STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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In the Matter of the Certificate of Need Application for the Minnesota Energy Connection Project in Sherburne, Stearns, Kandiyohi, Wright, Meeker, Chippewa, Yellow Medicine, Renville, Redwood, and Lyon Counties in Minnesota	Docket No. E002/CN-22-131

Initial Comments of the Joint Commenters
on the Merits of the Certificate of Need Application

The Citizens Utility Board of Minnesota ("CUB"), Fresh Energy, Minnesota Center for Environmental Advocacy, Center for Rural Affairs, and the Clean Grid Alliance (collectively, the "Joint Commenters") respectfully submit these Initial Comments in response to the Minnesota Public Utilities Commission's ("Commission") Notice of Comment Period issued on June 5, 2024 in the above-referenced matter.

I. BACKGROUND

Pursuant to Minn. Stat. § 216B.243 and Minn. R. Ch. 7849, Northern States Power Company d/b/a Xcel Energy ("Xcel" or the "Company") applied for a Certificate of Need on March 9, 2023 to construct the Minnesota Energy Connection Project (the "Project").[1] The Company subsequently filed Reply Comments in the instant docket and submitted a Revised Certificate of Need Application incorporating an updated load forecast.[2] On May 2, 2023, the Commission accepted Xcel's application as complete and authorized use of the informal review process available under Minn. R. 7829.1200.[3]

The Minnesota Energy Connection Project consists of two high voltage transmission lines spanning southern and southwestern Minnesota and is designed to repurpose existing interconnection rights at the Sherburne County Generation Station Substation ("Sherco Substation"). The Project is

[1] *In the Matter of the Certificate of Need Application for the Minnesota Energy Connection Project in Sherburne, Stearns, Kandiyohi, Wright, Meeker, Chippewa, Yellow Medicine, Renville, Redwood, and Lyon Counties in Minnesota*, Docket No. E002/CN-22-131, Initial Application for a Certificate of Need for the Minnesota Energy Connection Project (Mar. 9, 2023) (hereinafter "Initial Certificate of Need Application").

[2] *In the Matter of the Certificate of Need Application for the Minnesota Energy Connection Project in Sherburne, Stearns, Kandiyohi, Wright, Meeker, Chippewa, Yellow Medicine, Renville, Redwood, and Lyon Counties in Minnesota*, Docket No. E002/CN-22-131, Xcel Energy Reply Comments (Apr. 12, 2023); Revised Application for a Certificate of Need for the Minnesota Energy Connection Project (May 18, 2023) (hereinafter "Revised Certificate of Need Application").

[3] *In the Matter of the Certificate of Need Application for the Minnesota Energy Connection Project in Sherburne, Stearns, Kandiyohi, Wright, Meeker, Chippewa, Yellow Medicine, Renville, Redwood, and Lyon Counties in Minnesota*, Docket No. E002/CN-22-131, Commission Order (May 2, 2023).

fundamentally important to enabling renewable energy integration and will support the Company's efforts to generate or acquire 100 percent carbon-free energy resources by 2040.[4]

II. ANALYSIS

Minn. Stat. § 216B.243, Subd. 2 requires the Commission to issue a Certificate of Need before allowing a large energy facility to be sited or constructed within the state. Large energy facilities include, among other projects, any high-voltage transmission line that is (a) 200 kV or more and greater than 1,500 feet in length; or (b) 100 kV or more and either crosses a state line or has more than ten miles of its length in Minnesota.[5] The Minnesota Energy Connection Project is comprised of two 345 kV transmission lines that span approximately 160 to 180 miles in length and therefore qualifies as a large energy facility under both these definitions. A Certificate of Need must be granted before the Project moves forward.

