 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+

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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.