ELECTRIC METER JOURNEYMAN

JOB DESCRIPTION

Classification Responsibilities: An Electric Meter Journeyman performs skilled and difficult electrical and mechanical work in the installation, testing, calibration, and repair of precision electrical watt-hour meters, instruments, protective relays, and other related equipment. This class works under the supervision of the Electric Meter Foreman and assumes all meter shop responsibilities in the absence of the Electric Meter Foreman. This class is also responsible for performing related duties as required.

Distinguishing Features: Some job duties of this class are performed in the meter shop, but field meter testing, installation, and inspections are performed in the field. An Electric Meter Journeyman must thoroughly understand the full scope of electric meter and relay mechanical work and procedures. Incumbents may also be exposed to hazards and possible injury as a result of working around energized lines. Employees in this class are required to use appropriate safety equipment and follow safety procedures in performing assignments. An Electric Meter Journeyman may be called out for emergency situations and must be willing to work overtime as required. Work must be performed in an extremely efficient manner with a very minimal error rate. Employees may progress to this class by noncompetitive promotion upon meeting the specific criteria-based promotion requirements of coursework, on-the-job training, testing, and successful performance appraisals. General supervision is received from the Electric Meter Foreman who reviews work and results achieved. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City’s shared employee values of Knowledge, Respect and Integrity.

Minimum Qualifications Required. Any combination of education, training, and experience equivalent to graduation from high school or GED. Completion of a certified apprenticeship program in the meter man trade.

Special Requirements. Must possess a valid Arizona Driver’s License by hire or promotion. Must reside in the City of Mesa Electric Utility call-out area (example: within an eighteen-mile radius of the Main Street and Center Street intersection) within one year after hire date.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualifications. None.

ESSENTIAL FUNCTIONS

Communication: Communicates with customers, coworkers, supervisors, and the general public in a pleasant manner (at times under unpleasant working conditions). Establishes and maintains effective
working relationships with management, Engineering, other city Departments, and coworkers. Responds to customer high bill complaints and provides basic energy advisements. Follows verbal and/or written directions and instructions to work safely and effectively. Documents/maintains records of tests and inspections, reads meters accurately, and provides timely information to Customer Service Field Operations, as needed. Effectively communicates with other workers regarding instructions necessary to complete projects. Completes reports and forms related to requirements, and time reporting records.

**Manual/Physical:** Performs difficult and advanced electrical and mechanical work in testing, installing, calibrating, and repairing electric watt-hour meters, protective relays, and other related electrical instruments. Installs and inspects new meters to ensure proper working order. Conducts electric tests for new and in-service meter accuracy. Programs electronic meters. Performs meter tests of in-service meters. Audits commercial metering installations in the field to verify metering accuracy. Uses a power quality recording instrument for power quality complaints. Inspects meters and instruments in the field for proper wiring connections. Repairs or replaces instrument and meter parts. Inspects service entrance equipment for correct applications, proper wiring, grounding, equipment configuration, and compliance with City of Mesa Electric Service Specification. Moves light material and supplies (under 20 pounds) to heavy power equipment (over 50 pounds) for distances of up to 20 feet or more using a cart or other aid to assist with the lifting. Distinguishes colors for proper inspection of wiring and reading wiring diagrams. Operates a light truck requiring a standard Arizona Driver's License to travel to various worksites, and loads and unloads equipment. May operate a pallet jack and/or forklift. Observes tests by other utilities (including electric service providers, meter service providers, meter reading service providers, etc.) on meter equipment affecting the City. May be required to fuse transformers, repair circuitry, patrol lines, and pull disconnects. Uses a personal computer (PC) in programming electronic watt-hour meters. Meets scheduling and attendance requirements.

**Mental:** Evaluates test results in order to make the necessary calibrations and adjustments. Comprehends and makes inferences from written material. Reviews diagrams for service entrance equipment acceptance. Ensures the safe operation and use of equipment, tools, etc. Learns job-related material through on-the-job training and in classroom settings. Calculates energy consumption, demand, power factor, transformation multipliers, and other related metering values to verify proper and accurate operation of metering installations.

**Knowledge/Skills/Abilities:**

Knowledge of:

- electric watt-hour meters and electronic equipment used in testing meters for accuracy;
- the protective relays and testing equipment used to check proper operation;
- basic electrical theories and practices;
- the National Electrical Code;
- the standard electrical safety practices and procedures applicable to work around high voltage circuits and equipment;
- power quality testing and reporting;
- metering programming and troubleshooting; and
- service entrance requirements for electric utilities.
Skill in basic hand tools used to install meters and various electric equipment including infrared camera and underground locating equipment.

Ability to:

perform difficult electrical and mechanical work in installing, testing, calibrating, and repairing electric watt-hour meters, protective relays, and other related electrical instruments;
ensure that all work performed follows prescribed safety precautions;
ensure that work is performed in a cost effective manner;
follow oral and written directions and instructions;
work at a high degree of accuracy;
use a personal computer in programming electronic meters and extracting data from meters;
follow safety rules and be aware of the safety of others in the area;
use all equipment associated with the installation and removal of meters, locating underground utilities, and performing infrared inspections;
to distinguish colors for proper inspection of wiring and reading wiring diagrams; and
establish and maintain effective working relationships with coworkers and management.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.