

Josh Gutzmann

Experience Summary

13 years of experience in electric transmission planning, with expertise in transmission system reliability assessments, regional transmission planning, economic and policy-driven transmission development, generator and load interconnection studies, NERC compliance analysis, power system modeling and simulation, transmission project justification and permitting support, stakeholder and regulatory engagement, MISO planning processes, long-range transmission expansion planning, system impact assessments, load forecasting, grid modernization initiatives, strategic planning, engineering leadership, project coordination, and management of technical planning teams.

Education and Professional Certifications

Bachelor of Science in Electrical Engineering, University of St Thomas, St Paul

Professional Experience

Xcel Energy, Manager, Transmission Planning, May 2025-Present

- Lead transmission system planning activities by developing and evaluating transmission expansion plans, performing reliability and economic studies, ensuring compliance with NERC, FERC, and regional planning requirements
- Coordinating with MISO, utilities, developers, regulators, and internal stakeholders, managing planning staff and consultants, supporting permitting and regulatory filings
- Overseeing load and generation interconnection assessments, and advancing strategic transmission investments to maintain a reliable, resilient, and cost-effective electric grid.

Xcel Energy, Transmission Planning Senior Engineer, June 2022-May 2025

- Directed complex transmission planning and system expansion studies across multiple planning horizons.
- Led development of strategic transmission plans supporting regional reliability and economic objectives.
- Served as a subject matter expert on NERC compliance, interconnection studies, and transmission planning methodologies.
- Developed testimony, regulatory filings, and executive-level technical recommendations.
- Reviewed consultant work products and engineering analyses.

Xcel Energy, Transmission Planning Staff Engineer, June 2019-June 2022

- Led transmission reliability planning studies.
- Developed transmission project recommendations to address reliability, load growth, and public policy needs.
- Managed complex modeling efforts and study assumptions, served as technical lead for regional planning initiatives and stakeholder discussions.
- Supported transmission permitting, routing, and certificate-of-need activities.
- Represented the company in MISO working groups, stakeholder meetings, and technical committees.
- Mentored junior engineers and provided technical guidance.

Xcel Energy, Transmission Planning Engineer, June 2017-June 2019

- Performed power flow, contingency, short-circuit, and voltage analyses, developed and maintained transmission planning models in planning software (e.g., PSS®E, TARA, TSAT).
- Conducted NERC TPL reliability assessments and documented study results.
- Evaluated transmission system performance under forecasted load and generation conditions.
- Supported generator and load interconnection studies, prepared technical reports, presentations, and regulatory support documentation.
- Coordinated data requests with neighboring utilities, MISO, and internal stakeholders.
- Assisted in identifying transmission system limitations and potential mitigation