In evaluating whether a Certificate of Need is warranted, the Commission must consider the criteria detailed in Minn. Stat. § 216B.243, Subd. 3. Pursuant to Minn. R. 7849.0120, which reiterates these statutory elements, the Commission must grant a Certificate of Need upon determining the following conditions are met:

(A) The probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states;
(B) A more reasonable and prudent alternative to the proposed facility has not been demonstrated;
(C) The proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health; and
(D) The record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

In recognition of these overarching criteria, the Commission posed three questions for comment in its Notice issued June 5, 2024.[6] Stakeholders were asked (1) whether the Commission should grant the Certificate of Need for the proposed Project; (2) if granted, whether additional conditions or requirements should be included in the Certificate of Need; and (3) whether there are any other issues or concerns related to the matter.[7]

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[4] Revised Certificate of Need Application at 1; Minn. Stat. § 216B.1691, Subd. 2(g) (establishing Minnesota's carbon-free electricity standard).
[5] Minn. Stat. § 216B.2421, Subds. 2(2) and (2)(3).
[6] *In the Matter of the Certificate of Need Application for the Minnesota Energy Connection Project in Sherburne, Stearns, Kandiyohi, Wright, Meeker, Chippewa, Yellow Medicine, Renville, Redwood, and Lyon Counties in Minnesota*, Docket No. E002/CN-22-131, Notice of Comment Period on the Merits of the Certificate of Need Application at 1 (June 5, 2024).
[7] *Id*.

A. The Commission Should Grant a Certificate of Need for the Project.

Upon reviewing the record, the Joint Commenters find Xcel has met each of the criteria for granting a Certificate of Need. We address each question posed by the Commission and each element of Minn. R. 7849.0120 in turn.

i. Denying the Project would have an adverse effect on the future adequacy, reliability, and efficiency of energy supplies.

When evaluating whether a Certificate of Need should be granted, the Commission must consider whether denying the Project would have an adverse effect on the "future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states."[8]

The Project is designed to retain and efficiently re-utilize the Company's existing interconnection rights at the Sherco Substation.[9] Under Midcontinent Independent System Operator ("MISO") rules, these interconnection rights cannot be treated as standalone assets and must be reutilized within three years of Sherco's closure.[10] As the Commission recognized when approving the Company's integrated resource plan ("IRP"), the retirement of these thermal resources will necessitate Xcel acquiring "approximately 600 MW more solar-powered generation and 2,150 MW of wind-powered generation on the Sherco gen-tie line—or an equivalent amount of energy and capacity from a combination of wind, solar, and/or storage."[11] The Commission also authorized Xcel to partially fill this need through company-owned renewable and/or storage resources to "fully reutilize the Sherco Unit 1 and Unit 3 interconnections."[12] These new generation resources—together with the proposed Project—are needed to maintain the adequacy of electricity supplies so that Xcel can continue providing reliable electricity service to its customers.

As proposed, the Project will enable approximately 2,000 megawatts (MW) of electricity to be cost-effectively delivered to the Sherco Substation, and further allow more than 4,000 MW of renewable generation to be interconnected to the grid.[13] These resource additions will play a pivotal role in Xcel meeting Minnesota's recently enacted carbon-free energy standard by providing replacement generation necessary for the timely retirement of Sherco Units 1 and 3.[14] In the absence of the Project—and the integration of new generation resources enabled by its construction—fossil fuel retirements could be delayed, interconnection rights could be lost, and the ability to procure "sufficient energy capacity to meet customer needs" could be jeopardized.[15]

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[8] Minn. R. 7849.0120, Subp. A.
[9] Revised Certificate of Need Application at 1, 4-5, 20.
[10] Revised Certificate of Need Application at 40 (citing MISO Tariff, Attachment X, § 3.3.1).
[11] *In the Matter of the 2020-2034 Upper Midwest Integrated Resource Plan of Northern States Power Company d/b/a Xcel Energy*, Docket No. E002/RP-19-368, Order Approving Plan with Modifications and Establishing Requirements for Future Filings at 14 (Apr. 15, 2022) (hereinafter "Commission IRP Order").
[12] Commission IRP Order at 14.
[13] Revised Certificate of Need Application at 1.
[14] Revised Certificate of Need Application at 20.
[15] Revised Certificate of Need Application at 20.

