



**System Engineer
Position Description**

Department: Technical Services Department		Immediate Supervisor: Technical Services Superintendent	
Pay Group: Field Pay Grade: 10	FLSA Status: Non-Exempt	Last Updated: 9/6/2017	
Positions Supervised: N/A			
Position Summary			
Responsible for electric system planning and design. Provide technical and analytical support for system and operational initiatives. Responsible for tracking and reporting system reliability. Perform duties both in field and in office environment.			

Essential Functions

1. System Planning – Provide the technical and analytical support for the construction, operation, and maintenance of the distribution and transmission assets. Assist with project management for system construction and improvement projects.
 - A. Develop construction work plans, short and long range distribution system planning studies, system reports, system fault current protection and fuse coordination studies, power quality studies, and load growth studies.
 - B. Responsible to file and maintain current engineering planning studies, reports, and substation drawings.
 - C. Manage and track all reliability statistics. Responsible to file related reports.
 - D. Performs SCADA system functionality operation and enhancements.
 - E. Assists with planning, installation, and maintenance of substation controls and communication.
 - F. Assists with system capacitor and voltage regulator controls.
 - G. Assists with coordination of work with developers, contractors, customers, and staff.
 - H. Assists with process for switching of distribution lines and substations: including developing written switching orders to facilitate maintenance and construction activities.
 - I. Assists with metering equipment specification, planning, software utilization, and equipment sizing.

2. System Design – Responsible for the overall design and planning of electrical distribution system facilities.
 - A. Design and stake system improvements, upgrades, modifications, new line extensions, and pole replacements.
 - B. Prepare cost estimates for overhead and underground construction, maintenance

- and system improvement projects.
 - C. Point of contact for customers and affected property owners regarding line locations within road right-of-way and obtaining easements outside of road right-of-way.
 - D. Attend pre-construction meetings of electric and water distribution systems.
 - E. Assist with printing map books and uploading of information to mobile devices.
 - F. Assist with system mapping for electric and water departments.
 - G. Assist with GPS/GIS data collection and integration into the mapping system.
 - H. Point of contact for commercial customer service size and planning.
3. Performs other responsibilities of the Technical Services Department.
 - A. Review monthly substation inspections and identify appropriate follow up actions.
 - B. Prepare information and analysis as required for management.
 - C. Prepare, maintain and archive department records as required.
 - D. Assists with outage/storm restoration analysis and activities as needed.
 - E. Assist with meter reading, disconnects/reconnects on an as needed basis.
 - F. Assist with the operation and maintenance of electric generation facilities.
 4. Performs other essential job duties.
 - A. Regular and timely work attendance.
 - B. Follows all safety procedures.
 - C. Participates in safety and industry training as required.
 - D. Assist other departments as required.
 - E. Other duties as required.
 - F. Provide value-added feedback and input to enhance our work culture, customer service experience, and procedural efficiencies.

Required Knowledge, Skills, and Abilities

- Knowledge of electric distribution system design, substations, GIS and power plants.
- Knowledge of NESC, APPA, NEC OSHA, and applicable standards.
- Ability to make decisions within policy and position parameters.
- Ability to manage multiple projects and meet deadlines.
- Ability to effectively interact and communicate with other staff and customers in a professional, courteous and efficient matter.
- Ability to work effectively in a team environment.
- Proficient with various computer programs (MS Word, Excel, Power Point, etc.) with ability to learn job specific computer programs.
- Ability to read construction documents, drawings, and one-line schematics.
- Mechanical aptitude.
- Ability to perform all required physical work which may include sitting, standing, stooping, kneeling, crouching, walking, crawling, and climbing.
- Ability to work approximately 50% of the time in the field, and 50% in an office.
- Ability to drive assigned vehicles up to 50% of the time.
- Ability to infrequently lift 50lbs.

Minimum Qualifications

- Valid MN Driver's License.
- High school degree or equivalent.
- Bachelor of Science degree in engineering or equivalent experience.
- 2 years related engineering experience.

Preferred Qualifications

- Bachelor of Science in Electrical Engineering.
- Utility related ESRI software experience.
- OSI SCADA software experience.
- Itron MV90 software experience.
- Generation experience.
- NERC compliance experience.
- AutoCAD and/or ArcView software experience.

This Position Description is not intended to be all-inclusive. It is within Elk River Municipal Utilities' discretion to assign additional duties and responsibilities or remove duties and responsibilities at any time.

This Position Description does not constitute a Contract of Employment.