

JOB DESCRIPTION



ELECTRIC UTILITY TECHNICIAN I or II

DEFINITION

Under general supervision, perform work in the installation, testing, maintenance, calibration, repair, and modification of electrical and electronic equipment related to the City's receiving and distribution substations and electronic metering systems.

DISTINGUISHING CHARACTERISTICS

Electric Utility Technician I – Positions in this class typically have a good foundation in electricity with little or no directly related utility work experience and work under immediate supervision while learning job tasks. The Electric Utility Technician I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Electric Utility Technician II – This is the full journey level class in the Electric Utility Technician series and is distinguished from level I by the ability to perform the full range of duties assigned with only occasional instruction or assistance as usual or unique situations arise. Positions in this class are flexibly staffed.

EXAMPLES OF DUTIES:

These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The examples of work performed are neither restricted to nor all encompassing of the duties to be performed under this job title. **(E) Essential Duty; (M) Major Portion of Time**

- Install, inspect, test, and repair CT's and PT circuits on low and high voltage switchgear and substations. (E,M)
- Evaluate and document equipment testing performed. (E,M)
- Operate equipment in a safe and efficient manner in a variety of hazardous environments including toxic liquids and gases and high voltages. (E,M)
- Build and maintain positive working relationships with co-workers, other City employees, and public using principles of good customer service. (E)
- Install, test, trouble shoot, repair, upgrade, and program electromechanical equipment, revenue meters and telecommunication equipment. (E,M)
- Install maintain, and operate receiving and distribution substations.(E,M)
- Perform work on energized circuits.(E,M)
- Install voltage and current recorders to identify power system problems. (E)
- Install and maintain telecommunication equipment to provide supervisory control and data acquisition. (E)
- Perform scheduled preventative maintenance; answer emergency and trouble calls; conduct routine inspections; inspect and approve substation and commercial switch gear and other related equipment.(E,M)
- Work with high voltage in the construction, commissioning, testing, trouble shooting, and maintenance of substation equipment. (E)
- Design, troubleshoot control and protective relaying schemes and power equipment. (E)
- Design, install, and maintain various types of telecommunication and supervisory equipment to include SCADA, Junglemix, fiber optic equipment, Ethernet, and phone systems. (E)
- Work flexible hours, overtime, and take on-call duty as needed (E)
- Perform other duties as assigned

MINIMUM QUALIFICATIONS

Knowledge of:

- Basic electrical theory
- Principles of electrical control and power systems.
- Tools, methods, and materials used in electrical work.
- Metering and substation protection.
- Computer hardware and software.
- Safe work practices.
- Computer controlled test equipment.
- Lockout/tagout of low and high voltage and stored energy systems.
- Complex principles of electrical and electronic repair, maintenance, and system design.
- Principles, materials, installation methods, testing, maintenance and equipment operation used in distribution systems.

Ability to:

- Perform maintenance, troubleshoot, and repair work on a variety of electrical and electromechanical and electronic meters and substations.
- On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problem equipment; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.
- Intermittently sit while studying or preparing reports; bend, squat, climb, kneel, and twist when installing, repairing, and servicing equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 40 pounds or less.
- Understand and interpret written and oral instructions, electrical drawings, schematics, plans, and wiring diagrams.
- Maintain and repair city SCADA system.
- Install and maintain city communication systems.
- Install and analyze electrical recording devices.
- Use and care for tools and equipment used in maintaining and repairing electrical and electronic devices.
- Work safely under emergency, hazardous conditions, and high voltage environments.
- Assist others in municipal electrical and electronic maintenance and repair duties.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Troubleshoot and repair a wide variety of electrical and electronic equipment and devices.
- Interpret data from voltage and current recordings.
- Follow manufacturer instructions for maintenance and testing.

Education:

- Equivalent to the completion of the twelfth grade supplemented by specialized training in the electrical, electronics, or related field.
- Employees in this classification shall have the individual choice whether or not to obtain the Rubber Glove training and certification to become eligible for 6% Qualified Rubber Glove Observer incentive pay.

Experience:

Level I: One year of experience in the maintenance, repair and testing of high voltage control and power equipment.

Level II: Two years of experience in the maintenance, repair and testing of high voltage control and power equipment.

Necessary Special Requirement:

Possession of a valid Class C, California Driver's License.

Residency Requirement:

All members of the Electric Unit shall be expected, within six months of hire, to establish residence allowing response to the Electric Shop within 35 minutes of notification to report.