



Position details

Title of Position: Power System Engineer

Reports to (position title):Manager Network Connections

Division: Network

Function: Network Connections

Number of Direct Reports: NIL

Grade: 5

Health, Safety & Wellbeing

ElectraNet is committed to a Safety-First culture and a work environment promoting the health, safety and wellbeing of all workers. To sustain this culture, all leaders are required to implement and maintain the areas of ElectraNet's safety management system under their control, where the health, safety and wellbeing of all workers comes first while ensuring full compliance with all legislative and policy requirements.

All employees are required to contribute to the Safety-First culture by exercising their duty of care to themselves and one another, by working safely, by adhering to all reasonable safety and security instructions, by using all equipment provided in accordance with safe and secure work methods and by promptly reporting any unsafe working practices, hazardous working conditions or security threats.

Position Overview

Power System Engineers contribute to overseeing power system planning and network performance. They understand underlying principles and established techniques and spend their days applying creativity and innovation to plan for the future requirements and possibilities of our network. They enjoy the challenge of generating and implementing new ideas and solutions that continually transform our network to meet customer needs, ensuring its capabilities result in resilient performance.

Success in this role is characterised by generating and implementing new ideas and solutions that continually transform our network to meet customer needs an ability to build relationships across broad stakeholder groups and engineering and design delivery excellence.

Key Responsibilities

OPERATIONAL & TECHNICAL

Capable of working for extended periods under general supervision, you will be accountable in contributing to technical advice and operational support in:

Proactively managing Customer Connections by contributing to:

- Evaluating customer connection proposals
- Connection technical assessments and negotiation of Performance Standards

Proactive Long-Term Planning by contributing to:

- Planning inputs and analysis, including market benefit analysis
- Assessment development opportunities via scenario planning and market modelling
- Develop planning reports, e.g. Transmission Annual Planning Report

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Develop & maintain fit for purpose power system models and provide specialist analysis to support a secure and operable system now and into the future by contributing to:

- Development and maintenance of power system models
- System capability and system security analysis
- Connection compliance and performance
- Operational planning Equipment and line ratings

Behavioural

- Build and maintain strong working relationships with and between internal and external stakeholders, delivering a high level of customer service.
- Create and develop a respectful workplace environment that values cultural diversity, innovation, open discussion and cross functional collaboration to help drive high performance.
- Lead by example; role model desired behaviour and priorities, demonstrate personal accountability for self-development and for achieving quality and timely result.
- Demonstrate behaviour that is consistent with ElectraNet's values, Code of Conduct and Acceptable Use of Technology Resources Policy while performing the role in a professional and ethical manner.
- Promote safe work practises that support the safety of all workers and the security of ElectraNet's assets, proactively reporting safety incidents, near misses and security threats.

Significant Working Relationships

- External Customers & Suppliers
- ElectraNet Corporate Development
- ElectraNet Network Services
- SA Power Networks (SAPN)
- Australian Energy Market Operator (AEMO)
- Essential Services Commission of SA (ESCOSA)

Equipment & Technology Used

- PSS/E & AULimit
- PSCAD
- Power Factory
- Other specialist analysis tools, e.g. PLEXOS, Mudpack & Matlab

Selection Criteria

Knowledge & Experience

Essential

- Applying theoretical and practical knowledge to solve commonly encountered problems
- Applying generally accepted concepts, principles and standards in defined areas
- Undertake small to medium sized projects delivering to medium term weekly to quarterly timeframes
- Undertake regular ongoing tasks being performed on a weekly/monthly/quarterly basis
- The application of engineering analytical techniques planning, system design and operational support;
- Applying established methods and approaches to engineering problems;

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- Understanding and application of physics and mathematical principles in conducting system planning and operational support;
- Applying economic impact of solutions to technical problems
- Ability to undertake programming using Python or similar
- Knowledge of legislated industry requirements (National Electricity Rules, ESCOSA, OTR, AEMO Guidelines)
- Well-developed analytical, investigation and problem solving skills
- Demonstrable, advanced written and verbal communication skills; good interpersonal skills
- Knowledge of transmission system reliability and performance
- Knowledge of substation and transmission system components, performance and operation
- Demonstrable ability to work as a team member and actively promote office harmony
- Flexible approach to working hours and after-hours commitments

Desirable

- Minimum 5 years' relevant experience in Discipline related role, and demonstrated capability in an Engineering related role
- Electricity Industry background an advantage

Qualifications

- Tertiary qualification in Electrical Engineering or relevant discipline (essential).
- Eligible for membership of Engineers Australia (essential)

Background Checks

Pre-employment checks, including background and security checks (such as global criminal checks)
are required for this position, completed prior to commencement and repeated on a regular basis after
appointment.

NOTE: Copies of the above listed qualifications/licences/certificates are required as evidence on appointment.

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