

**Bixuan Sun, Ph.D.**

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414 Nicollet Mall, 6th floor, Minneapolis, MN 55401

**EXPERIENCE**

**Xcel Energy**

*Director of Resource Planning and Bidding*

Oct 2024 - Present

Responsible for developing and directing the systems, processes and personnel required to prepare effective and prudent long term system plans for Xcel's Upper Midwest service territory. Also responsible for developing and directing the systems, processes and personnel required to conduct effective and fair power solicitation processes to procure needed power and energy to meet native load demand and energy requirements and achieve cost reductions in the Xcel supply portfolios.

*Senior Resource Planning Analyst*

Sept 2023 – Oct 2024

*Resource Planning Analyst II*

Aug 2022 – Sept 2023

*Resource Planning Analyst I*

May 2020 – Aug 2022

Develop and model long-term resource expansion plans to meet electric system growth; perform generation expansion and production cost studies for resource solicitations and resource plan development.

**University of Minnesota**

*Post-Doctoral Researcher*

October 2018 – May 2020

Collaborated with researchers at Harvard Kennedy School and University of Cambridge on research that examines driving factors of innovation in energy technologies. Published at top international academic journals.

**Charles River Associates**

*Consultant*

April 2020 – May 2020

Developed and coded an optimization model in GAMS that computes the optimal dispatch schedules for energy storage resources participating in the wholesale electricity markets and evaluates the resulting revenue streams. Wrote a white paper on the model.

**Hamline University**

*Adjunct Professor*

June 2019 – December 2019

Developed the instruction materials for the course "MSBA 8170 Advanced Statistics and Machine Learning I". Taught the course in the MS Business Analytics program at Hamline University, including giving weekly lectures and computer lab sessions.

**EDUCATION**

Ph.D. in Applied Economics, University of Minnesota	2018
M.S. in Applied Economics, University of Minnesota	2015
B.A. in Economics, University of Minnesota – Morris; Shanghai University	2013

## SELECTED PUBLICATIONS

Kolesnikov, S., Goldstein, A. P., **Sun, B.**, Chan, G., Narayanamurti, V., & Anadon, L. D. (2024). A framework and methodology for analyzing technology spillover processes with an application in solar photovoltaics. *Technovation*, 134, 103048.

**Sun, B.**, & Sankar, A. (2022). The changing effectiveness of financial incentives: Theory and evidence from residential solar rebate programs in California. *Energy Policy*, 162, 112804.

**Sun, B.**, Kolesnikov, S., Goldstein, A., & Chan, G. (2021). A dynamic approach for identifying technological breakthroughs with an application in solar photovoltaics. *Technological Forecasting and Social Change*, 165, 120534.

Konidena, R., **Sun, B.**, & Bhandari, V. (2020). Missing discourse on microgrids—The importance of transmission and distribution infrastructure. *The Electricity Journal*, 33(4), 106727.

**Sun, B.**, & Aplan, J. (2019). Operational planning of public transit with economic and environmental goals: application to the Minneapolis–St. Paul bus system. *Public Transport*, 11(2), 237-267.

**Sun, B.**, Eryilmaz, D., & Konidena, R. Transparency in Long-Term Electric Demand Forecast: A Perspective on Regional Load Forecasting. *IEEE Smart Grid Newsletter*, August 2019.

**Sun, B.** (2018). Heterogeneous direct rebound effect: Theory and evidence from the Energy Star program. *Energy Economics*, 69, 335-349.