For these reasons, denying the project or delaying its construction until after Xcel's interconnection rights have expired would have an adverse effect on the future adequacy, reliability, and efficiency of energy supplies.

ii. A more reasonable and prudent alternative has not been demonstrated.

Minn. R. 7849.0120, Subp. (B) requires the Commission to consider whether a more reasonable and prudent alternative to the proposed facility has been demonstrated by a preponderance of evidence on the record. In evaluating such alternatives, the Commission must consider the appropriateness of the size, type, timing, cost, and reliability of the Project as compared with alternatives, as well as the potential impacts to natural and socioeconomic environments posed by each option.[16]

Throughout its Certificate of Need Application, the Company studied a wide array of transmission and non-transmission alternatives. Ten different 345 kV transmission configurations and one 500 kV alternative were evaluated together with series compensation and voltage support technologies.[17] Transmission lines at lower voltages were also evaluated and rejected due to high energy losses and the inability to transfer energy at the levels needed to reutilize Sherco interconnection rights.[18] In addition to these transmission options, Xcel evaluated whether the need to construct the Project could be obviated by upgrading existing transmission lines or generation facilities, investing in conservation or demand-side management, or taking a combination of approaches.[19]

Of the studied possibilities, Xcel determined Option 9a was preferred as it would provide greater capacity at lower costs and allow the Company to reutilize its Sherco interconnection rights.[20] The Company describes Option 9a as follows:

> Two 345 kV lines, with the longest portion of both lines compensated to 20% of impedance, one 150 MVAR STATCOM located in the middle of the longest line section of each line, and one synchronous condenser at the Terminal Substation connected to each line.[21]

To properly compare Option 9a against alternatives, it is essential to understand the framework within which the Project is being proposed. As Xcel properly notes, the need sought to be addressed by the Project is to permit new renewable energy resources to connect to the broader regional grid through the Sherco Point of Interconnection ("POI").[22] The Commission's directive in the Company's IRP made clear that interconnection capacity should be reutilized to the extent reasonably possible.[23] Alternatives that risk the termination of those interconnection rights could halt the retirement of

[16] Minn. R. 7849.0120, Subp. (B)(1) – (4).
[17] Revised Certificate of Need Application at 62-63.
[18] Revised Certificate of Need Application at 72.
[19] Revised Certificate of Need Application at 71-75.
[20] Revised Certificate of Need Application at 75-77.
[21] Revised Certificate of Need Application at 63.
[22] Revised Certificate of Need Application at 59, 71; Commission IRP Order at 13-14.
[23] *See*, *e.g.*, Commission IRP Order at 13, 14, 31 (requiring Xcel to acquire generation resources to reutilize interconnection capacity made available following Sherco retirements, and directing the Company to begin the instant Certificate of Need proceedings to enable new energy resources to connect to the grid).

Sherco Units 1 and 3, subject the Company to delays in the MISO interconnection queue, or otherwise leave Xcel with insufficiently connected generation capacity to serve its customers. As a result, the most reasonable and prudent option will allow Xcel to retain its interconnection rights and connect new renewable energy resources at the lowest feasible cost.

The Joint Commenters agree that Option 9a would best serve the needs of the Company and its customers. Non-transmission alternatives would prevent the Company from utilizing its Sherco interconnection rights. Transmission Options 1-5, as well as 6, 7, and 10, were incapable of delivering at least 1,996 MW of electricity to the Sherco POI.[24] This left both Options 8 and Option 9 and its subparts as potential configurations for the Project. Ultimately, the Company determined Options 9 and 9a could deliver more energy than Option 8 through minor variations in how synchronous condensers were incorporated into the Project.[25] Further, the use of static synchronous compensators in both 9a and 9b would provide greater resiliency by addressing "potential turbine interaction issues that may occur due to the amount of anticipated wind generation."[26] As between these configurations, Option 9a could provide more capacity at lower costs than Option 9b.[27]

No other alternative has been demonstrated to be more reasonable or prudent than Option 9a.

iii. The Project will provide benefits to natural and socioeconomic environments, and further improve human health.

