

December 28, 2023

Sen. Nick A. Frentz, Chair
Energy, Utilities, Environment and Climate Committee
Minnesota Senate
3109 Minnesota Senate Building
St. Paul, MN 55155

Sen. Fong Hawj, Chair
Environment, Climate and Legacy Committee
Minnesota Senate
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Rep. Rick Hansen, Chair
Environment and Natural Resources Finance and Policy Committee
Minnesota House of Representatives
State Office Building, Suite 407
100 Rev. Martin Luther King Jr. Blvd.
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Rep. Zack Stephenson, Chair
Commerce Finance and Policy Committee
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Dear Legislators:

The Minnesota Public Utilities Commission (Commission) respectfully transmits this Report to the Legislature of the State of Minnesota as required by Minnesota Statutes, Section 116C.83, concerning the Commission's decision approving additional spent nuclear fuel storage at the Monticello Nuclear Generating Plant (MNGP or Plant) Independent Spent Fuel Storage Installation (ISFSI).

Respectfully submitted,



Will Seuffert
Executive Secretary

Legislative Report

Report of the Minnesota Public Utilities Commission’s decision concerning additional spent nuclear fuel storage at the Monticello Nuclear Generating Plant Independent Spent Fuel Storage Installation (ISFSI) as Required by Minnesota Statute §116C.83

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Estimated Costs of Preparing this Report

The cost information reported below is the estimated cost of preparing this report document. Special funding was not appropriated for the costs of preparing this report. In accordance with Minn. Stat. §3.197, the estimated cost incurred by Minnesota Public Utilities Commission in preparing this report is less than \$1000.

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1. Reporting Requirement

Minnesota Statutes, Section 116C.83 establishes several requirements for Commission approval of additional dry cask storage at the MNGP. Minnesota Statutes, Section 116C.83, Subd. 3 states:

(a) To allow opportunity for review by the legislature, a decision by the commission on an application for a certificate of need pursuant to subdivision 2 is stayed until the June 1 following the next regular annual session of the legislature that begins after the date of the commission decision. By January 15 of the year of that legislative session, the commission shall issue a report to the chairs of the house of representatives and senate committees with jurisdiction over energy and environmental policy issues, providing a summary of the commission's decision and the grounds for that decision, the alternatives considered and rejected by the commission, and the reasons for rejecting those alternatives. If the legislature does not modify or reject the commission's decision by law enacted during that regular legislative session, the commission's decision shall become effective on the expiration of the stay.

(b) The stay of a commission decision to approve an application for a certificate of need for additional dry cask storage under subdivision 2 does not apply to the fabrication of the spent-fuel storage casks. However, if the utility proceeds with the fabrication of casks, it does so bearing the risk of an adverse legislative decision.

2. Historical Background on MNGP and the ISFSI

The Monticello Nuclear Generating Plant is owned and operated by Northern States Power Company-Minnesota, doing business as Xcel Energy (Xcel). The Plant is equipped with a single-unit, boiling water reactor rated for gross output at 671 megawatts (MW). The MNGP is located within the city limits of Monticello, Minnesota in Wright County, on the western bank of the Mississippi River approximately 50 miles northwest of Minneapolis. The Plant became operational in 1971. The MNGP site in total consists of approximately 2,150 acres of land owned by Xcel Energy.

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MNGP was originally licensed by the U.S. Nuclear Regulatory Commission (NRC) to operate through 2010. The Plant operates a single unit boiling water reactor powered by nuclear fuel. Spent nuclear fuel from the operation of the Plant is stored on site in a spent fuel pool inside the Plant, and a separate outdoor ISFSI.

On October 23, 2006, the Commission granted a certificate of need for construction of the ISFSI at the MNGP.¹ The Commission's order authorized the storage of up to 30 spent fuel containers, vaults, and associated equipment necessary to allow the Plant to remain operational through 2030.

