**SHELBY ENERGY COOPERATIVE**

**POSITION DESCRIPTION**

**JOB TITLE:** GIS and Mapping Technician **LOCATION:** Power Delivery Services

**FLSA STATUS:** Non-Exempt **EEO CODE:** 03

**REPORTS TO:** Manager of Engineering **NRECA JOB CODE**: 54-4422

**GENERAL SUMMARY:**

Under general supervision of the Manager of Engineering, is responsible for maintaining the Geographic Information System (GIS) and providing engineering support for the safe and efficient operation of the electric distribution system.

**ESSENTIAL DUTIES AND TASKS:**

1. Maintain the GIS and perform necessary revisions to reflect changes made to the electrical distribution system related to new construction, line conversions, maintenance programs, switching operations, phase changes, etc. to ensure an accurate and current representation of the electrical system.
2. Maintain the GIS to reflect accurate and current geographical and land base information including but not limited to road ways, water ways and wetlands, city and town limits, taxing districts, service territories, easements, property lines, developments, etc.
3. Write and maintain code and scripts including Python, SQL, VBScript, etc
4. Perform all work required to accurately input service order and work order information into the GIS.
5. Perform field inspections on distribution poles, lines and equipment to verify and maintain the accuracy of the GIS.
6. Produce maps, diagrams, drawings, and reports as needed using the GIS, ESRI, ArcPro software, Access software and other available tools.
7. Import and export GIS data to facilitate the sharing of information with contractors, developers, governmental and regulatory agencies and other utilities as needed.
8. Perform installation/removal of software related to the GIS system onto company equipment.
9. Work with representatives from the GIS software vendor to troubleshoot and solve technical issues and suggest additional functionality in order to improve current design and usefulness.
10. Integrate and maintain accurate databases between GIS, ArcPro, the Outage Management System (OMS) and other operating systems as needed.
11. Perform functions necessary to operate and maintain electronic staking system along with providing training and support to employees regarding the software.
12. Assist in the preparation of system planning and operational studies (such as construction work plans, long range plans, and sectionalizing studies) by providing an updated GIS model to be used for engineering analysis.
13. Write and maintain queries to develop specialized spreadsheets that provide technical support and analysis.
14. Monitor requests for joint-use of facilities by other utilities and process as necessary.
15. Prepare and submit applications for right-of-way encroachment permits to the Kentucky Transportation Cabinet Department of Highways.
16. Remain current regarding Rural Utilities Service (RUS) construction and material specifications, National Electric Safety Code (NESC) requirements, local codes, rules and regulations of the Kentucky Public Service Commission (PSC) and policies, regulations and procedures of Shelby Energy.
17. Stay current with applicable business practices and respond to organizational needs.
18. Participate in CPR training, safety classes and other safety activities as necessary.
19. Attend and participate in the annual meeting as directed.
20. Attend and participate in annual training for employees and other training as recommended by management.
21. Assist during major outages or emergency situations.
22. May serve as team member for on-call outage duty
23. Perform other duties as required or assigned.

**WORKING CONDITIONS:**

This work is performed indoors and outside the office. Some work is done in the field where there may be unfavorable weather conditions. Exposure to insects and air-borne allergens are possible. Regular hours are Monday through Friday, 7:00 a.m. to 3:30 p.m.; however this position may require work outside of these hours.

In order to maintain a safe working environment, each Shelby Energy employee shall:

Adhere to the Shelby Energy’s Safety Manual and abide by the rules adopted by the Cooperative and applicable governmental regulations;

Attend and participate in Shelby Energy’s Safety Meetings as assigned;

Comply with all NESC, OSHA, DOT, PSC and Federal Motor Carrier regulations; and

Take responsibility for their own safe work practices and the safety of others.

**EFFORT:**

Must be able to see, hear and speak. Work requires standing, walking, sitting; must be able to move body in various positions, including maintaining balance, stooping, kneeling, crouching, climbing, and reaching.

Must be able to lift seventy-five (75) pounds; must be able to push and pull objects weighing up to one-hundred (100) pounds. Must be able to operate light-duty work vehicles. Must hear well enough to engage in conversations, hear various alarms and other sounds.

**MACHINES, TOOLS, EQUIPMENT:**

Personal computer, Mapping Software, mapping equipment, plotters, printers, copiers, and laminators. May also be required to use ladders, transit and surveying instruments.

**MINIMUM QUALIFICATIONS:**

Bachelor’s or Associates Degree in Geographic Information Science, or other related technical field, with (3) years of work experience is preferred. Educational requirement may be met by a combination of education and experience when competency in the role is demonstrated. A minimum of two (2) years of practical work experience in geographical information systems, programming, staking, system design or other related work is required.

Must have the ability to follow the system electrically to determine the direction of feed, open points, and phasing on the electrical distribution system. Must be skilled at using computers and software, specifically, GIS related software for mapping.

Reasonable accommodations may be made to those who are able to perform the essential duties of the job. Must be able to pass any required drug test and new hire physical examination. Successful performance on pre-employment tests is required. Must possess a valid driver’s license.

**SPECIALIZED SKILLS AND KNOWLEDGE:**

* Ability to maintain absolute confidentiality of any information encountered.
* In-depth knowledge and understanding of a broad range of computing technologies and proficiency in applying technology to solve business problems.
* Knowledge of various computer operating systems, relational databases and personal computers.
* Excellent written and oral communication skills including outstanding interpersonal skills.
* Ability to conduct and direct research and present ideas in a business-friendly and user-friendly language.
* Highly self-motivated with keen attention to detail.
* Ability to perform complex mathematical calculations with analytical, evaluative and problem-solving skills.
* Communicate and interact with personnel at all levels of the organization in a business, professional and respectful manner.

**The Company reserves the right to revise and alter this job description as needed.**

Approved: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee Statement:

I have read this job description and a copy has been provided to me. My signature below certifies that I am able to perform the essential functions of this position.

Employee Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Created: 06/15

Revised: 05/17 05/25