

Direct Testimony and Schedule  
Britta Bergland

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\_\_\_\_(BB-1)

**Environmental 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 Britta Bergland. I am a Principal Consultant at Merjent, an environmental consulting firm based in Minneapolis, Minnesota. Merjent performed environmental analysis and environmental document preparation on behalf of Northern States Power Company, d/b/a Xcel Energy (Xcel Energy or the Company) in support of the Prairie Island Nuclear Generating Plant (Prairie Island Plant or the Plant) Independent Spent Fuel Storage Installation (ISFSI) Expansion Project (Project).

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I have over 20 years of experience in the environmental field. As an environmental consultant, I have supported environmental review, permitting, and compliance efforts for projects in the biofuels, power generation and transmission, mining, and pipeline industries. Prior to working as an environmental consultant, I worked for an operator of Midwest nuclear power plants, one of which was the Prairie Island Plant. Additional detail is provided in my statement of qualifications, which is provided as Exhibit\_\_\_(BB-1), Schedule 1.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of Xcel Energy.

Q. DESCRIBE YOUR RELATIONSHIP TO THE PROJECT.

A. I work as Merjent's Project Manager. Merjent supported Xcel Energy staff in environmental analysis and document preparation, as well as agency

1 coordination and survey efforts for the Project. I managed the team that  
2 developed the environmental impact sections of the Certificate of Need  
3 Application (Application) as well as the data portion of the Minnesota Scoping  
4 Environmental Assessment Worksheet (Scoping EAW). My work on the  
5 Project began in November 2022.

6  
7 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

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

- 9 • Identify the portions of the Application that I am sponsoring;
- 10 • Describe the environmental analyses that have been conducted to
- 11 support the Project;
- 12 • Describe the analysis of alternative storage locations within the Prairie
- 13 Island Plant site; and
- 14 • Describe the environmental permits that will be needed for the Project.

15  
16 **II. BACKGROUND**

17  
18 Q. WHAT IS MERJENT'S ROLE ON THE PROJECT?

19 A. Xcel Energy retained Merjent to conduct environmental analyses to support  
20 the Application and Scoping EAW development processes and to assist with  
21 agency outreach. Following Xcel Energy's submittal of the Application,  
22 Merjent provided support for review of the published Scoping EAW and the  
23 Environmental Impact Statement (EIS) required by Minn. Stat. § 116D.04 and  
24 prepared by the Minnesota Department of Commerce (Department).

25  
26 Q. DO YOU ALSO SPONSOR ANY SECTIONS OF THE COMPANY'S APPLICATION,  
27 FILED ON FEBRUARY 7, 2024 IN THIS DOCKET?

1 A. I am sponsoring the following Application sections:

- 2 • Chapter 5.3 – Induced Development
- 3 • Chapter 9.2 – Other Alternatives - Alternative Sites
- 4 • Chapter 11 – Environmental Information and Alternative Sites
- 5 • Chapter 12.3-12.6, 12.8 – Non-radioactive Solid and Liquid Wastes;
- 6 Non-radioactive Gaseous and Particulate Emissions; Fugitive Dust;
- 7 Non-radioactive Runoff, Potential Sources of Contamination, and
- 8 Discharge to Receiving Waters; Noise
- 9 • Chapter 13.3-13.5, 13.8-13.9 Methods for Recycling or Disposal of
- 10 Solid or Liquid Waste; Emission Control Devices and Dust Control
- 11 Measures; Water Pollution Control Equipment and Runoff Control
- 12 Measures; Other Equipment or Measures to Reduce Effects of Facility
- 13 on the Environment; Environmental Monitoring
- 14 • Chapter 14 – Estimates of Induced Development

15  
16 Q. WHAT SCHEDULES ARE YOU SPONSORING IN YOUR DIRECT TESTIMONY?

17 A. I am sponsoring the following schedule:

- 18 • Schedule 1 – Statement of Qualifications

19  
20 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

21 A. My testimony is organized as follows:

- 22 • *Section III*: Environmental Analysis of the Project
- 23 • *Section IV*: Analysis of Alternatives
- 24 • *Section V*: Permits
- 25 • *Section VI*: Conclusion

1                                   **III. ENVIRONMENTAL ANALYSIS OF**  
2                                   **THE PROJECT**

3  
4    Q.    WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

5    A.    In this section, I describe the process used to study the environmental impacts  
6           of the proposed Project and discuss Xcel Energy's outreach to relevant  
7           regulatory agencies and other stakeholders to support environmental portions  
8           of the Application.