MNGP uses fuel assemblies in its reactor core to generate heat, which then boils water to produce steam inside the reactor vessel. The steam is directed toward the turbine generators that produce electrical power. Each fuel assembly is used for several fuel cycles (about six years) before its output drops to the point it is no longer effective. Spent nuclear fuel assemblies are offloaded to a spent fuel pool located in the reactor building adjacent to the reactor. After sufficient cooling time in the spent fuel pool, the used fuel assemblies are loaded into a dry cask canister system. The canisters are sealed before being moved to the ISFSI. The canisters provide radiation shielding to workers and members of the public during loading and storage, as well as protection from external hazards during storage.

On November 8, 2006, the NRC extended MNGP's operating license authorizing its operation through September 8, 2030.

3. Xcel Energy's Certificate of Need Application

Xcel Energy filed its most recent integrated resource plan (IRP) with the Commission on July 1, 2019.² Integrated Resource Planning is the process where a utility, the Commission, and

¹ *Order Granting Certificate of Need for Interim Independent Spent fuel Storage Installation*, Docket No. E-002/CN-05-123, e-Dockets No. [3390312](#), October 23, 2006.

² Commission Docket E-002/RP-19-368.

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stakeholders examine a utility's current and planned electricity generation for the next 15 years. In its Integrated Resources Plan, Xcel Energy claimed that extending operations of the MNGP would be the most prudent path forward to achieving its carbon-free clean energy goals while also maintaining affordability and reliability.³ Xcel Energy believes that operation of the MNGP through 2040 is a reasonable approach to ensure the adequacy, reliability, and efficiency of Minnesota's energy supply. Xcel Energy indicated that additional storage at the MNGP ISFSI is necessary to support operation of the MNGP through 2040. In its April 15, 2022 Order on Xcel Energy's 2019 IRP, the Commission allowed Xcel Energy to continue pursuing a ten-year extension for MNGP.

Additional storage of spent nuclear fuel in the MNGP ISFSI requires a certificate of need (CN) from the Commission.⁴ On September 1, 2021, Xcel Energy filed its CN application with the Commission to enable expansion of the MNGP ISFSI. Xcel requested approval for additional storage capacity of spent nuclear fuel at the ISFSI sufficient to extend its operating life by 10 years – from 2030 to 2040. Xcel estimated that approximately 14 additional spent fuel storage canisters will be needed for continued operations through 2040. This additional storage will require installation of a second concrete support pad within the existing ISFSI sized to accommodate approximately 36 vaults of the current design. A modular concrete storage system would be placed on a new concrete pad within the ISFSI. Xcel indicated that spent fuel would be stored in steel canisters, with the canisters then being placed into the concrete storage system.

Xcel Energy is currently seeking a Subsequent License Renewal from the NRC to extend MNGP's operating license to enable continued electrical generation at the Plant through the year 2050.⁵

³ Certificate of Need Application page 4, Docket E-002/RP-19-368 September 1, 2021.

⁴ Minnesota Statutes § 116C.83, Subd. 2 states in part: "expansion or establishment of an independent spent fuel storage facility at a nuclear generation facility in this state, is subject to approval of a certificate of need by the Public Utilities Commission pursuant to section 216B.243."

⁵ NRC only issues operating licenses with 20-year periods, hence the disparity between the ISFSI's certificate of need approval to the year 2040, and the potential 2050 expiration date of MNGP's NRC-issued supplemental renewal operating license.

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4. Commission Review Process

Upon receiving the certificate of need application, the Commission initiated a completeness review to ensure the application contained sufficient information to begin the review process.

In addition to a certificate of need, an Environmental Impact Statement (EIS) must be prepared on the facility by the Department of Commerce (Department) prior to the Commission's decision on a certificate of need.⁶ The Department prepared a draft scoping decision and a scoping environmental assessment worksheet (EAW) to aid in the development of the scope of the EIS.

