



JOB DESCRIPTION

DISTRIBUTION ENGINEER

Revision Date:

11-26-2024

Reports to

Engineering Manager

Directs

No direct reports

Purpose of Position

To aid in the design and planning of the distribution system and apply engineering principles to problems that arise.

Responsibilities & Duties

- Responsible for the design and engineering of the System's electric facilities in accordance with prevailing safety codes and accepted engineering standards and practices.
- Responsible for the preparation and maintenance of operating records which includes drafting, system diagrams, distribution maps, transformer records, and other similar records necessary in the engineering, construction, operation, and maintenance of the System's electric facilities.
- Responsible for continuous review and appraisal of the System's load growth trends to assure adequate service to consumers. This includes the preparation of load studies, voltage studies, sectionalizing studies, data for system studies, and other related studies such as regulator placement, capacitor placement, fault current calculation, coordination studies, ampacity studies, line balancing, transformer sizing, and fusing.
- Responsible for developing, receiving, reviewing and taking appropriate action on all applications for service and all applications for changes in existing services.
- Responsible for obtaining necessary permissions, clearances, and permits to perform required operations, when necessary.

- Responsible for supporting SCADA operations, configurations, and troubleshooting.
- Responsible for programming protection relays, RTAC's, and SCADA equipment.
- Responsible for configuring and updating various databases and data repositories.
- Responsible for performing switching operations via SCADA communications.
- Responsible for supporting operations, technicians, and other departments with all engineering and technical applications.
- Responsible for recommending, analyzing, initiating, and assisting to improve LES in all areas.
- Responsible for operating company truck and radio communications.
- Responsible for supporting and upholding the utmost priority on safety and customer service.
- Responsible for the proper use and care of all materials, equipment, and supplies which are provided for use by the Engineering Department.
- Responsible for abiding to safe work practices as outlined in the APPA safety manual, OSHA standards, and company policies.
- Responsible for keeping the Engineering Manager always informed of all aspects of the operation of the engineering department.
- Supports 365/24/7 work habits and schedule.
- Responsible for carrying out all other duties assigned by the Engineering Manager.

Physical Activities

- **Walking:** Must be able to move about, as required, to accomplish tasks. Sometimes the employee is required to walk extended distances and for an extended duration of time. The employee is frequently required to stoop, kneel, crouch, or crawl.
- **Lifting:** Raising objects weighing at least 125 pounds from a lower to a higher position or moving objects horizontally from position-to-position. Lifting requires the substantial use of the upper extremities and back muscles.
- **Communication:** Written, oral, and technical communication is required.
- **Hearing:** Perceiving the nature of sounds with or without correction. Must have the ability to receive detailed information through oral communication and to make fine discriminations in sound.
- **Visual:** Have vision sufficient, or corrected sufficiently, to read diagrams/material sheets and apply to hands-on job duties specific to this position.

Working Conditions

The employee is subject to indoor and outdoor working conditions and may be in close contact with the public. The employee is also subject to all weather conditions and working hours, as the situation requires.

The employee's work will expose him/her to high places, high voltages and electrical currents, dangerous machinery and its moving parts, sharp tools, fumes, chemicals, and/or toxic substances.

Education

A Bachelor of Science degree in Mechanical or Electrical Engineering from a SACS/ABET accredited school is required.

Job Knowledge, Abilities and Skills

- Must be able to organize responsibilities and follow-up with jobs to their completion.
- Must be able to make quick and safe decisions.
- Must have the ability to read and interpret maps, blueprints, sketches, and work orders.
- Must have the ability to draw construction sketches manually or electronically.
- Must be proficient in computer software applications (Word, Excel, PowerPoint, etc.), engineering analysis software, and customer information systems.
- This position requires constant upkeep of technical knowledge related to the electrical sector. A thorough understanding of computers and other technical devices is required
- Must have or acquire in-depth knowledge of electricity and electrical theory.
- Must have the skills to troubleshoot electrical issues.
- Must have or acquire the knowledge of the methods, materials, and practices related to the operation, construction, and maintenance of electrical substations and distribution systems.
- Must know the geographic location of the System's breakers, reclosers, switches, and distribution line feeds.
- Must have or acquire a knowledge of underground electrical distribution practices.
- Must be able to determine, locate, and evaluate power outages and/or interruptions and analyze the system for root causes for corrective actions.
- Must be able to prepare budgets, write specifications and cost estimates, manage and track multiple projects, and assist in operations and maintenance activities.
- Must have or acquire knowledge of TVPPA and RUS construction standards.
- Must have or acquire knowledge of the NESC and NEC requirements and standards.

- Must have good communication skills and be able to deal with technical and non-technical audiences.
- Must be able to establish effective working relationships with employees, other companies, and the general public.

Other

- Maintain current Tennessee Drivers License.
- Attend TVPPA and all other training sessions, as assigned.
- Be certified in First Aid and CPR.