9  
10   Q.   PLEASE DESCRIBE THE PROCESS USED TO DEVELOP THE ENVIRONMENTAL  
11          ANALYSIS PRESENTED IN THE APPLICATION FOR A CERTIFICATE OF NEED.

12   A.   The environmental impacts of the ISFSI have been studied multiple times in  
13          previous regulatory review efforts by the State of Minnesota and the U.S.  
14          Nuclear Regulatory Commission (NRC) since the ISFSI was constructed in  
15          1993 with two pads and expanded to include the third pad in 2021.

16  
17          At the state level, the Minnesota Environmental Quality Board (EQB)  
18          published an Environmental Impact Statement (EIS) for initial ISFSI  
19          construction and operation in 1991. The Department published an EIS in  
20          2009 that studied the expansion of the ISFSI to its present capacity. Most  
21          recently, the Department issued a supplement to the 2009 EIS to study Xcel  
22          Energy's request for a change in spent fuel storage technology.<sup>1</sup>

23  
24          The NRC also studied the impacts of the original ISFSI construction and  
25          operation in 1992 through an Environmental Assessment (EA); the impacts

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<sup>1</sup> Scoping EAW, Table 6-2.

1 of renewal of the ISFSI's site-specific license in 2015 through an EA; and the  
2 impacts of expansion to 64 casks/three pads in 2020 through an EA.<sup>2</sup>

3  
4 Xcel Energy and Merjent reviewed the scope of the proposed Project and  
5 determined that, due to the Project's impacts occurring within the existing  
6 ISFSI footprint, and the industrial nature of the Project site, Xcel Energy  
7 could initially rely on the substantial data produced by the studies conducted  
8 for these past environmental review efforts as a starting point for its analyses.  
9 Under Xcel Energy supervision, Merjent conducted desktop environmental  
10 analyses to update and supplement these data where necessary to document  
11 the environmental effects of adding additional spent fuel storage capacity to  
12 the existing ISFSI site. These data and desktop review efforts provided  
13 information that was presented in the Application and used to inform  
14 consultation with relevant agencies.

15  
16 Q. PLEASE DESCRIBE THE DESKTOP REVIEW CONDUCTED TO SUPPLEMENT THE  
17 DATA COLLECTED AS PART OF PRIOR STATE AND FEDERAL ENVIRONMENTAL  
18 REVIEWS.

19 A. Xcel Energy and Merjent evaluated the potential for changed conditions in  
20 and around the Prairie Island Plant and the ISFSI. Merjent then reviewed  
21 various publicly available data sources, including, but not limited to:

- 22 • The Minnesota Department of Natural Resources (MDNR) Natural  
23 Heritage Information System and Minnesota Conservation Explorer  
24 system for state-listed resources;

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<sup>2</sup> Scoping EAW, page 11.

- The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system and Determination Keys for federally protected species or critical habitats;
- The MDNR Minnesota Climate Explorer website;
- The Minnesota Office of State Archaeologist (OSA) Portal; and
- The Minnesota Pollution Control Agency (MPCA) What's in My Neighborhood web-mapper.

Data sources used by Xcel Energy and Merjent are included as references in the Application.

Q. WHAT INDIAN TRIBES AND AGENCIES DID XCEL ENERGY CONTACT TO SUPPORT DEVELOPMENT OF THE APPLICATION?

A. Prior to submittal of the Application, Xcel Energy contacted the Minnesota Public Utilities Commission (MPUC), the Department, the Prairie Island Indian Community (PIIC), Goodhue County, the City of Red Wing, the MDNR, the Minnesota State Historic Preservation Office (SHPO), and the USFWS.

Q. WHAT RESPONSE DID XCEL ENERGY RECEIVE FROM THESE AGENCIES?

A. SHPO stated that there are no recorded archaeological sites in the ISFSI Project area and no National Register of Historic Places listed above-ground historic properties within one mile of the ISFSI. SHPO stated that additional archaeological survey for the ISFSI Project was not warranted.

Goodhue County expressed support for the continued operation of the Prairie Island Plant, but also noted its hope that spent fuel will eventually be moved out of Goodhue County into another secure facility.



1 MDNR, in its response to Merjent's submittal through the Minnesota  
2 Conservation Explorer system, noted that there have been reports of one  
3 state-listed threatened species (Blandings' turtle) and one state-listed species  
4 of special concern (peregrine falcon) in the vicinity of the Project area, but  
5 that impacts from the Project are not anticipated. MDNR provided directions  
6 if either species is encountered.