At the conclusion of the public comment period, the Department issued a scoping decision for the EIS. Department staff prepared a draft EIS, which was issued for public comment. The Department replied to Comments on the draft EIS in a final EIS. After soliciting public comment, the Department determined the adequacy of the final EIS. The final EIS was evaluated by the Commission when determining whether to issue a CN for the project.

In November 2022, Xcel detected tritium (a radioactive isotope of hydrogen) in groundwater near the plant. Xcel notified the State Duty Officer and subsequently consulted with the Pollution Control Agency, the Health Department (MDH), and Department of Natural Resources to establish a response plan to control the leak, abate tritium from groundwater and protect the public. After continued recovery of tritium from the groundwater, MDH concluded that there is "no health risk" to the public from the leak and that there was no evidence of impact to wildlife or plants⁷.

⁶ Minnesota Statute 116C.83 identifies the Department of Commerce as the responsible governmental unit responsible for preparation of an environmental impact statement for Xcel Energy's proposed expansion of the MNGP ISFSI. The EIS was prepared in accordance with Minnesota Rule parts 4410.2000 through 4410.3100.

⁷ In granting the certificate of need, the Commission [required Xcel](#) to file quarterly reports describing its activities to remediate the leak until such time as the monitoring groundwater wells at MNGP demonstrate tritium levels below the Environmental Protection Agency drinking water standard of 20,000 pico-curies per liter for four consecutive quarters.

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After preparation of the FEIS, the Commission held public hearings on the project in the City of Monticello. An administrative law judge (ALJ) from the Office of Administrative Hearings presided over the hearings. Members of the public were provided an opportunity to speak at the hearings, ask questions, and submit comments. The ALJ evaluated the FEIS, the comments received at the hearings and during the related public comment period, along with the entire record to prepare a report for the Commission. The ALJ issued a [Report](#) that contains a summary of the proceedings, findings of fact, conclusions of law, and recommendations.⁸ The ALJ Report recommended the Commission approve the certificate of need with several conditions.

5. Commission Evaluation of Alternatives to Expansion of the MNGP ISFSI or Continued Operation of the MNGP

Several alternatives to the Project were evaluated in the Application and in the Environmental Impact Statement. Neither the Department or the ALJ found support for any of the alternatives and recommended the Commission approve Xcel’s application with conditions. The Commission agreed with the Department and the ALJ. The following alternatives to the Project were evaluated.⁹

A. No Action Alternative

Authorization of any additional dry cask storage or expansion of the MNGP ISFSI requires the Commission’s approval of a certificate of need pursuant to Minnesota Statute section 216B.243. In such a proceeding, the commission may make a decision that could result in a shutdown of the MNGP.¹⁰

⁸ Summary of Testimony, Findings of Fact, Conclusions of Law, and Recommendations,

⁹ See Sections 7 and 8 of the [Final Environmental Impact Statement – Monticello Nuclear Plant Additional Spent Fuel Storage](#), January 2023.

¹⁰ Minnesota Statute § 116C.83, Subd. 2.

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Absent other alternatives for storing additional spent fuel, a denial of the certificate of need application would result in the MNGP ceasing operations in 2030. In this event, Xcel would need to replace the capacity and energy provided by MNGP to maintain reliable operation of the electric transmission system. Xcel modeled two scenarios for replacement of MNGP.

Both replacement scenarios have greater aesthetic and land use impacts than continued operation of the MNGP. Additionally, both scenarios would have relatively greater impacts on fauna, specifically birds and bats. Xcel Energy’s modeling indicates that both replacement scenarios are more expensive on a social cost basis and have greater carbon emissions than continued operation of the MNGP.¹¹ Both scenarios would require additional infrastructure, such as transmission lines, with associated costs and impacts.

