

ELECTRIC APPRENTICE METERING SYSTEM TECHNICIAN
ELECTRIC METERING SYSTEM TECHNICIAN

DEFINITION

To perform work in the installation, testing, programming, maintenance, calibration, repair and modification of electric revenue and power quality metering equipment.

DISTINGUISHING CHARACTERISTICS

Electric Apprentice Metering System Technician I - This is the entry level class in the Electric Metering System 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 Apprentice Metering System Technician class is distinguished from the journey level by the performance of less than the full range of duties assigned to the Electric Metering System Technician. 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 Metering System Technician - This is the full journey level class in the Electric Metering System Technician series and is distinguished from the Apprentice 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 Apprentice level.

This class is distinguished from the Senior Electric Metering System Technician in that the latter performs the most difficult and responsible types of duties assigned to classes within this series including assigned responsibilities for the installation, maintenance and repair of electric revenue meters and may exercise technical and functional supervision over an Apprentice.

SUPERVISION RECEIVED AND EXERCISED

Electric Apprentice Metering System Technician

Receives immediate supervision from an assigned supervisor; and receives technical and functional supervision from a Senior Electric Metering Systems Technician. Electric Apprentice Metering System Technicians may receive technical supervision from an Electric Metering System Technician as assigned at a worksite.

Electric Metering System Technician

Receives general supervision from an assigned supervisor; and receives technical and functional supervision from a Senior Electric Metering System Technician

May exercise technical supervision over an Electric Apprentice Metering System Technician as assigned at a worksite.

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

Install, program, maintain, rebuild, repair and wire electrical revenue meters and associated equipment including transformer rated meters, pulse relays and recorders.

Operate, troubleshoot and maintain Advanced Metering Infrastructure (AMI) hardware and software; perform system administration functions for AMI and Meter Data Management (MDM) platforms and field programming of devices including the maintenance testing and installation of firmware upgrades and new meter programs and profiles.

Perform routine field and shop testing and audits on existing electric meters and transformers, ensuring accuracy of meter reads; respond to and investigate power diversion concerns.

Configure and install power quality monitors; download recorded data for analysis.

Review blueprints for permit application of new construction and remodels; conduct field inspections to ensure consistency with City standards.

Maintain inventory of electrical meters and related equipment and supplies; acquire quotes from vendors.

Safely connect and disconnect electrical meters and related equipment.

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

Track and monitor the installation, removal and retirement of AMI metering and communication equipment.

Perform scheduled preventative maintenance; answer emergency and trouble calls.

Maintain accurate records concerning all functions of assigned work.

Use computerized maintenance management systems.

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 live (energized) circuitry.

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.

MINIMUM QUALIFICATIONS

Electric Apprentice Metering System Technician

Knowledge of:

Computer software.

Safe work practices.

Ability to:

Learn principles of electrical systems and electrical theory..

Learn types of tools, methods and materials used in electrical work preferred, but not required.

Learn the components, parts and basic safety used in metering and substations preferred
Perform maintenance, troubleshooting and repair work on a wide variety of electric revenue meters and AMI equipment.

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.

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.

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 is desired.

Training:

Equivalent to the completion of the twelfth grade GED, or higher-level degree. Specialized training in electrical or an electronics field preferred but not required.

License or Certificate

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

Possession of, First Aid and cardiopulmonary resuscitation (CPR) certificates within six (6) months of date of appointment.

Electric Metering System Technician

In addition to the qualifications for the Electric Apprentice Metering System Technician:

Knowledge of:

Computer controlled test equipment.

Complex control electric and electronic schematics.

Electric circuit protection.

Electrical safety and Personal Protective Equipment (PPE) procedures.

Lockout/Tagout procedures.

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

Principles and practices associated with installing current transformers, metering circuits, potential transformers and the programming of electrical revenue meters.

National Electrical Code/California Electric Code and related standards.

Methods for troubleshooting telecommunication issues.

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

AMI systems, including communication equipment and meter programming.

Ability to:

Troubleshoot and repair a wide variety of electrical metering devices, AMI communication devices and associated equipment.

Analyze electrical and electronic prints and schematics.

Troubleshoot and repair electrical metering devices.

Analyze test data from voltage and current recordings.

Follow detailed manufacturer instructions to perform tests.

Work assigned shift schedules; be available for callback and on-call assignment.

Work unusual and prolonged work schedules during emergencies, seasonally caused circumstances in varying weather and temperature conditions.

Experience and Training

Experience:

Three years of responsible electrical maintenance experience performing duties similar to that of an Electric Apprentice Metering System Technician with the City of Roseville.

Training:

Equivalent to the completion of the twelfth grade GED, or higher-level degree, Completion of a recognized Electric Metering Systems Technician Apprenticeship program or equivalent.

License or Certificate

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

02-26-22	Electric Apprentice Metering System Technician/Electric Metering System Technician
05-09-20	Electric Metering Systems Technician I/II
03-15-18	
11-09-10	
01-01-07	Electric Utility Technician I/II