# **Job Description**

## **Sheffield Utilities**

Job Title: Senior Electrical Engineer – Electric

Work Group: Electric Engineering
Reports To: Operations Manager

FLSA Status: Exempt

**Residency Required:** No

**Work Location:** 300 N. Nashville Ave., Sheffield, AL 35660

**Last Revision:** January 2, 2024

### **SUMMARY**

Plans, evaluates and designs electric distribution and transmission facilities. Primary duties include completing designs for electric facilities and system studies for power quality, load management and maintenance.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

A commitment to safety, providing reliable utility services, protecting public health and providing excellent customer service are the responsibilities of all job positions at Sheffield Utilities. We believe that teamwork, open communication, honesty, integrity, fairness, diversity and respect for each other are essential traits to perform all job duties. All employees are to adhere to the Sheffield Utilities Core Values, Mission Statement & Vision Statement.

- Scope of work includes all phases of electric engineering functions including but not limited to: power quality, load management, system planning/design/layout, modeling and coordination, metering and construction.
- Prepares plans, specifications and cost estimates for electric construction projects with limited supervision. Manages projects and serves as the primary liaison between SU Electric Department and Owners/Developers.
- Reviews plans and specifications by outside engineers, architects and developers concerning utility improvements and/or extensions for conformity to SU requirements.
- Manages and serves as department lead for annually reoccurring tasks such as: contract pole inspections, underground
  cable replacement, street lighting improvements, field audits, joint use billing, construction specification development
  and 4kV conversion.
- Identifies and recommends improvements to electric system facilities and processes in order to improve SU's service and reliability to its customers, reduce costs, and/or improve operating efficiencies.
- Collects, compiles and analyzes data, generates reports and maintains files & documents for electric system.
- Assists with load studies, switching and outage restoration.
- Coordinates interrelated projects with other SU departments, engineers, or outside city/state representatives.

## SUPERVISORY RESPONSIBILITIES

The position has no supervisory responsibilities. May coordinate the work of contractors and other SU employees on major construction or maintenance projects.

### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **EDUCATION AND/OR EXPERIENCE**

Bachelor degree (B.S.) in Electrical Engineering or equivalent related engineering degree from an accredited college or university. Minimum of 5+ years relevant engineering experience with electric utility system. PE accepted, but not required.

### **COMMUNICATION SKILLS**

## Job Description pg 2

## **Sheffield Utilities**

Ability to read, interpret and comprehend documents such as safety rules, operating and maintenance instructions, drawings and procedure manuals. Ability to analyze and prepare engineering and technical reports and business correspondence. Ability to interact and effectively communicate with supervisors, customers, co-workers, mid-level representatives of governmental agencies, contractors, developers, product vendors and other professional groups or contacts in the community. Ability to effectively present information to management, public groups and/or the Sheffield Utilities Board.

### **COMPUTER SKILLS**

Proficient in Microsoft Office Suite (Microsoft Outlook, Word & Excel) as required to perform job tasks. This includes using software applications for email, word processing, database tracking and spreadsheet applications and using Internet Explorer to navigate online Employee Self Serve webpage for personal payroll, benefit and employee information. Must be able to use specialized software applications for ESRI GIS, customer inquiries, modeling and mapping. Responsible for SCADA system & supervising AMI use as it pertains to engineering.

### **MATHEMATICAL SKILLS**

Ability to apply advanced mathematical concepts to perform various electric engineering tasks to include: impedance calculations, power factor analysis, voltage drop, fault current, wind loading, ice loading, economic comparisons, demand and calculating transformer loading.

### **REASONING/COMPLEXITY**

Ability to accurately define problems, collect data, establish facts, draw conclusions and provide valid solutions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Ability to read, interpret and understand technical standards, permits, Local, State and Federal regulations and codes for utility compliance.

### PHYSICAL DEMANDS/WORK ENVIRONMENT

Required to stand; walk; use hands to handle or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch or crawl; talk and hear. May occasionally lift and/or move up to 25 pounds. Specific vision abilities include close vision and distance vision. Occasionally works around electricity, energized equipment and moving mechanical parts. May be exposed to outside weather conditions, including wet and/or humid conditions, extreme cold and extreme heat. The noise level in the work environment is usually moderate.

### **CERTIFICATES, LICENSES, TRAINING**

Valid Driver's License; Dispatch Training; CPR/First Aid Certification; Customer Service Skills and applicable safety training as scheduled.

### **OTHER REQUIREMENTS**

Available to work scheduled and unscheduled times to accommodate work demands and emergency situations; good organizational and time management skills; ability to handle multiple projects and tasks simultaneously; maintain professional business appearance and image; subject to random drug testing and driver's license checks. Field work required. May be subject to work after hours as it pertains to power restoration. Performs related work as required and other such duties as may be assigned.

This position description provides an overview of the referenced position, but the job is not limited by this description. In other words, the individual performing this job may be called upon to perform other duties not listed here at any time as directed by the Management of Sheffield Utilities.

Approved By: Steve Hargrove	Date: 1-2-2024