

**Title:** Senior Protection Engineer

**Reporting to:** Engineering and Design Manager

**Direct Reports:** N/A

## PURPOSE OF POSITION

The Senior Protection Engineer is a member of the Engineering & Design team of MainPower NZ.

The Senior Protection Engineer has responsibility for design and development of MainPower's network protection systems, as well as aspects of automation and data communications. The Senior Protection Engineer provides design expertise on new builds and upgrades, evaluates and integrates new technologies, undertakes fault investigations, develops technical standards, and provides engineering support to other business teams.

The role is pivotal to ensuring the safety, effective operation, and reliability of MainPower's network.

## POSITION VALUES

The Senior Protection Engineer will:

- prioritise safe outcomes for MainPower's employees and our community
- show technical leadership within the team environment and foster collaborative discussion
- seek out personal excellence and team success in developing solutions that provide maximum value for our customers and stakeholders
- maintain a high level of professionalism and integrity
- display a positive attitude and team focus
- always uphold MainPower's values

## KEY RELATIONSHIPS – INTERNAL AND EXTERNAL

- Engineering & Design team
- Asset Management team
- Network Control Team
- Service Delivery team
- Technicians and other Field Services staff
- External contractors, consultants and suppliers
- Other Electricity Distribution Businesses and industry participants

ACCOUNTABILITIES	RESPONSIBILITIES AND PERFORMANCE MEASURE
<p><b>Protection Systems Engineering</b></p> <p>Design, develop and support MainPower’s protection, automation, and communications systems</p>	<ul style="list-style-type: none"> <li>• Undertake network studies, event/fault analysis, system design, and change control of network protection and related secondary systems, both directly and through proactive management of external consultants</li> <li>• Provide engineering support for MainPower’s protection and secondary systems, liaising with Technicians, and including provision of occasional after-hours support</li> <li>• Liaise with external engineering consultants and suppliers, including writing project scopes and reviewing deliverables</li> <li>• Provide sound engineering advice to support other MainPower teams in the planning, design, construction, commissioning, operation, maintenance, and renewal of MainPower assets</li> <li>• Develop and maintain high quality specifications, drawings, and standards</li> <li>• Assess alternative solutions, technologies, and equipment objectively and rigorously</li> <li>• Collaborate with other industry participants, with a particular focus on standardisation</li> <li>• Identify and evaluate opportunities to drive improvement in business process, network operation, equipment functionality, safety, or asset management</li> </ul>
<p><b>Documentation</b></p> <p>Ensure all administrative processes, procedures and documentation are effective, accurate and up to date</p>	<ul style="list-style-type: none"> <li>• Contribute to effective and accurate change management documentation and records</li> <li>• Maintain a full understanding of relevant Company policies, procedures, standards, and practices</li> <li>• Maintain accurate Company records through updating relevant documents, databases, and systems</li> </ul>
<p><b>Health and Safety Support</b></p> <p>Contribute towards a culture of health and safety</p>	<ul style="list-style-type: none"> <li>• Positively contribute to the Company’s health and safety culture through active support and adherence to internal policies and procedures</li> <li>• Ensure Safety in Design practices are integrated within all stages of design work</li> </ul>
<p><b>Professional Development</b></p> <p>Undertake all professional development required to fulfil the competencies and accountabilities of the role</p>	<ul style="list-style-type: none"> <li>• Actively participate in all performance reviews and 1-on-1 meetings with the Engineering &amp; Design Manager</li> <li>• In conjunction with the Engineering &amp; Design Manager, prepare and keep current a professional development plan</li> </ul>

<p><b>Team Participation</b></p> <p>Work with the Engineering &amp; Design team and the wider Company to deliver a constructive workplace culture</p>	<ul style="list-style-type: none"> <li>• Participate fully in meetings with colleagues, contributing as appropriate and supporting colleagues as required</li> <li>• Foster constructive, collaborative discussion and debate and show leadership within the team environment</li> <li>• Assist, mentor, train and motivate team members</li> <li>• Provide support to MainPower during emergency response and adverse weather events</li> <li>• Ensure the Engineering &amp; Design Manager is made aware of issues and kept informed of Engineering developments</li> <li>• Undertake any further responsibilities as reasonably requested by the Engineering &amp; Design Manager</li> </ul>
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**COMPETENCIES – SKILLS AND EXPERIENCE**

The Senior Protection Engineer shall have the following skills and experience to be effective in the position:

- A Bachelor’s degree in Electrical Engineering (or equivalent)
- 5+ years in Protection Systems design for electrical distribution or transmission networks (either directly or in a consultant role)
- Experience with network modelling tools such as PowerFactory or PSS SINCAL
- Technical knowledge of industry standards and regulations
- A high degree of accuracy and attention to detail
- An ability to take initiative, combined with sound judgement
- Strong analytical and problem-solving skills
- Excellent verbal and written communication skills with the demonstrated ability to document and communicate technical information to non-technical people
- Strong planning skills to ensure priorities and tasks are completed on time

**COMPETENCIES – ATTRIBUTES AND BEHAVIOURS**

The Senior Protection Engineer shall have, and be able to consistently demonstrate, the following attributes and behaviours to be effective in the position:

- Professional, credible and of high personal integrity
- Proactive, enthusiastic, positive, and empathetic in all dealings with colleagues and customers
- Strong understanding of, and commitment to, MainPower’s values
- Actively work to support the goals and objectives of others in the wider business
- Make and implement timely decisions, through clear logic, analysing key drivers, opportunities, and competitive advantages
- Motivated and willing to volunteer for new challenges
- Calm under pressure