

POSITION DESCRIPTION

Electrical Design Engineer

Date:	29 April 2022	Line Manager:	Grid Engineering Manager
Title:	Electrical Design Engineer	Direct Reports:	Nil
Team:	Technical Services/Development	Status of Position:	Permanent
Location:	Sydney	Date Reviewed:	29/04/2022

1 Position Summary

The Electrical Design Engineer is responsible for working with the Development Team to provide concept designs of the wind farm collector network and HV substation. The designer will be responsible for providing input for the technical specification and reviewing the contractor design during the wind farm tendering stage. The Electrical Engineering Designer will also be a key subject expert to assist the Asset Management Team in reviewing detailed contractor design during the construction stage. The designer will provide ad-hoc support related to the electrical issues of operating assets.

1.1 Key Responsibilities

- General electrical design and management for renewables projects.
- Renewable project layout and cost optimisation through electrical design.
- Reading and interpreting site audit photos. Developing conceptual protection scheme, earthing System and HV design.
- Drafting of design drawings using AutoCAD package and/or delegation of design requirements to a Drafter.
- Development of power calculations to determine loads and battery sizes.
- Development of specification, evaluation, and selection of HV equipment.
- Fault level and load flow calculation of power system networks.
- On-site supporting HV testing and commissioning if required.
- Oversee the design management in engineering delivery of electrical/ HV design projects.
- Review detailed technical drawings, schematics, and termination wiring for construction projects.
- Develop detailed engineering reports for electrical installation changes required on-site for operating assets.
- Responsible for the on-time delivery of the allocated work schedules.
- Ensure the safety of designs through the application of specialist expertise, standards, reviews, risk assessments and risk management.
- Work within a team to deliver results within allocated time, budget, and quality constraints.

1.2 General Responsibilities

Work health and safety compliance	Comply with all workplace health and safety obligations and report any incidents, hazards and accidents to the safety team.
Administration	Ensure all documentation is stored and recorded on the Squadron Energy document management system.
Reporting	Ensure that issues and risks are escalated/reported to management in a timely manner.
Financial	Adhere to Squadron Energy and project procedures for purchasing and expenditure in compliance with approved budgets.
Stakeholders	Maintain a professional relationship with all project Stakeholders.
Company	Ensure that all work is carried out in accordance with Squadron Energy's employee policies and standards.

2 Skills and experience

2.1 Experience and knowledge

- Minimum five (5) years' experience in an electrical engineering role.
- Hands on experience in power system concept design, power flow modelling and calculation, together with preparation of estimates for engineering design works.
- Experience in developing detailed electrical and/or reviewing HV design drawings for construction projects.
- Experience in developing and/or reviewing equipment specifications and contractor designs.
- Experience in electrical design, fault finding and commissioning of industrial power systems plant and equipment.
- Awareness of safety systems, legislation codes and contractual documentation.

2.2 Skills

- Solid understanding of the IEC and Australian design standard of HV systems
- Hand on electrical engineering HV design skill.
- Good understanding of HV systems operating requirement.
- Effective written and verbal communication skills, along with an open and collaborative attitude.
- Excellent interpersonal skills, including liaison and negotiation skills.
- High-level organisation skills including well-developed priority-setting skills and the ability to meet deadlines.

2.3 Qualifications

- Tertiary qualification in Engineering (Electrical).
- Driver's licence.

3 Core behavioural responsibilities for all employees

Our values drive everything we do and underpin the culture we seek to create. Integration of our ten core values into our employment practices and frameworks allows Squadron Energy to recognise and respect individual employees for their personal contributions to their roles, their colleagues, our company and stakeholders.

Humility Be vulnerable, take risks to trust others.	Courage and Determination NEGU - we never ever give up.	Empowerment Go to your leader for advice, not permission.	Enthusiasm Be the most positive person in the room.
Family Support each other, always be kind.	Frugality Think of ways we can do things better, faster, cheaper, safer.	Generating Ideas Always be on the lookout for breakthroughs.	Integrity Do what you say you're going to do.
Safety Look out for your mates and yourself.	Stretch Targets Always be uncomfortable with your level of challenge.		

Squadron Energy is an EEO employer and we value diversity within our company.