In determining whether the Project, or a suitable modification thereof, provides benefits to society in a manner that protects natural and socioeconomic environments, the Commission must consider:

(1) the relationship of the Project to overall state energy needs;
(2) the effects of the Project upon natural and socioeconomic environments compared to the effects of not building the Project;
(3) the effects of the Project in inducing future development; and
(4) the socially beneficial uses of the output of the Project, including its uses to protect or enhance environmental quality.[28]

The Project will provide substantial benefits to Minnesota, Xcel, and the customers and communities in the Company's service territory and throughout the MISO region. By allowing replacement electricity to be interconnected to the grid, the Project enables the planned retirement of thermal resources at Sherco.[29] In turn, the Project will lower emissions, enhance environmental quality throughout the state, and assist the Company in meeting Minnesota's carbon-free electricity standard. Jobs, tax revenues, and lease payments will be created, and new renewable energy investments could be spurred by the Project's ability to facilitate grid interconnection. For all these reasons, and as

[24] Revised Certificate of Need Application at 64.
[25] Revised Certificate of Need Application at 64.
[26] Revised Certificate of Need Application at 76.
[27] Revised Certificate of Need Application at 76.
[28] Minn. R. 7849.0120, Subp. (C)(1) – (4).
[29] Revised Certificate of Need Application at 20.

outlined below, the Joint Commenters find the Project provides tangible benefits to society in a manner that not only protects, but improves, natural and socioeconomic environments.

a. The Project supports overall state energy needs by replacing retiring thermal resources, enabling renewable energy integration, and lowering exposure to fuel cost volatility.

The Commission must consider the relationship between the Project and Minnesota's overall state energy needs.[30] This includes not only looking at the Project's role in providing retail consumers with adequate and reliable service at reasonable rates,[31] but also how the transmission development can contribute to the overarching objectives of achieving carbon-free electricity generation and a net-zero emissions economy.[32]

As detailed in Section A(i), above, the Project serves a fundamental role in maintaining the adequacy and reliability of electricity service within Xcel Energy's service territory as thermal energy resources are retired pursuant to Commission Orders in the Company's IRP proceedings.[33] Additionally, enabling the integration of renewable energy resources onto the grid will reduce customers' exposure to cost volatility in fuel markets and could contribute to more stable, affordable bills over time.

The Project is also essential to meeting Minnesota's recently enacted standard requiring electric utilities to generate or procure 100 percent of their retail electricity needs from carbon free resources by 2040.[34] Meeting this standard will necessitate a fundamental shift in how electricity is generated and transmitted across the state. As proposed, the Project would connect the "potentially rich wind and solar resources" in Lyon County to the broader MISO grid.[35] Without implementing transmission upgrades, high interconnection costs could leave these resources underutilized.[36]

Ultimately, the Project will support the state's clean energy needs while ensuring Minnesotans continue to receive reliable electric service.

b. The Project will produce net socioeconomic and environmental benefits.

When considering whether to grant a Certificate of Need, the Commission must compare the effects of the Project upon the natural and socioeconomic environments in Minnesota against the effects of not building the facility.[37]

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[30] Minn. R. 7849.0120, Subp. (C)(1).
[31] Minn. Stat. § 216B.01.
[32] *See* Minn. Stats. §§ 216B.1691, Subd. 2g; 216H.02, Subd. 1.
[33] *See In the Matter of Xcel Energy's 2016-2030 Integrated Resource Plan*, Docket No. E002/RP-15-21, Order Approving Plan with Modifications and Establishing Requirements for Future Resource Plan Filings at 11 (Jan. 11, 2017) (approving the retirement of Sherco 1 in 2026); *In the Matter of the 2020-2034 Upper Midwest Integrated Resource Plan of Northern States Power Company d/b/a Xcel Energy*, Docket No. E002/RP-19-368, Order Approving Plan and Establishing Requirements for Future Filings at 13 (Apr. 15, 2022) (directing Xcel to retire Sherco Unit 3 in 2030).
[34] Minn. Stat. § 216B.1691, Subd. 2g.
[35] Revised Certificate of Need Application at 12.
[36] Revised Certificate of Need Application at 12, 15, 17.
[37] Minn. R. 7849.0120, Subp. (C)(2).

