Job Description

Position Title:	Senior Engineer – Protection
Reports To:	Transmission Team Lead
Client(s)/Key Liaison:	Niko Engineers and Project Managers, external clients
Responsible For:	Provision of protection engineering services
Issued:	September 2025

Purpose of the Role

This position provides protection engineering support to Niko external clients and internally to the Niko protection and electrical design teams. This is a senior protection engineering position so the Protection Engineer may be required to mentor junior and intermediate engineers; while still focussing on the development of key protection competencies and experience of their own.

Key Tasks

Complete engineering project work, with major areas of responsibility as follows:

Major areas of responsibility include:

- Development of protection philosophies, protection concepts and relay and instrument diagrams.
- Investigation of power systems faults.
- Power system computer modelling and fault studies.
- Detailed installation design of power systems secondary systems.
- Protection relay setting calculations, reviews and co-ordination.
- Configuration of protection relays and provision of associated documentation.
- Site inspections and providing support to test technicians for protection testing and commissioning.
- Report preparation.
- Preparation of proposals for protection projects.
- Carry out Quality Assurance reviews of work by other Protection Engineers.
- Provide coaching and direction to Junior and Intermediate Protection Engineers.

Person Specification

Education/Qualifications

- 8+ years in the power systems protection field.
- Tertiary qualified, ideally with a BE(Electrical) or equivalent, but not essential for those with significant industry experience.

Knowledge/Skills Required

- Advanced theoretical understanding of power systems and power systems protection.
- Significant experience with power system computer modelling and fault studies, (ideally DigSilent Power Factory).
- Familiarity with New Zealand transmission/generation/ distribution utility standards & systems (essential).
- Familiarity with IEC61850 and DNP3 for SCADA mapping.
- Detailed knowledge of installation design for protection systems.
- Protection relay setting calculations, reviews, and co-ordination.
- Extensive experience of configuration of numerical relays.
- Wide experience in the preparation of technical reports.
- Familiarity with the Microsoft 365 suite of software

Competencies Required

- Attention to detail and a drive for technical excellence. Niko's reputation relies on high quality design outputs.
- An aptitude for solving problems based upon a mixture of analysis, wisdom, experience, and judgment.
- Ability to establish and maintain strong working relationships with clients and colleagues and gain their trust and respect.
- Desire to develop and enhance your theoretical knowledge of power systems protection.
- Ability to organise and manage multiple tasks.
- Strong self-motivation and desire to work with minimal supervision.
- Ability to prioritise workload.
- Ability to confer with engineering staff and other personnel to resolve problems.

Values

Personal values and behaviours that align to our company values:

- Be friendly and approachable, whilst being professional in your dealing with internal and external clients.
- Have consideration for the safety of themselves and others at the place of work.
- Respect for colleagues.
- Act in good faith and be fair.
- Willing to work and share knowledge within a close-knit team.
- Commitment to ***outstanding*** customer service.