



Columbia Power & Water Systems

Job Description

Job Title: Power System Geographic Information System (GIS) Analyst

Effective Date:

Department: Power Engineering

Reports To: Engineering Manager

Classification: Exempt

Job Purpose: To assist in designing, planning, updating, and specifying mapping system datasets for recording Columbia Power System facilities including transmission lines, substations, distribution lines, and services.

Duties/Responsibilities:

- Provide quality control and assurance of power mapping systems to ensure data is highly accurate to current conditions in the field
- Maintain and update mapping systems and related datasets of the mapping system
- Generate thematic maps as assigned for Columbia Power System use, analysis, meetings, and presentations
- Train and mentor Engineering staff on GIS mapping best practice techniques and software migration needs along as serving as a technical expert
- Give presentations and lead meetings to discuss the thematic map results in a clear manner
- Perform spatial analyses for current mapping system datasets, future planned networks prior to implementation, and generate recommendations for all cross-departmental new and/or existing projects or areas of growth
- Help coordinate and carry out the development of computer engineering studies such as system protection, short circuit, load flow, arc flash, voltage drop, power factor correction, and power quality using the GIS mapping and related systems
- Study system for load growth in relation to the GIS mapping system
- Help prepare detailed construction drawings
- Assist in installing, operating, and maintaining system distribution computer model program
- Enter databases for computer analysis
- Interact with customer, consultants, and contractors
- Assist the Power, Water, and Broadband Engineering departments
- Other duties as assigned

Required Skills/Abilities:

- Acknowledge and adhere to all CPWS policies
- Regular attendance at work
- Perform duties safely without endangering self, others, and the public
- Ability to read and understand instructions and job-related materials (electrical work orders, electrical codes, blueprints, drawings, safety data sheets, distribution maps, manuals, etc.)
- Ability to write
- Ability to follow instructions
- Ability to communicate and exchange information and requirements for interconnection to Columbia Power Systems facilities with the public on the telephone and in person
- Ability to use mathematical skills to easily and effectively work with exponents, linear equations, quadratic equations, and analytical geometry
- Ability to work inside and outside and be exposed to noisy places, fumes, chemicals, toxic substances, and machinery
- Ability to be exposed to weather conditions that are cold, hot, rainy, and windy

Physical Requirements:

- Ability to sit at a desk or table for up to 8 hours per day
- Ability to lift 0 – 50 pounds for ½ hour a day
- Ability to lift and/or carry objects weighing 0 – 25 pounds for 2 hours a day
- Ability to walk and stand for 4 hours a day
- Ability to stoop, kneel, and crouch
- Ability to talk, see, hear, reach, handle, and feel
- Ability to easily walk across undeveloped areas that can be hilly, overgrown, and rocky

Education, Experience, and Qualifications:

- High School Diploma or equivalent required
- Bachelor of Science degree in Geography with an emphasis in GIS preferred
- Valid State of Tennessee Driver's License required
- 15 years of experience with GIS mapping systems preferred
- 1 year of experience in power utility services mapping required

This is not necessarily an exhaustive list of all responsibilities, skills, duties, requirements, efforts, or working conditions associated with the job. While this is intended to be an accurate reflection of the current job, management reserves the right to revise the job or to require that additional and/or different tasks be performed when circumstances change (i.e., emergencies, changes in personnel, workload, rush jobs, or technological developments). This job description does not constitute a written or implied contract of employment.