SUMMARY
Manage the planning, development and integration of the Sunflower bulk power transmission system and the Mid-Kansas sub-transmission system. Manage the preparation of the Sunflower ten-year capital construction budget for the Sunflower bulk power transmission facilities and the development of power system analysis.

ESSENTIAL RESPONSIBILITIES

Engineering
Manage planning engineering and associated projects. Support the Sunflower Electric Power Corporation (Sunflower) and Member systems. Serve as the primary interface between Member systems and Sunflower for planning engineering.

Manage the development of Sunflower policies and position on transmission planning and load analysis issues.

Manage and perform feasibility studies for new interconnection requests by Sunflower, Member systems, new loads services, and Southwest Power Pool, Inc. (SPP).

Manage the development of the ten-year bulk power transmission capital construction budget.

Manage the process of developing and coordinating transmission substation and line maintenance, transmission line and substation construction and a telecommunication outage/testing schedule to ensure the grid is operated in a safe and reliable manner while minimizing cost to the company and customers.

Manage and perform steady-state power flow analyses, voltage stability analyses, dynamic stability analyses, and transfer analyses to assess the transmission system compliance with related North American Electric Reliability Corporation (NERC) Standards.

Manage and lead the development of a long range outage plan and identify stressed systems and ensure no single contingency will result in system overloads or outages.

Ensure that Sunflower system engineering data are maintained, updated, and submitted to SPP. Manage the Sunflower implementation of the SPP GI, including the generation interconnection protocol. Represent Sunflower on the SPP Planning Committee and provide technical support for Sunflower’s operations staff in coordination with SPP.
Provide support, as needed, to the Transmission Engineering department, transmission control center and regional control room operations.

Provide formal presentations to Sunflower senior management, other Sunflower departments, and outside organizations on topics relating to transmission planning.

**Transmission System Operations Planning**
Ensure the completion of contingency analyses, voltage stability studies, load flow analyses, and other power system studies, as required, to support system operation.

Manage the process of evaluating transmission and generation resource outages to ensure reliable operation of the system is maintained.

Ensure power system operation models remain current. Manage the process of coordinating model updates with Transmission Engineering planning staff and SPP planning staff.

Benchmark the operational models to reflect real life SCADA Shots.

Ensure Sunflower meets the NERC Standards and conducting studies required to support Sunflower compliance activities

Oversee the new construction activities to ensure they are accurate and reflected in the operation planning models.

Remain familiar with the system operations and their procedures and standards.

Ensure in-service dates and construction sequences are properly modeled and used in evaluating system reliability in the operating horizon.

Support system operation daily and second day studies.

**Environment**
Ensure compliance with all applicable laws and regulations governing Sunflower's transmission and substation facilities.

Develop the necessary information to secure permits, permit renewals, operating licenses, and regulatory approvals for existing and future transmission projects. Ensure compliance and accurate records to demonstrate compliance with state and federal regulations.

**Management, Supervision, and Leadership**
Serve as member of management team helping to ensure achievement of business goals and objectives and promoting integration between divisions.

Provide leadership, coaching, and counseling to direct reports regarding job performance. Conduct annual performance appraisals in a timely manner. Ensure direct and indirect reports receive training in order to meet or improve their job performance. Keep employees informed of work requirements, business conditions, company policies, and other factors that impact their work performance and environment.
Safety
Lead by example and follow up to ensure a safe working environment for all employees. Set high safety standards and expectations and emphasize the importance of safety. Maintain safety awareness and comply with all safety policies, practices, and procedures. As applicable, resolve safety concerns and issues in coordination with the safety department and provide the highest level of support to the safety department to establish and enforce safety programs consistent with industry practice.

Culture
Demonstrate a high level of commitment by modeling Sunflower’s culture in the conduct of all work and to the core values of technical competency, respect and dignity, accountability, integrity, trustworthiness, and servant leadership to empower or otherwise enable others to optimally perform their job responsibilities. Demonstrate and promote ethics and behaviors consistent with Sunflower’s culture, Board policies, and business practices. Understand and fulfill the role and responsibility for all compliance programs within the company.

Other Responsibilities
As assigned or required to support Sunflower’s mission and operations.

QUALIFICATIONS

Certifications and Licenses
Professional Engineer license in the state of Kansas, or the ability to obtain a KS Professional Engineer license within one year of hiring.

Education and Experience
Bachelor degree in electrical engineering from an ABET accredited institution and ten years of progressive transmission planning engineering experience, including at least four years’ supervisory responsibility; or equivalent combination of education and experience.

Knowledge, Skills, Abilities
Extensive knowledge in preparing engineering planning studies documentation and planning studies project management skills.

Advanced knowledge of modern and complex electrical engineering planning principles and practices.

Advanced knowledge of and ability to apply standard planning engineering principles to solve bulk power supply problems and to evaluate most economical solution to planning problems.

Able to develop and maintain current understanding of the regulatory environmental requirements pertaining to operation and maintenance of Sunflower’s transmission system and Members’ distribution systems.

Effective team building and problem solving ability.

Able to understand and communicate system operations practices as relates to NERC compliance.

Analytical skills with ability to synthesize information to develop a working solution.
Able to learn and implement new engineering planning concepts and processes, including software automations used in steady-state and transient analysis of power systems.

Sound organizational and time management skills with the ability to manage multiple projects.

Management, supervisory, leadership, and coaching skills and abilities. Strong ability to provide leadership and technical direction for assigned organizational responsibilities, programs, and personnel.

Written, verbal, and interpersonal communication skills at the level required to successfully perform the essential responsibilities of the position.

Able to operate computers and associated programs at the level required to successfully perform the essential responsibilities of the position.

**Other**

Must possess and maintain a valid driver’s license.

Able to travel to all Sunflower sites and attend training and meetings out of state as needed.

**Physical and Mental Demands**

See Physical and Mental Requirements section below.

This outline is not all inclusive but rather serves as a general overview of the current business needs. Experience guidelines are not the sole basis for awarding this position and substitutions may be made as they relate to the essential functions, duties, and responsibilities of this position.
**PHYSICAL AND MENTAL REQUIREMENTS**

**Position:** Manager, Planning Engineering  
**Date:** January 2015

### Physical Tasks and Exposure

For the following, indicate if the task or exposure during a typical shift is:

- **O** = Occasional (<10% of time);  
- **S** = Sometimes (26-50%);  
- **F** = Frequently (51-75%);  
- **R** = Regularly (>75%)

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**Audio-Visual**

For the following, check if essential to the position

- ☒ Heating: Must be able to hear others when in the field.
- ☒ Vision: Read prints, computer screens, specifications, testing procedures, etc.
- ☐ Color discrimination:
- ☒ Depth perception: To avoid contact with energized equipment.
- ☐ Other:

**Mental Requirements**

For the following, check if essential to the position

- ☒ Sense of urgency  
- ☒ Multiple tasks  
- ☒ Works alone  
- ☒ Independent judgement  
- ☒ Concentration  
- ☒ Proper reasoning  
- ☒ Repetition  
- ☐ Other:
For the following, check if essential to the position
*NOTE “Physical Capacity Profile or Physical”

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