

ELECTRIC METER TECHNICIAN

PURPOSE AND NATURE OF WORK

The work of this class involves skilled independent work in metering, power quality monitoring, and power line interference. Work is performed by programming, installing, evaluating, testing, repairing, troubleshooting, and maintaining electric smart meters, gatekeepers, and repeaters, as well as performing power quality monitoring and power line interference on the electrical system. Specific work assignments are usually received in terms of the equipment to be serviced. Incumbents in this class are required to work around high voltage in varying weather conditions, and are on 24-hour call. The employee applies standard testing and work procedures under the general supervision of the Electric Meter Supervisor. The work is checked for accuracy and adherence to established standards.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Uses sophisticated test equipment to perform meter testing, service conductor testing, power quality monitoring, power line interference investigations, Local Area Network (LAN) communications testing, and all Automated Metering Infrastructure (AMI) testing. Maintains the Automated Metering Infrastructure by installing, testing, repairing, and replacing AMI smart meters, repeaters, gatekeepers and all associated hardware. Programs, downloads, and analyzes the smart meters, repeaters and gatekeepers. Responds to and trouble shoots all smart meter and gatekeeper generated alerts and alarms, such as loss of power, voltage alert, tamper alert, communications failure, etc. Responds to all power line interference complaints by using sophisticated test equipment to locate arcing on LUS power lines and associated hardware or equipment. Repairs or assists with repairs identified as power line interference. Programs, installs, monitors, and downloads power quality recording equipment. Installs, inspects, and monitors NET Meters. Energizes and de-energizes transformers using high voltage tools. Connects and disconnects energized conductors in transformers, pedestals, and overhead services. Investigates and finds loss revenue due to tampering or equipment failures. Wires current transformers, potential transformers, and transformer rated meters for 120-13,800 volts. Repairs meter bases and meters while service is energized. Assists commercial customers with Energy Management Systems (EMS) by providing them a special meter with pulse outputs that connect to their EMS. Performs percent of accuracy test on electric meters due to customer complaints or deviations in billing and consumption. Maintains and assists in the calibration of tie-point metering. Assists in the troubleshooting and repair of primary and secondary lines during power outages (hurricanes, storms, etc). Provides various customer services, including load profile consumption reports, power quality recording reports, power line interference investigations, EMF (electromagnetic field) investigations, customer complaint meter testing, energy usage investigation, and energy conservation advice.

NECESSARY KNOWLEDGE, ABILITIES, AND SKILLS

Considerable knowledge of standard practices, materials, tools, and equipment of the electrical and electronic trades.
Knowledge of the mechanism of electric meters, and of testing instruments.
Knowledge of modern electronic principles, methods, and practices.
Knowledge of computers and the ability to customize software programs related to area of assignment.
Knowledge of billing procedures.
Knowledge of the occupational hazards and safety precautions of working with and around high-voltage equipment.
Ability to diagnose defects in electric meters.
Ability to assume responsibility for attainment of prescribed standards.
Ability to use independent judgment in planning the sequence of operations in testing meters and electronic equipment.
Ability to establish and maintain effective relationships with superiors and other employees.
Ability to wire metering equipment in accordance with wiring diagrams.
Skill in the use and care of standard tools and equipment and used in electrical repair work.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from high school, supplemented by completed vocational/technical school in electricity and electronics, and experience in electric meter repair or related work; or any equivalent combination of training and experience.