

Direct Testimony and Schedule  
Jessica K. Peterson

Before the Minnesota Public Utilities Commission  
State of Minnesota

In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy  
for a Certificate of Need for Additional Dry Cask Storage at the  
Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation

Docket No. E002/CN-24-68  
Exhibit\_\_\_\_(JKP-1)

**Conservation Programs and Impacts**

February 10, 2025

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## Schedule

Statement of Qualifications

Schedule 1

## I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND TITLE.

A. My name is Jessica K. Peterson. I am the Manager of Program Policy and Strategy for Xcel Energy Services Inc. (XES or Service Company), the service company subsidiary of Xcel Energy.

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I have worked for Xcel Energy since 2001. I served as a Program Manager for various Conservation Improvement programs and focused on Strategy and Implementation of our demand response portfolio before moving into our Demand Side Management (DSM) Regulatory and Policy group, where I worked as an analyst for six years before serving in my current role beginning in 2021. My statement of qualifications is provided as Exhibit\_\_\_\_(JKP-1), Schedule 1.

Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?

A. In my current role, I manage a group of six individuals who focus on Xcel Energy's implementation of the Company's demand side management and related efforts. My group is responsible for filing our Energy Conservation and Optimization Plans (ECO) in Minnesota and DSM plans in South Dakota as well as reporting on the status of those efforts.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my Direct Testimony in this proceeding is to:

- Identify the portions of the Certificate of Need Application (Application) that I am sponsoring; and

- Discuss current conservation program achievements, future goals, and the potential to offset generation with conservation programs.

## II. BACKGROUND

Q. WHICH SECTIONS OF THE COMPANY'S APPLICATION, FILED ON FEBRUARY 7, 2024 IN THIS DOCKET, ARE YOU SPONSORING?

A. I am sponsoring the following Application sections:

- Ch. 4.1.6 – Conservation Cannot Eliminate This Need
- Ch. 4.1.7 – Promotional Activities Have Not Created This Need
- Ch. 4.2.3 – Generation Alternatives – Demand Side Management
- Ch. 5.2 – Promotional Activities
- Ch. 6 – Conservation Programs

Q. ARE YOU SPONSORING ANY UPDATES TO THE APPLICATION?

A. No.

Q. WHAT SCHEDULES ARE YOU SPONSORING IN YOUR DIRECT TESTIMONY?

A. I am sponsoring the following schedule:

- Schedule 1 – Statement of Qualifications

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. My testimony is organized as follows:

- *Section III*: Conservation Programs
- *Section IV*: Generation Offset
- *Section V*: Conclusion

### III. CONSERVATION PROGRAMS

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section, I describe Xcel Energy's conservation programs and its Upper Midwest Integrated Resource Plan (IRP) goals for those conservation programs for 2024-2040.

Q. PLEASE DESCRIBE XCEL ENERGY'S CONSERVATION PROGRAMS.

A. Xcel Energy's conservation program offerings include a combination of more than 40 business, residential, income qualified, and demand response programs.

Based on 2023 data, these conservation programs have saved nearly 13,072 GWh of energy and 4,535 MW of demand, since 1990.

Q. WHAT ARE XCEL ENERGY'S FUTURE PLANS FOR CONSERVATION?

A. Xcel Energy has proposed an average annual goal of 780 GWh through 2034 in its 2024-2040 IRP. These savings drop slightly in the 2035-2040 period as efficient equipment becomes more standardized. The total proposed goals in the IRP include a cumulative 8,547 GWh and 1,659 MW from 2024-2040. In addition, Xcel Energy will continue to grow our Demand Response portfolio to over 1,385 MW by 2034.

### IV. GENERATION OFFSET

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section, I explain that Xcel Energy's conservation programs are

1 insufficient to replace the generation from the Prairie Island Nuclear  
2 Generating Plant (PINGP or the Prairie Island Plant).

3  
4 Q. CAN CONSERVATION PROGRAMS REDUCE DEMAND ENOUGH TO REPLACE THE  
5 PINGP?

6 A. No. Although Xcel Energy has aggressive energy efficiency and DSM efforts  
7 through 2040, these programs cannot sufficiently reduce demand to the point  
8 that the PINGP is not needed for generation.

9  
10 As I mentioned above, Xcel Energy and its customers have saved nearly  
11 13,072 GWh of energy and 4,535 MW of demand. These savings avoided the  
12 need to build approximately 18 medium-sized (250 MW) power plants.  
13 Additionally, Xcel Energy's current IRP proposes goals of an additional 8,547  
14 GWh and 1,659 MW cumulative savings over the 2024–2040 planning period.  
15 Despite these reductions, the IRP anticipates an increase in customer load  
16 over time and therefore a need for generation beyond what can realistically be  
17 avoided through conservation programs. Although conservation-related  
18 energy savings are projected to grow and continue to offset the need for new  
19 energy facilities, they are insufficient to both offset the need for new  
20 generation and replace generation from the PINGP if it was retired in  
21 2033/2034.

22  
23 Further, in 2023, the State of Minnesota passed a bill requiring utilities to  
24 generate 100 percent of their electricity through carbon-free generation by  
25 2040, accelerating Xcel Energy's plan to reach carbon-free generation in  
26 Minnesota by ten years. Conservation programs will be a necessary  
27 component to achieving this goal. Under this accelerated timeline, the savings

1       achieved by the Company's conservation programs will be needed to  
2       supplement the loss of carbon-based generation, leaving even less room to  
3       further reduce the programs' ability to replace generation from the Prairie  
4       Island Plant. This is addressed in more detail in Company witness Allen Krug's  
5       Direct Testimony.

6  
7    Q.    HAVE PROMOTIONAL ACTIVITIES BY XCEL ENERGY CREATED THE NEED FOR  
8       THE ADDITIONAL SPENT FUEL STORAGE?

9    A.    No. The Prairie Island Plant is an essential part of the electrical supply system  
10       and has been for 50 years. The need for additional storage is a simple function  
11       of extending the life of the Plant to continue to provide baseload power  
12       beyond 2030.

13  
14                                   **V. CONCLUSION**

15  
16   Q.    DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

17   A.    Yes, it does.

**Jessica K. Peterson**

Jessica Peterson has been employed by Northern States Power Company – Minnesota (NSPM) in demand side management (DSM) roles for 23 years, and her current position is Manager, Program Policy for the Company's DSM Policy and Strategy department. Her current job responsibilities include DSM policy analysis, customer program compliance, and strategic analysis for the Company's future efficiency portfolio.

Jessica received a Bachelor of Arts degree in Public Relations from Winona State University in 2001. Later, she received a Master of Business Administration from St. Thomas University in 2010. Jessica was hired by NSPM as Marketing Coordinator in 2001, progressing to a Senior Product Manager role during her tenure in the Department. Her experience in Product Marketing included the development and implementation of demand side management programs in Minnesota. Additionally, she helped launch our demand side management programs (DSM) in our Colorado jurisdiction in 2007.

In 2011, Jessica accepted a position as a DSM and Renewable Strategy and Policy Coordinator. In this role, she led cross-functional teams to discover and plan the direction of the Company's future demand response portfolio and managed the policy direction for our DSM portfolio in our northern service territories.



In 2014, she transferred to the Company's DSM Policy and Strategy team. Her role within the team was to manage compliance, policy, stakeholder engagement and strategic direction as part of customer renewable programs. She also managed our DSM compliance for South Dakota where she has continued to be an expert witness on our DSM portfolio since 2014. Jessica was promoted to Manager, Performance and Strategy in 2021, and to Manager, Product Policy in 2024 where her responsibilities expanded as described above.