



JOB TITLE:	Senior Electrical Engineer
JOB TYPE:	Full-Time, Day Shift, Exempt
JOB LOCATION:	TBD (southeast Minnesota, southwest Wisconsin, or northeast Iowa)
SUPERVISED BY:	CEO
SUPERVISES:	None
RELATIONSHIPS:	Line Superintendents Line Workers Customers/Cooperative Members Generation and Transmission Engineers STAR Clients Sales Representatives
QUALIFICATIONS:	☆ Professional Engineering License ☆ Bachelor's Degree in Electrical Engineering With Power Option

Changes to this job description could occur at any time and other duties may be assigned.

Position Summary:

Provide STAR members and clients with electrical engineering services, which include work plans, sectionalizing studies, contingency switching orders, project management, equipment testing, and correcting power quality issues.

Duties and Responsibilities:

- Gather and analyze voltage regulator location, sizing, operation, and panel settings by using smart grid data, the Engineering Model, field inspections, and field inspection reports. Recommend new additions or changes via technical recommendations and plans.
- Gather and analyze capacitor bank location, sizing, and functionality utilizing smart grid data, field inspections, and field inspection reports. Recommend new additions or changes via technical recommendations and plans.
- Gather and analyze OCR operations using smart grid data, engineering model, and field inspection reports. Help facilitate maintenance cycles, OCR additions, OCR changes, and OCR testing procedures.
- Incorporate regulator, capacitor, and OCR data in the GIS.

- Enhance the engineering model through incorporation of data contained within the GIS.
- Substation design and project management.
- Maintain the engineering models for summer, winter, fall, and spring conditions. Data for inclusion are: SCADA feeder/phase level data, line regulator data, capacitor bank data, and AMI data. Proper computer modeling and data acquisition can help focus capital construction to needed areas.
- Work with operations personnel to identify areas of poor reliability and help develop mitigation programs. Areas to be targeted should be identified through the integration of outage reports, GIS, and substation recording devices such as recloser panels.
- Seek out opportunities that will lead to cost savings by better use of the GIS. Develop recommendations for consideration. Act as a leader in GIS enhancement as applied to engineering, construction, and operations.
- Prepare planning studies and sectionalizing studies.
- Prepare electric rate studies.
- Assist operations personnel during the budget process to identify the next year's priority projects.
- Perform power quality investigations.
- Attend technical conferences.
- Schedule work day based upon priorities set by the Principal Engineer.
- Work under the guidance of the Principal Engineer.