

Job Description

Job Title: GIS Administrator
Department: Engineering
Reports To: Manager of Engineering
FLSA Status: Exempt
Physical Effort: Level 1 (Minimal)

Prepared By: Human Resources
Prepared Date: February 2015
Approved By: General Manager and CEO
Approved Date: February 2015

SUMMARY

Under the direction of the Engineering Department Manager, this position is responsible for the activities of the Cooperative's geographic information system. Among other duties, this includes ensuring the electrical system model, database, connectivity, and geographic base map are accurate and current and optimizing field and departmental GIS applications to meet the Cooperative's needs.

ESSENTIAL DUTIES AND RESPONSIBILITIES may include other duties as assigned.

- Delivers and updates a full-process mapping solution for the Cooperative's GIS needs that will ensure safe, reliable, and efficient utility operations both daily and during emergencies. This includes designing and implementing GIS software and hardware improvements in a team environment, base data sourcing, testing updates to the current system, consulting with users to provide asset information to end-users (field/departments/contractors) in various formats (paper, web, mobile), custom and regular GIS analysis and presentation of reports.
- Develops and supports implementation of up-to-date, user-appropriate solutions for optimizing field data collection, viewing, validation, and design.
- Responsible for maintaining an accurate and current geographic information system (GIS) and engineering model, including all pertinent data on electrical distribution system and essential base map layers.
- Ensures that service and work order processes are properly maintained and associated data are entered into the GIS and engineering model.

JOB DUTIES may include other duties as assigned.

- Works with the IT Department by communicating needs and expectations for maintaining GIS software and hardware and for accessing data from company systems (Financial, Outage Management, Customer Information/Billing, and Engineering Analysis).
- Develops protocols as needed to ensure GIS and engineering model quality.
- Works with Cooperative departments to meet GIS needs.
- Assists and trains both technical and non-technical end users of GIS in the Cooperative's mapping solutions.
- Maintains appropriate backups of GIS database and applications as needed.
- Provides proposed project details to GIS Specialist for updating in the GIS.
- Develops and follows schedule for updating GIS base map files.
- Obtains subdivision plats as necessary from developers and/or county offices to keep the GIS database current.
- Responsible for updating easements, tree trimming, pole testing and other system operational information for presentation in current mapping solutions and developing maps to support the acquisition of new easements and information.

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- Identifies and implements processes to automate and/or improve data collection, integration and presentation, including developing templates and protocols as needed.
- Occasionally runs engineering analysis models, reports errors or invalid outputs, and presents results.
- Produces maps, diagrams, and reports as requested for field operations or UEC staff.
- Acquires thorough knowledge and familiarity with electric distribution system components and their functions, the National Electric Safety Code, and standard RUS assemblies.
- Maintains proficiency in understanding the relationship of GIS and other company systems such as Financial, Outage Management, Engineering Analysis, and Customer Information/Billing.
- Maintains up-to-date knowledge of technology and GIS functionality. Acquires and maintains appropriate GIS certification. Participates in local professional group meetings, online professional listservs, and stays abreast of new trends and innovations in the field of GIS, database management, and related hardware/software.
- Focuses with detail and accuracy on quality in all aspects of the job.
- Respectfully takes direction from supervisors.
- Works collaboratively in a team environment with a spirit of cooperation.
- Conducts themselves in a manner that reflects well on UEC and contributes to harmonious relations with members and the general public.

This is not intended to be an exhaustive list of all functions, responsibilities, skills and abilities. Additional functions and requirements may be assigned by supervisors as deemed appropriate.

QUALIFICATIONS

Ability to perform essential job duties with or without reasonable accommodation and without posing a direct threat to safety or health of employee or others. 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.

SUPERVISORY RESPONSIBILITY

The top priorities for this position are the above job duties, with general supervision of the GIS Specialist as a secondary responsibility of this position. Main aspects of this supervision include ensuring GIS data quality, coordinating set up of the software and hardware GIS environment, and developing the Cooperative GIS plans and protocols that direct the GIS Specialist tasks.

EDUCATION and/or EXPERIENCE

Education: Bachelor's degree (B.A./B.S.) from four-year school in Geographic Information Systems, Cartography, Computer Science, or a related computer-aided design field; or a minimum of (12) twelve years of related experience and/or training; or equivalent combination of education and experience.

Experience: Eight (8) years of experience and training in ArcInfo or similar mapping or drafting software; or an equivalent combination of education and experience. Must have experience with ArcGIS for Server, SQL Server, and/or similar software. Familiarity with electrical utility systems or networks is preferred but not required.

LANGUAGE SKILLS

Excellent verbal and written communication skills. Ability to read, analyze, and interpret common technical descriptions/instructions, work or service orders, and legal documents. Ability to respond to common communications from colleagues, regulatory agencies, or members of the Cooperative or business community. Ability to effectively present information to colleagues, management, the public, and/or boards of directors.

MATH SKILLS

Ability to comprehend and apply principles of advanced calculus, modern algebra, and spatial statistics. Ability to work with concepts such as buffers, network connectivity and flow, query structures, and measurements related to various coordinate systems.

COMPUTER SKILLS

Highly proficient in computer technology; adapts and embraces new devices, software applications and technology processes. Must have experience with server operations and/or database management software. Has advanced computer skills in such fields as GIS, graphic design, electric system design, statistics and/or web-based training. Familiarity with GIS server administration, web mapping services, mobile mapping solutions, modeling/scripting, and working with multiple data formats is preferred.

REASONING ABILITY

Ability to work independently and collaboratively to define problems, collect data, and draw valid conclusions. Ability to develop clear protocols for data processing and administration. Ability to interpret a variety of technical instructions in mathematical or diagram form and deal with abstract and concrete variables.

CERTIFICATES and LICENSES

A valid Driver's License is required. Current GIS Professional (GISP) certification is not required at time of hire, but acquisition and maintenance of GISP certification through the GIS Certification Institute is a requirement for ongoing job duties.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Skills:

Specific vision abilities required by this job include close, distance, color, and peripheral vision. The employee needs depth perception and the ability to adjust focus and to read computerized and paper maps where various colors are key indicators. While performing the job duties, the employee is regularly required to use hands to finger, handle, or feel objects, tools, or controls. The employee is frequently required to sit. The employee is occasionally required to stand; walk; reach with hands and arms; stoop, kneel, crouch, or crawl; twist, turn; push and/or pull; talk or hear.

Physical Effort:

The employee must occasionally lift and/or move up to 25 pounds, be able to drive a motor vehicle for extended time periods, and be able to walk outdoors in field areas, encountering uneven terrain.

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WORK ENVIRONMENT

Works in a climate-controlled office the majority of the time. While performing the duties of this job, the employee is occasionally exposed to work near moving mechanical parts and outdoor weather conditions. The noise level in the work environment is usually moderate.

Employee Signature: _____

Employer Representative: _____

Date: _____