**Replacement Scenarios Compared to Continued Operation of MNGP
in the 2030-2040 Timeframe**

Characteristic	Scenario 1	Scenario 2
Resources selected to replace MNGP capacity and energy	<ul style="list-style-type: none"> • Combustion turbines (750 MW) • Wind turbines (750 MW) • Solar farms (200 MW) • Market purchases 	<ul style="list-style-type: none"> • Wind turbines (950 MW) • Solar farms (700 MW) • Storage (300 MW) • Market purchases
Additional land use (acres)	1,670	5,215
Additional present value social cost (PVSC, \$ million)	63	77
Additional bird and bat fatalities	22,500 (birds) 75,000 (bats)	28,500 (birds) 95,000 (bats)
Additional carbon emissions (short tons)	7,215,153	1,806,064

¹¹ Certificate of Need Application, Section 9.3.

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B. Additional Spent Fuel Pool Storage

Spent fuel in the MNGP spent fuel pool could be consolidated through two means - 1) fuel rod consolidation, a process which involves disassembling spent fuel assemblies and repackaging the assemblies into a smaller volume, or 2) re-racking, a process in which fuel assemblies are left intact and are placed in higher density storage racks. Both processes are directed to using less space to store spent fuel in the pool. Using less space would free up space for additional spent fuel assemblies.

Industry experience with fuel rod consolidation has shown that it is not a feasible strategy for creating sufficient additional storage space in a spent fuel pool. The predicted space-savings in a pool were not able to be realized. Additionally, radiation doses to workers were higher than predicted due to labor-intensive spent fuel handling.

The movement of spent fuel assemblies from low-density to high-density racks within the spent fuel pool (“re-racking”) is a possible strategy for creating some additional space in a spent fuel pool. Xcel Energy estimated that re-racking in the MNGP spent fuel pool would result in additional storage of spent fuel but also that it would support less than six years of additional MNGP operation. The Commission concluded that re-racking could not support operation of the MNGP through 2040 and is not a feasible option.

C. Alternative Spent Fuel Storage Technologies

The NRC has certified two basic types of spent fuel storage technology – casks and canisters. The MNGP currently uses canister technology. Xcel Energy has indicated that it will solicit bids solely for canister systems for additional storage in the MNGP ISFSI.

Xcel Energy could use a cask system for the storage of spent fuel in the MNGP ISFSI. The Commission has authority to grant a certificate of need contingent on modifications to the project, e.g., use of a cask system rather than a canister system.

Advantages of a cask system include relatively less handling of spent fuel compared to a canister system and relatively lower radiation doses for workers. Casks are bolted shut and do not require welding. Casks are all-in-one metal vessels; unlike canister systems, they do not

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require a transfer cask. Because a cask system requires relatively less spent fuel handling, worker radiation doses are relatively lower for cask systems.

Disadvantages of a cask system include cost, a relative lack of industry innovation, and potential obstacles in moving casks to an offsite storage facility. Casks are large metal vessels that require specialized equipment to fabricate and handle. Because there are only a few facilities that can manufacture casks and because of the amount of steel involved, casks are about twice as expensive as canisters. Over time, canister systems have been adopted by the nuclear industry as the predominant method for storing spent nuclear fuel. As a result, advances in canister systems can be shared among ISFSI operators. These advances are not available to cask systems. Thus, cask systems are not supported by spent fuel industry innovations or advances.

Xcel Energy noted that the only cask system currently available for the storage of spent fuel from a boiling water reactor such as MNGP is the TN-68 system manufactured by Orano, Inc. Xcel Energy indicated that the TN-68 cask diameter is larger than the loading space in the MNGP spent fuel pool. Thus, use of the cask would require moving spent fuel racks within the spent fuel pool. Further, the cask's weight exceeds the lifting capability of the plant's reactor building crane. A crane with a greater lifting ability would be required to use the TN-68 cask.

D. Federal Geological Repository – Yucca Mountain

The Nuclear Waste Policy Act (NWPA) governs efforts in the United States to manage spent nuclear fuel. Since enacted in 1982 (and subsequently amended), the NWPA:

- Requires DOE to establish a permanent geologic repository at Yucca Mountain, Nevada, for the storage of spent nuclear fuel.
- Allows DOE to construct a monitored retrievable storage (MRS) facility if DOE recommends to the President that a permanent repository can be constructed; further, construction of the MRS facility cannot begin until Yucca Mountain has received a construction permit.
- Establishes a nuclear waste fund to pay for development of a geologic repository.