7  
8 The consistency letters issued by the USFWS after Merjent's submittal of the  
9 Minnesota-Wisconsin Federal Endangered Species Determination Key and  
10 the Northern Long-Eared Bat Rangewide Determination Key resulted in a  
11 determination of "no effect" for the Northern Long-Eared Bat, Higgins Eye  
12 (pearlymussel), Monarch Butterfly, Tricolored Bat, and Whooping Crane.

13  
14 Q. WAS ANY OTHER INPUT RECEIVED FROM ANY INDIAN TRIBE, FEDERAL OR  
15 STATE AGENCY, OR LOCAL GOVERNMENTAL BODY?

16 A. Yes. Goodhue County submitted additional comments on the Scoping EAW,  
17 requesting that the scope of the study consider the socioeconomic impacts of  
18 long-term spent fuel storage. The Minnesota Pollution Control Agency  
19 indicated that it reviewed the Scoping EAW and had no comments at that  
20 time.

21  
22 Q. DID THE COMPANY UNDERTAKE ANY SURVEYS IN CONNECTION WITH THE  
23 PROJECT?

24 A. Yes. Merjent, on behalf of the Company, conducted a Phase I archaeological  
25 survey of the proposed location for the ISFSI expansion in April 2024, in  
26 coordination with the PIIC.

1 Q. DESCRIBE HOW THE COMPANY COORDINATED WITH THE PIIC.

2 A. Xcel Energy provided the survey protocol to the PIIC for review and  
3 comment prior to fieldwork. The PIIC did not provide any comments. PIIC  
4 representatives were invited to monitor the Phase I survey, but the PIIC did  
5 not send representatives to attend the survey. Following the survey, a draft  
6 survey report was sent to the PIIC for review and comment. PIIC  
7 representatives reviewed the draft report and had no comments.

8  
9 Q. WHAT WERE THE RESULTS OF THE ARCHAEOLOGICAL SURVEY?

10 A. No cultural resources were identified during the survey. Merjent  
11 recommended no further archaeological work and recommended a  
12 determination that no historic properties will be affected by the proposed  
13 Project. A copy of the final report was provided to PIIC, and to SHPO as a  
14 courtesy. SHPO responded that the report will be maintained in their files  
15 and had no further comment.

16  
17 **IV. ANALYSIS OF ALTERNATIVES**  
18

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

20 A. In this section, I discuss the process and rationale behind Xcel Energy's decision  
21 to forego environmental analyses of alternative spent fuel storage locations  
22 within the Prairie Island Plant site.

23  
24 Q. DID XCEL ENERGY CONSIDER THE IMPACTS OF NO ACTION AND  
25 ALTERNATIVE STORAGE OPTIONS FOR SPENT FUEL STORAGE?

26 A. Yes, Xcel Energy considered a no action alternative, alternatives to on-site  
27 storage such as private interim storage or a federal repository, and alternative

1 storage technologies for spent fuel, other than the proposed dry cask canister  
2 storage. Company witnesses Pamela Prochaska and Christopher Shaw address  
3 these alternatives.  
4

5 Q. DID XCEL ENERGY CONSIDER CONSTRUCTING AN ALTERNATIVE STORAGE  
6 FACILITY OUTSIDE OF THE PRAIRIE ISLAND PLANT SITE?

7 A. No. Pursuant to Minn. Stat. § 116C.83, subd. 4, spent nuclear fuel may be  
8 stored only at the generation site.  
9

10 Q. DID XCEL ENERGY CONSIDER ALTERNATIVE STORAGE LOCATIONS WITHIN  
11 THE PRAIRIE ISLAND PLANT SITE?

12 A. No. Because the current ISFSI has sufficient space to accommodate the  
13 additional spent fuel storage required to extend the Prairie Island Plant's  
14 operation until 2053/2054 without any modification to its footprint, the use  
15 of the existing site will result in the fewest environmental impacts as compared  
16 to a new site in any other location on the Prairie Island Plant property.  
17 Building a new stand-alone site outside of the current footprint at some other  
18 new location on the Prairie Island Plant property would result in new  
19 environmental impacts that would be avoided by use of the current site.  
20 Therefore, Xcel Energy did not consider any alternative storage locations.  
21

## 22 V. PERMITS

23

24 Q. WHAT ENVIRONMENTAL PERMITS OR AUTHORIZATIONS ARE NECESSARY FOR  
25 THE PROJECT, AND WHAT IS THE STATUS OF THOSE PERMITS OR  
26 AUTHORIZATIONS?

