



## Engineering Technician Electric

### JOB SUMMARY

This position provides technical and engineering support for a variety of electric utility system operations. An incumbent in this position may be designated Lead Engineering Technician if they have gained the experience to be designated as such.

### MAJOR DUTIES

- Installs and maintains the utility's advanced metering infrastructure (AMI) to provide downloaded data to customers and billing personnel; selects appropriate metering for a variety of applications; programs and tests various metering applications.
- Performs meter upgrades and change outs; troubleshoots meters and resolves problems.
- Operates the Supervisor Control and Data Acquisition (SCADA) system; opens and closes breakers; issues hot line tags; accesses voltage and amperage readings in support of field personnel; troubleshoots problems associated with the fiber network, including splicing fiber and repairing or replacing network electronic devices.
- Responds to and resolves a variety of system malfunctions and equipment failures.
- Coordinates and designs power loading shifts; writes switching orders for substation and field switching to ensure uninterrupted service; identifies potential substation problems and makes corrections.
- Utilizes AutoCAD software in the development of construction drawings for line crews; verifies rights-of-way; obtains easements; notifies customers; assesses project feasibility; sizes transformers to residential, commercial and industrial applications; reviews and submits drawings to the Georgia Department of Transportation (GDOT), designs projects to GDOT specifications, and completes the permit process.
- Performs thermal imaging of utility- and customer-owned facilities to help identify problems.
- Installs, programs, downloads and analyzes data from power quality meters; utilizes a load box to diagnoses power quality problems.
- Responds to and resolves escalated customer billing complaints.
- Performs energy audits for residential and commercial customers; reviews and obtains data at customer location to provide accurate energy-saving strategies.
- Responds to after-hours emergencies.
- Performs related duties.

### KNOWLEDGE REQUIRED BY THE POSITION

- Knowledge of department policies and procedures.
- Knowledge of utility metering principles, practices, tools, and equipment, including those associated with AMI.
- Knowledge of SCADA system operations principles.
- Knowledge of power load shifting techniques and principles.
- Knowledge of AutoCAD software.
- Knowledge of Integrated Transmission System policies and procedures.
- Knowledge of mathematics, including algebra, geometry and trigonometry.
- Knowledge of the principles of civil and electrical engineering.
- Skill in providing customer services and resolving customer complaints.
- Skill in operating assigned vehicles and equipment.
- Skill in the operation of computers and job-related software programs.
- Skill in the maintenance and repair of electric utility system equipment and components.
- Skill in oral and written communication.

### SUPERVISORY CONTROLS

The Technical Services Superintendent assigns work in terms of general instructions. The supervisor spot-checks completed work for compliance with procedures, accuracy, and the nature and propriety of the final results.

## **GUIDELINES**

Guidelines include department policies and procedures, Georgia Department of Transportation guidelines, the National Electric Safety Code, and the American Public Power Association safety manual. These guidelines require judgment, selection and interpretation in application.

## **COMPLEXITY/SCOPE OF WORK**

- The work consists of varied technical duties. The variety of tasks to be performed contributes to the complexity of the position.
- The purpose of this position is to provide technical and engineering support for system operations. Success in this position contributes to the efficiency and effectiveness of those operations.

## **CONTACTS**

- Contacts are typically with co-workers, other city employees, representatives of state and federal agencies, contractors, developers, representatives of other public utilities, and members of the general public.
- Contacts are typically to provide services, to give or exchange information, or to resolve problems.

## **PHYSICAL DEMANDS/ WORK ENVIRONMENT**

- The work is typically performed while sitting at a desk or table or while intermittently sitting, standing, walking, bending, crouching or stooping. The employee frequently lifts light and occasionally heavy objects, climbs ladders, uses tools or equipment requiring a high degree of dexterity, distinguishes between shades of color, and utilizes the sense of smell.
- The work is typically performed in an office and outdoors, occasionally in cold or inclement weather. The employee may be exposed to machinery with moving parts. Some of the work is performed on utility poles, in elevated buckets, and in the presence of electrified lines. Work requires the use of protective devices such as masks, goggles, gloves, etc.

## **SUPERVISORY AND MANAGEMENT RESPONSIBILITY**

None.

## **MINIMUM QUALIFICATIONS**

- High School diploma or GED.
- Sufficient experience to understand the basic principles relevant to the major duties of the position, usually associated with having had a similar position for three to five years.