

ELECTRICAL MAINTENANCE SUBSTATION TECHNICIAN

DEFINITION

Under direction performs journey level work in the testing, repair, and installation of electrical non-revenue metering and its component parts, electrical substation and distribution equipment; operates equipment in a safe and efficient manner in a variety of hazardous environments; and performs other related work as required.

DISTINGUISHING CHARACTERISTICS

This is a journey level classification in the substation technician series. Employees perform difficult and responsible types of duties. Employees at this level are required to be fully trained in all procedures related to substation work. This class is distinguished from lower classifications by performance of the full range of duties within the series by the level of responsibility assumed and the complexity of duties assigned. independent work performed, and judgment and initiative required; and from higher classifications which perform the most difficult and responsible types of duties including assigning work and providing lead direction.

EXAMPLES OF DUTIES

1. Installs, inspects, tests, calibrates and repairs current transformer (CT) and potential transformer (PT) circuits on low and high voltage substation switchgear.
 2. Documents equipment testing performed.
 3. Performs scheduled preventive maintenance; conducts routine inspections, inspects substation switchgear and other related equipment.
 4. Interprets blue prints and diagrams to determine the types of non-revenue meters and related materials necessary to accurately record electrical energy consumption.
 5. Installs, adjusts, tests, calibrates, troubleshoots, repairs and wires all types of non-revenue electric meters, instruments and associated electrical and metering equipment, including transformer rated non-revenue meters, pulse relays and recorders.
 6. Tests, cleans and repairs transformers, switches, circuit breakers, voltage regulators and reclosers.
 7. Installs, tests, ~~services~~ and repairs circuit breakers, voltage regulators, reclosers, relays, substation wiring and equipment, and other substation apparatus.
 8. Makes special load checks and tests.
- Programs, installs, maintains, and services SCADA system and equipment.
- ~~5. Makes special load checks and tests, and performs trouble-shooting work on customer premises.~~
 - ~~9. Uses/Operates PC computer and other computer equipment running established programs.~~
 - ~~10. May act as Combustion Turbine Operator. Perform NERC required inspections and documents in Sharepoint database.~~
 11. Trains Apprentice Substation Technicians.

EMPLOYMENT STANDARDS

Education/Experience

Any combination equivalent to education and experience likely to provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

Education: Graduation from high school, supplemented by courses in advanced electrical theory and mathematics involved in alternating current electrical theory and completion of an state or federal approved electric utility apprenticeship or equivalent program for Electrical Maintenance Substation Technician.

Experience: Five years of meter or substation related experience with an electric utility, two years of which shall have been at the journey level. ~~SCADA experience is highly desired.~~

Knowledge

Knowledge of the principles and practices of journey level work in electrical non-revenue metering and electrical substation and distribution equipment; principles, methods, materials, tools and equipment used in the installation, testing, removal and

maintenance of transformers, regulators, capacitors, switching and fusing equipment, circuit breakers, controls and instrumentation, relays, batteries and chargers, revenue meters and other associated equipment; electrical terminology, mathematics and mechanical theory, and safe work practices and procedures.

Ability

Ability to operate electrical test equipment and tools; interpret schematic drawings and computerized data; operate computer equipment; interpret electrical codes and regulations; apply established ~~Bureau~~AMP policies and procedures; work independently; use initiative and judgement seeking guidance for situations where standard procedures may not apply; establish and maintain accurate records; communicate effectively; establish and maintain effective working relationships with employees and the general public.

Special Requirements

Willingness and/or ability to respond to after-hours emergency calls as required. Freedom from color blindness.

Other Requirements

Possession of a valid California Driver's License and satisfactory driving record as a condition of initial and continued employment.

~~JK/fdg: Personnel Department 9-1-93~~CL: Human Resources Department 12-13-16