

ELECTRIC METER APPRENTICE (I, II, III, IV)

JOB DESCRIPTION

Classification Responsibilities: An Electric Meter Apprentice (I, II, III, IV) is a trainee class used to prepare incumbents to perform skilled and difficult electrical and mechanical work in the installation, testing, calibration, and troubleshooting of electric watt-hour meters and related hardware for residential and commercial uses. The Apprenticeship Program requires a total of four years of classroom and field experience in combination with successful completion of apprentice testing requirements. The four-year training program includes on-the-job training, classroom and home study curriculum, and formal written testing. Preparation involves training in all aspects of metering equipment installation, testing, and maintenance procedures. This class is responsible for performing related duties as required.

Distinguishing Features: Throughout the training program, an Electric Meter Apprentice works under the direct supervision of the Electric Meter Foreman or Electric Meter Journeyman. The Electric Meter Apprentice's job duties are usually performed in the field. Work must be performed in an extremely efficient manner, with a very minimal error rate. The Apprentice begins the training program as an Electric Meter Apprentice I and will progress to Apprentice II, III, and IV by noncompetitive, criteria-based promotion after successfully completing required coursework, on-the-job training, testing, and successful performance appraisals. This position is subject to stand-by and/or call-out duty. 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 a high school or GED, and any combination of education, training, and experience equivalent to one year of experience in one or more of the following areas: electrical wiring; digital electronics; instrumentation and controls; electrical metering; computer/software applications; construction, operations, or maintenance of electric distribution equipment or facilities.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire or promotion. Must reside in the Mesa electric utility call-out area (example: within an eighteen-mile radius of 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 Qualification. One year or more of electric utility experience is preferred (for example: Utility Worker, Groundman, Equipment Operator, etc).

ESSENTIAL FUNCTIONS

(This position requires that incumbents learn to perform the essential functions of the Journeyman Meterman class. Most of these essential functions can be learned through the successful completion of the Mesa Electric Meter Apprentice Training Program.)

Communication: Communicates with customers, coworkers, supervisors, and the general public in a pleasant manner (at times under unpleasant working conditions). May respond to customers on their high bill complaints. 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 as needed. Effectively communicates with other workers regarding instructions necessary to complete projects. Completes reports and forms related to requirements, time reporting records, and curriculum.

Manual/Physical: Learns to perform electrical and mechanical work in testing, installing, calibrating, and repairing electric watt-hour meters, and other related electrical equipment. Learns to install and inspect new meters to ensure proper working order. Assists in/learns to perform the installation of commercial metering, including current transformers, potential transformers, and test blocks depending upon the Electric Meter Apprentice step guidelines. Learns to conduct electric tests for new and in-service meter accuracy. Learns to inspect meters and equipment for proper wiring connections. Learns to repair or replace metering parts as required. Learns to complete meter set forms and Blue Stake reports. Learns to inspect service entrance equipment for correct applications, proper wiring, grounding, equipment configuration, and compliance with City of Mesa Electric Service Specification requirements and electrical safety. Learns to use an infrared camera in the field to inspect electric connections and equipment to identify any potential equipment failures. Learns to prepare reports that document connections and/or equipment that needs maintenance or replacement. Learns to use locating equipment to accurately locate underground utilities. 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. Requires bending, stooping, and climbing ladders. Operates a light truck requiring a standard Class D Arizona Driver's License to load and unload equipment. Learns to operate a pallet jack and/or forklift to perform similar manual tasks. Uses a personal computer (PC) to enter meter data into Customer Information System (CIS) data system, and infrared data and program electronic watt-hour meters. Meets scheduling and attendance requirements.

Mental: Understands verbal and/or written instructions. Comprehends and makes inferences from written material. Evaluates test results in order to make necessary calibrations and adjustments. Reads operating reports and technical manuals to diagnose possible causes of problems. Maintains accurate repair and maintenance records of work performed. Calculates energy consumption, demand, power factor, transformation multipliers, and other related metering values to verify proper and accurate operation of metering installations. Learns job-related material through on-the-job training and in classroom settings.

Knowledge/Skills/Abilities: (Knowledge/Skills/Abilities are obtained through the successful completion of the Mesa Electric Meter Apprentice Training Program.)

Knowledge of:

basic electrical theories and practices;
basic electricity concepts and blueprints;
electric watt-hour meters and electronic equipment used in testing meters for accuracy;
standard electrical safety practices and procedures applicable to working around electrical equipment including high voltage circuits;
service entrance requirements for electric utilities;
electric meters;
Arizona Blue Stake Law;
competent operation of PCs and testing equipment; and
the safe operating procedures of power equipment and vehicles used in overhead and underground electrical system.

Skill in basic hand tools used to install meters, and various electric equipment including infrared camera and underground locating equipment.

Ability to:

perform a variety of tasks as part of a team including electrical and mechanical work in installing, testing, calibrating, and repairing electric watt-hour meters and other related electrical equipment;
follow verbal and written directions and instructions;
work at a high degree of accuracy;
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;
use a PC in programming electronic meters and extracting data from meters;
perform the physical requirements of the job;
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.

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MR/lb

CS4032.DOCX (Electric Meter Apprentice I)

PAY GRADE: 46

CS4285 (Electric Meter Apprentice II)

PAY GRADE: 49

CS4476 (Electric Meter Apprentice III)

PAY GRADE: 51

CS4637 (Electric Meter Apprentice IV)

PAY GRADE: 53

EEO-SCW

IND-7539

JOB FCTN-TRA

SWORN-No

INCREMENTS:

(Electric Meter Apprentice I): 196-200

(Electric Meter Apprentice II): 186-200

(Electric Meter Apprentice III): 190-200

(Electric Meter Apprentice IV): 191-200