HV Commissioning Engineer

About The Role

Reporting to the Commissioning Manager, the HV Commissioning Engineer is responsible for the execution of commissioning activities across high-voltage substation assets operating from 3.3 kV to 400 kV. The role requires a strong working knowledge of substation plant, protection and control systems, and safe systems of work to ensure the reliable operation, and lifecycle performance of electrical infrastructure.

The successful candidate will provide technical support to field commissioning operations, carry out fault diagnostics on primary and secondary systems, and ensure that all commissioning interventions, testing activities, and operational procedures are completed in accordance with site safety rules, statutory requirements, and approved engineering standards. The role also supports an incident-free culture through rigorous application of electrical safety, isolation, permit, and risk control processes.

- Attends project commissioning kick off and co-ordination meetings
- Commissioning of HV primary Plant including instrument transformers, Circuit breakers, Power transformers, reactors, GIS/AIS switchgear
- Commissioning of HV protection systems from a wide range of OEM's including Hitachi, Siemens, ABB, Toshiba, SEL and Schneider.
- Configuration of protection relays, and substation automation systems
- Completion and submission of redline drawings during commissioning
- Attends FAT tests for equipment when requested
- Completion of commissioning and test documentation
- Completion of pre and post energisation testing
- Completes project RFI during commissioning and manage the design log process.
- Assists Trainee commissioning engineers with development

Job Requirements & Experience

- Completed technical training in electrical engineering, power systems, electrical services, or a recognised equivalent trade qualification is required.
- 5 years of demonstrable experience in the operation, commissioning, testing, and fault response of high-voltage electrical equipment within utility, industrial, renewable, or critical infrastructure environments.
- Strong practical knowledge of HV substations, primary plant, secondary systems, protection schemes, SCADA interfaces, communication systems, and network operating principles.

- Experience planning and coordinating commissioning programs & switching programmes
- Ability to interpret and work from single-line diagrams, schematic drawings, wiring diagrams, interlock logic, protection drawings, and manufacturer technical documentation.
- Proficiency in digital reporting platforms, including Procore and standard office-based software used for technical reporting, documentation control, and asset tracking.
- Strong understanding of electrical safety management, permit-to-work systems, RAMS, isolation procedures, and safe execution of high-risk commissioning activities.
- Fluent English communication skills with the ability to produce clear technical documentation and work effectively in cross-functional maintenance, commissioning, and contractor teams.
- Hands-on experience with the following manufacturers of HV switchgear and protection relays is highly desirable:
    - ABB
    - Hitachi
    - Schneider
    - Siemens
    - Toshiba
    - Woodward
    - SEL
    - Eaton
    - GE
- Practical experience using the following HV test equipment and associated software:
    - Omicron CMC353/356 & 500
    - Omicron CPC 100
    - Omicron CTA
    - Omicron Testrano
    - Omicron Dirana
    - Omicron Franeo
    - Omicron Cibano
    - Megger Torkel Battery Discharge Tester

Desirables

- TSO/DSO approved commissioning engineer