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The U.S. Department of Energy (DOE) completed an EIS for the Yucca Mountain repository in 2002. DOE submitted a license application for the Yucca Mountain repository to the NRC in 2008. In 2010, the Obama administration determined that the Yucca Mountain repository should not be opened and discontinued funding for the repository. Subsequent administrations have (1) proposed funding for the repository but not received funding from Congress and (2) not requested funding for the repository. Thus, the review of the Yucca Mountain repository remains within the NRC licensing process without funding to move forward.

At the time the Obama administration foreclosed the Yucca Mountain repository, it established a Blue-Ribbon Commission (BRC) to recommend new spent fuel management strategies. The BRC recommended that the NWPA be amended to adopt a consent-based approach to the siting of a geologic repository. Additionally, the BRC recommended that the NWPA be amended to allow for multiple MRS facilities whose development could proceed independent of a repository.

Since the BRC report, several bills have been introduced in Congress that address consent-based siting for MRS facilities and for a geologic repository. To date, none of these bills has been passed out of Congress or enacted into law. DOE had anticipated that Yucca Mountain would open by 2048; this date is now uncertain.

E. Interim Off-Site Storage Facilities

A federal repository for commercial spent nuclear fuel remains undeveloped and spent nuclear fuel continues to accumulate at reactor sites throughout the United States. Two companies have proposed privately developed and operated consolidated interim storage facilities (CISFs).

Interim Storage Partners LLC has proposed a CISF in Andrews County, Texas. The CISF would be built in eight phases with each phase holding 5,000 metric tons of spent fuel, for a total of 40,000 metric tons. The NRC issued a license for the first phase of the facility on September 13, 2021.

Holtec International (Holtec) has proposed a CISF in Lea County, New Mexico. The CISF would, ultimately, hold up to 173,600 metric tons of spent fuel in 10,000 spent fuel canisters Holtec's

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initial application to the NRC requested a license for 8,680 metric tons of spent nuclear fuel stored in Holtec spent fuel canisters. The NRC issued a final EIS for the project in July 2022.

To date, neither the Interim Storage Partners CISF nor the Holtec CISF has accepted spent nuclear fuel for storage, and it is unclear when or whether they might accept such fuel. The state of Texas has enacted a law banning new storage sites for spent nuclear fuel within the state. The state of New Mexico has filed a lawsuit to block the licensing of the Holtec CISF.

Additionally, it is unclear whether private CISFs are compatible with the NWPA. The NWPA permits DOE to construct a monitored retrievable storage facility if Yucca Mountain has received a construction permit. It is unclear if DOE may contract with a private developer for the interim storage of spent fuel absent a Yucca Mountain construction permit. In 2019, then DOE secretary Rick Perry indicated that current law prevents DOE from contracting for interim storage of spent fuel at a private facility. Legislation authorizing DOE to enter contracts with private CISFs was introduced in Congress several times in the 2015-2021 timeframe; however, none of the bills were enacted into law.

CISFs are designed to store spent fuel canisters. Xcel Energy intends to solicit bids solely for canisters systems for the additional spent fuel required for MNGP operation through 2040. However, because there are several legal and political challenges to storing spent fuel in CISFs, and these challenges will likely play out over an extended period, CISFs are not currently a feasible alternative to additional storage of spent fuel in the MNGP ISFSI.

