

ELECTRIC UTILITY TECHNICIAN I
ELECTRIC UTILITY TECHNICIAN II

DEFINITION

To 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 - This is the entry level class in the Electric Utility Technician series. Positions in this class typically have little or no directly related 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 the I level by the ability to perform the full range of duties assigned with only occasional instruction or assistance as unusual or unique situations arise. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

SUPERVISION RECEIVED AND EXERCISED

Electric Utility Technician I

Receives immediate supervision from an assigned supervisor; and may receive technical supervision from an Electric Utility Technician II.

Electric Utility Technician II

Receives general supervision from an assigned supervisor.

May exercise technical supervision over an Electric Utility Technician I.

EXAMPLES OF ESSENTIAL DUTIES– Duties may include, but are not limited to, the following:

Install, inspect, test, and repair CT's and PT circuits on low and high voltage switchgear and substations.

Evaluate and document equipment testing performed.

Operate equipment in a safe and efficient manner in a variety of hazardous environments including toxic liquids and gases and high voltages.

Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

Perform related duties as assigned

When assigned to Metering:

Install, troubleshoot, repair, upgrade, test, and program electromechanical and electronic meters and telecommunication equipment; install, maintain, and operate receiving and distribution substations.

Perform low and high voltage work on live circuits and related equipment.

Install, test, and provide data interpretation for voltage and current recordings, power quality analyzers, and energy recordings at customer sites.

Install and maintain various telecommunication equipment to provide supervisory control and data acquisition.

Perform scheduled preventative maintenance; answer emergency and trouble calls; conduct routine inspections; inspect and approve substation and commercial switch gear and other related equipment.

When assigned to Substations:

Work in high voltage electric Substations in the construction, commissioning, testing, trouble shooting , maintenance and operation of substation and switchyard equipment which includes power transformers, 60 kv breakers, 12 kv breakers and associated equipment.

Design, understand and troubleshoot complicated control and relaying schemes; test, maintain, and troubleshoot all components using computer software.

Design, install and maintain various types of telecommunication and supervisory equipment to include SCADA, Junglemix, fiber optic equipment, Ethernet and phone systems.

MINIMUM QUALIFICATIONS

Electric Utility Technician I

Knowledge of:

Basic principles of electrical systems and electrical theory.

Types of tools, methods and materials used in electrical work.

Components, parts and basic safety used in metering and substations.

Computer software.

Safe work practices.

Ability to:

Perform maintenance, troubleshoot and repair work on a wide 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, blueprints, plans and wiring diagrams.

Maintain and repair city SCADA system.

Install and maintain city communication systems.

Set 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.

Experience and Training

Experience:

One year of experience in the maintenance and repair of electrical equipment and systems related to an electric or service utility, or industrial electrical maintenance.

Training:

Equivalent to the completion of the twelfth grade GED, or higher level degree, supplemented by specialized training in electrical or an electronics field.

License or Certificate

Possession of a valid California driver's license by date of appointment.

Electric Utility Technician II

In addition to the qualifications for the Electric Utility Technician I:

Knowledge of:

Computer controlled test equipment.

Complex control electric and electronic schematics.

Electric circuit protection.

Lockout/tagout and high voltage procedures.

Complex principles of electrical and electronic repair, maintenance and system design.

Principles, methods, materials and equipment used in the installation, testing, maintenance, operations and modification of electronics equipment.

Ability to:

Troubleshoot and repair a wide variety of electrical and electronic equipment and devices.

Analyze electrical and electronic prints and schematics.

Troubleshoot and repair electrical and electronic equipments.

Analyze test data from voltage and current recordings.

Follow detailed manufacturer instructions to perform tests.

Experience and Training

Experience:

Two years of responsible electrical maintenance experience performing duties similar to that of an Electric Utility Technician I with the City of Roseville.

Training:

Equivalent to the completion of the twelfth grade GED, or higher level degree, supplemented by specialized training in electronics or a related field.

License or Certificate

Possession of a valid California driver's license by date of appointment.

03-15-18

11-09-10

01-01-07 Electric Utility Technician I/II