SUBSTATION ELECTRICIAN / MECHANIC – SAMPLE POSITION DESCRIPTION

Summary:

Substation Electricians/Mechanics perform journey-level work in the installation, testing, repair and maintenance of equipment and facilities used in the generation, distribution and transmission of electrical power.

Employees in this position are electrical trades workers who perform highly skilled work independently and provide instruction and direction to lower level workers.

Substation Electrician/Mechanics install and maintain a variety of electrical systems using specialized tools and vehicles; provide on-the-job training to apprentices and helpers, and diagnose and correct defects in power generation and distribution systems.

The work requires expert knowledge of electrical theory and principles, familiarity with the tools and equipment used in the electrical trades, ability to interpret and apply blueprints, specifications and codes, and knowledge of safety rules and procedures. Work is carried out independently, with the supervisor providing instruction and clarification for unusual or difficult problems. Employees select from and apply a variety of written guidelines and reference materials.

Examples of Work:

- Installs, maintains, tests and repairs generators, control equipment, electrical motors, power circuit breakers, voltage regulators, automatic generation control equipment, transformers, and other electrical equipment.
- Installs and repairs conduit and wiring in and around substations, powerhouses and other installations.
- Installs, inspects and repairs security systems, selective and control relays, station batteries, and chargers.
- Diagnoses, repairs and replaces monitoring and control systems, hoisting equipment, overhead cranes, and elevator systems.
- Operates and maintains specialized mobile equipment and vehicles.
- Instructs and monitors the work of Electrical Helpers and Apprentices.
- Performs other related duties of a comparable level/type as assigned.

Education and Qualifications:

- Successful completion of industry recognized Apprenticeship Program
- 2 – 3 years journey level experience or, a combination of experience and education that deems the candidate qualified
- Must have highly developed observation skills to anticipate and detect operational anomalies
• Excellent interpersonal skills to work with a team, data analysis skills, as well as verbal and written communication skills in English
• General knowledge of safety and environmental regulations

Work Environment/Physical Demands:

Works outdoors in all weather conditions. Works on or near energized high voltage equipment, at heights, and in confined areas. May be exposed to toxic/hazardous substances. Requires physical exertion and lifting or manipulating of objects that weigh more than 50 pounds.

Minimum Qualifications:

Requires a minimum of three years experience in the electrical trades as an apprentice or helper, including one year working with 2200 volt or higher electrical equipment (or a combination of education and/or training and/or experience which provides an equivalent background required to perform the work of the class).

Licensing and Other Requirements:

Current driver's license. Commercial Driver's License with B endorsement may be required. Successful completion of an industry standard apprenticeship program.