F. Effect of Conservation Programs

In making its determination on the ISFSI expansion, the Commission is required to consider the effects of existing or expected conservation programs of the applicant. Xcel Energy noted in its Direct Testimony that it offers more than 40 efficiency and demand response programs that have saved nearly 11, 735 Gigawatt-hours of energy and 4,113 MW of demand. Xcel Energy's most recent Integrated Resource Plan proposed growing its demand response portfolio to over 1,500 MW by 2034 which would result in 780 Gigawatt-hours of annual savings. The Department of Commerce concluded in its modeling of the potential conservation programs identified in Xcel Energy's 2019 Integrated Resource Plan that additional levels of energy efficiency beyond those proposed would increase system costs. The Commission ultimately

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agreed with the conclusion in the ALJ Report that there was no evidence in the record that suggests that additional conservation plans could replace generation from MNGP if it was taken out of service in 2030.

G. Off-Site Storage Alternatives

Minnesota Stat. § 116C.83, subd. 4. requires that spent nuclear fuel in a Spent Fuel Pool or in dry casks at a nuclear generating plant must be managed to facilitate the shipment of those wastes out of state to a permanent or interim storage facility as soon as these transfers are feasible. Minnesota law also requires that until shipment out of state can be facilitated, the spent fuel generated by a Minnesota nuclear generation facility must be stored on the site of that facility.

Reprocessing Spent Nuclear Fuel

The administrative record evaluated numerous off-site alternatives to the MNGP ISFSI. Xcel Energy noted that there are no facilities available now or in the near future that would provide reprocessing of spent nuclear fuel.

Existing Off-Site Storage Facilities

The ALJ concluded that utilizing off-site contractual storage facilities is not an available or a viable alternative to the expansion of the MNGP ISFSI; noting that the sole facility storing spent fuel on a contractual basis is no longer accepting spent nuclear fuel from commercial nuclear power plants.

H. Generation Alternatives

The preferred alternative from Xcel Energy's IRP included continued operation of MNGP through 2040 with retirement of specific existing baseload energy resources before 2034.

The IRP included modeling of two generational cases as alternatives to the continued operation of MNGP to 2040. The first case was the fully optimized replacement of MNGP in the year 2030 with additional mix of other generation resources. The second case would replace MNGP with renewable and storage resources. In addition to identifying resource assumptions, the modeling incorporated the cost, environmental performance, and Risk/Reliability of both cases.

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Xcel Energy’s analysis shows that Replacement Case 1 initially achieves lower levels of carbon emissions (when measured against a 2005 baseline) in 2030, but then regresses from this 2030 low after the Monticello Plant retires. This regression is due to an increase in gas combustion generation and market purchases required to meet projected customer needs. Replacement Case 1 results in nearly one million tons of additional carbon emissions to meet customer needs in just 2031, the first year after the Monticello Plant would cease operations.

Xcel Energy’s analysis shows that Replacement Case 2 performs similarly to the IRP Alternate Plan, and better than Replacement Case 1, because the resource planning model was required to choose zero emission resources. However, Replacement Case 2 requires additional market purchases to meet customer needs and thus still results in slightly higher carbon emissions.

When considering the final EIS and capacity expansion modeling, the Department of Commerce asserted that continued operation of the Monticello Plant through 2040 is expected to create minimal impacts to the natural and socioeconomic environment. On the other hand, the alternatives in both Replacement Case 1 and Replacement Case 2 would likely generate significant impacts through additional greenhouse gas emissions, and flora and fauna impacts.

In its April 15, 2022 order approving Xcel Energy’s Upper Midwest Integrated Resource Plan¹², the Commission agreed with Administrative Law Judge that the two replacement cases were reasonable test cases by which to compare the environmental impacts of extending the life of the MNGP. The Commission adopted the finding that the cost considerations weigh in favor of extending the Monticello Plant and granting the CN, as compared to the Company’s two replacement cases.

¹² *Order Approving Plan with Modifications and Establishing Requirements for Future Filings*, e-Dockets No. [20224-184828-01](#), April 15, 2022.