1 A. The Project will require the Certificate of Need from the Minnesota Public  
2 Utilities Commission that is the subject of the present Application and may  
3 require a building permit from the City of Red Wing. The need for a building  
4 permit is yet to be determined and will be addressed closer to construction  
5 after plans for the Project have been finalized.

6  
7 The ISFSI expansion is needed to allow the Company to continue to operate  
8 the Prairie Island Plant for an additional 20 years, or until 2053/2054. To  
9 extend the Prairie Island Plant's operating life, Xcel Energy will need to obtain  
10 an Operating License and Subsequent License Renewal from the NRC.  
11 Company witness Prochaska will address the Operating License and  
12 Subsequent License Renewal process in her Direct Testimony.

13  
14 **VI. CONCLUSION**

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

17 A. Yes, it does.



## BRITTA BERGLAND

### PROFESSIONAL SUMMARY

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Britta Bergland is a Principal Consultant at Merjent, with over 20 years of experience working in the environmental industry. Prior to joining Merjent, she worked for another Minnesota-based environmental consulting firm, as well as for an operator of Midwest nuclear power plants.

She specializes in permitting and environmental review of large-scale energy and development projects in Minnesota and has worked for both the project proposers and as a third-party consultant.

### SELECT ENVIRONMENTAL CONSULTING EXPERIENCE

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- Project Manager for environmental support of a project to expand a spent nuclear fuel storage facility at nuclear power plant in Minnesota. On separate projects at the same facility, developed environmental portions of the applications to renew the federal licenses of the nuclear power plant and the spent nuclear fuel storage facility. Supported these efforts first as an employee of the plant operator, and then as an environmental consultant and Project Manager.
- Project Manager for development of environmental portions of an extended power uprate application for a separate nuclear power facility in Minnesota. Deputy Project Manager for expansion of a spent-fuel storage facility at the same facility. Supported license renewal of the plant as an employee of the plant operator.
- Deputy Project Manager and Minnesota Permitting Lead for a new 161-kV transmission line in Minnesota and North Dakota.
- Project Manager and Deputy Project Manager for new 69- to 115-kV transmission lines in Minnesota.
- Minnesota Permitting Lead for a new system of new carbon dioxide pipelines in Minnesota.
- Project Manager for a proposed peat mine in Minnesota.
- Minnesota Permitting Lead for a crude oil replacement pipeline in North Dakota, Minnesota, and Wisconsin. Provided expert witness testimony as part of a MPUC Contested Case proceeding.
- Minnesota Permitting Lead for activities to support deactivation of an oil pipeline.



- Minnesota Permitting Lead for a new crude oil pipeline in North Dakota, Minnesota, and Wisconsin.
- Deputy Project Manager and Resource Report author (Geology, Soils, Socioeconomics, and Land Use) for a Federal Energy Regulatory Commission (FERC) 7(c) Environmental Report for a natural gas pipeline replacement project in Utah.
- Resource Report author for Socioeconomics and Land Use for a FERC 7(c) Environmental Report for a new natural gas pipeline in Utah.
- Co-authored the Alternatives Analysis for a FERC EIS for a new natural gas pipeline in Pennsylvania, West Virginia, Virginia, and North Carolina.
- Supported a FERC third-party EIS for a natural gas pipeline in Ohio and Michigan.
- Supported a FERC third-party EIS and Biological Assessment for a new natural gas pipeline in Wyoming, Utah, Nevada, and Oregon.
- Resource Report author (Reliability and Safety) and Document Specialist for a FERC 7(c) Environmental Report application for a natural gas pipeline from the North Slope of Alaska to the U.S.-Canada border.
- Deputy Project Manager for an applicant-prepared EA for an easement renewal for two existing natural gas pipelines that cross tribal land in Wisconsin.
- Supported ongoing environmental compliance for over 30 ethanol facilities in states across the midwestern/western US. Focused on compliance with environmental, health, and safety regulations for management of hazardous materials. Developed Facility Response Plans, Spill Prevention, Control, and Countermeasure Plans, Stormwater Pollution Prevention Plans, Process Safety Management and Risk Management Plans, Emergency Response Plans, General Industry Safety Programs, US Coast Guard plans, and Security Plans. Supported facilities during audits by the US Environmental Protection Agency and the US Occupational Safety and Health Administration. Conducted employee training on spill prevention, emergency response, storm water management, and workplace safety.

## **EDUCATION**

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B.A., Environmental Studies and English. Geography Minor. Gustavus Adolphus College. Magna Cum Laude.