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6. Summary of the Commission Decision and Grounds for Decision

In its October 17, 2023, the Commission issued its *Order Granting Application with Conditions*¹³ for the MNGP ISFSI certificate of need. In the Order, the Commission adopted the ALJ Report with modifications¹⁴ and agreed with the ALJ that the following requisite criteria for granting the certificate of need have been met:

- A. the probable direct or indirect result of denial would be an adverse effect upon the future adequacy, reliability, safety, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:
 - 1) the accuracy of the applicant's forecast of demand for the energy or service that would be supplied by the proposed facility;
 - 2) the effects of existing or expected conservation programs of the applicant, the state government, or the federal government;
 - 3) the effects of promotional practices in creating a need for the proposed facility, particularly promotional practices that have occurred since 1974;
 - 4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and
 - 5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

- B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering;

¹³ E-Dockets No. [202310-199638-01](#), October 17, 2023.

¹⁴ The Commission's changes to the ALJ Report provided clarification to several Findings of Fact but did not modify its Conclusions or Recommendations.

1. the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;
 2. the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;
 3. the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and
 4. the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;
- C. it has been demonstrated by a preponderance of the evidence on the record that the consequences of granting the certificate of need for the proposed facility, or a suitable modification thereof, are more favorable to society than the consequences of denying the certificate, considering:
1. the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;
 2. the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;
 3. the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and
 4. the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and
 5. that it has not been demonstrated on the record that the design, construction, operation, or retirement of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

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- D. The record in this proceeding, and in the Company's most recent IRP docket, demonstrate the reasonableness of Xcel Energy's forecast for energy demand and corresponding need for additional spent fuel storage.
- E. Conservation efforts have been considered by the Company and cannot replace the need for the Project.
- F. No promotional activities have given rise to the need for the Project.
- G. There are no current or planned facilities not requiring a CN that can meet the needs met by the Project.
- H. The Project makes efficient use of resources by generating reliable, carbon- free energy with minimal impacts to the physical environment.
- I. The Project will enhance the future adequacy, reliability, and efficiency of energy supply in Minnesota and the region.
- J. An evaluation of alternatives demonstrated that there is not a more reasonable or prudent alternative that the Project, considering the Project size, type, and timing; cost; human and environmental impacts, and system reliability.

The Commission granted the certificate of need with the following conditions:

- A. Xcel Energy must justify any costs, including those of operations and maintenance, ongoing capital expense, revenue requirements related to capital including in the rate base, insurance expense, land-lease expense, and property tax expense.
- B. The Commission will otherwise hold Xcel Energy accountable for the price and terms used to evaluate the project.
- C. Ratepayers will not be put at risk for any assumed benefits that do not materialize.
- D. Xcel Energy's customers must be protected from risks associated with the non-deliverability of accredited capacity, energy, or both, from the project. The Commission may adjust Xcel's recovery of costs associated with this project in the future if actual production varies significantly from assumed production over an extended period.

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- E. The Commission’s decision does not address the operations of the Monticello Nuclear Generating Plant beyond 2040, which will be subject to review in future resource planning proceedings.
- F. Xcel Energy shall file Monticello Nuclear Generating Plant reports as follows:
 - 1. Content: The reports must contain:
 - a. Xcel Energy’s estimate of the number of casks required to run the Monticello Plant through 2040;
 - b. the amount of fuel being loaded each cycle;
 - c. the capacity of the cask selected; and
 - d. a summary of all proceedings before federal regulatory authorities in the past two years regarding licensure of the facility and removal of waste.
 - 2. Recipients: Xcel Energy shall file the reports with —
 - a. the Commission and
 - b. the chairs of the committees with jurisdiction over energy and environmental policy issues in both the Minnesota House of Representatives and Senate.
 - 3. Timing: Xcel Energy shall file the reports on or before January 15, 2029, and by January 15 of odd-numbered years thereafter until either —
 - a. a new certificate of need application has been filed for additional storage for the Monticello Plant to operate beyond 2040; or
 - b. the Plant has begun the process of decommissioning.

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For more information contact:

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