As detailed above, the Project plays a pivotal role in allowing Xcel to retire its coal generation facilities. By reducing reliance on fossil fuels, the Project will lower exposure to fuel cost volatility and help the Company reduce its systemwide emissions output. Further, the Project will assist the Company in meeting state energy objectives by enabling delivery of at least 1,996 MW of carbon-free resources to the Sherco POI.[38] Importantly, the Project presents a more reasonable and cost-effective opportunity than alternative avenues for achieving these objectives because it makes use of existing interconnection rights.[39] If the Project is not built, new renewable generation could face delayed interconnection to the broader grid, thereby threatening the Company's ability to phase out coal generation and prolonging the detrimental environmental and health impacts associated with fossil fuel combustion.[40]

Socioeconomic impacts on local communities are also expected to be beneficial. The Company has committed to working with communities to foster socioeconomic opportunities—such as by using local retailers and workers—throughout Project development.[41] Xcel estimates that 100-200 jobs will be created during the 18-24 months of Project construction.[42] Additional labor will be required to build and maintain renewable energy projects that connect to the transmission line.[43] During this time, local businesses could see an increase in revenues associated with the purchase of construction materials or the sale of goods to utility personnel.[44] Tax revenues and lease payments will also accrue to local governments and landowners—both from the Project and from renewable energy developments made possible by the Project's construction.[45]

Xcel has taken care to identify potential impacts to public services, transportation routes, recreational opportunities, agricultural production, and archaeological and historical resources. These sites will be avoided to the extent possible through the routing process and, if necessary, mitigation efforts will be undertaken to minimize negative impacts.[46]

Ultimately, the Project will produce long-term benefits for Minnesotans by aiding the transition away from fossil fuels towards clean, reliable energy resources. Land use impacts will be avoided or minimized, and numerous jobs and tax revenues will be created as a result of Project development. The Joint Commenters find the Project will generate net socioeconomic and environmental benefits.

[38] *See generally* Revised Certificate of Need Application at 16.
[39] Revised Certificate of Need Application at 15, 17.
[40] Revised Certificate of Need Application at 17, 20, 75.
[41] Revised Certificate of Need Application at 131-32.
[42] Revised Certificate of Need Application at 20-21, 92.
[43] Revised Certificate of Need Application, Appx. C at 32-33.
[44] Revised Certificate of Need Application at 131-32.
[45] Revised Certificate of Need Application at 5, 21, 132.
[46] *See generally* Revised Certificate of Need Application at 17-18, 99-142.

c. The Project would allow existing energy projects to move forward and induce further development of renewable energy technologies.

The Commission must consider the effects of the Project on inducing future development in the state.[47] By including an endpoint in Lyon County, the proposed transmission lines will streamline the MISO interconnection process and make investments in renewable energy resources more viable throughout the region.

As confirmed in responses to a Request for Information ("RFI") issued by the Company, a significant amount of interest exists around developing renewable energy projects in the Lyon County area.[48] Responders indicated a desire to build "2,300 MW of solar, 7,600 MWh of energy storage, and 4,214 MW of wind," which is "well in excess" of the amount of capacity expected to connect to the Project.[49] Historically, projects in this region have "encountered higher interconnection costs and experienced lower success rates," but the addition of new transmission is expected to create economic efficiencies that would enable greater integration of these resources.[50]

By providing the transmission capacity necessary to make these developments viable, the Project supports renewable energy buildouts that will, in turn, create additional jobs, tax revenues, and local economic opportunities.

d. The Project generates social benefits by protecting and enhancing environmental quality through emissions reductions.

Finally, the Commission must consider the socially beneficial uses of the Project, including its uses to protect or enhance environmental quality.[51] As discussed throughout these Comments, the Project is designed to facilitate the retirement of fossil generation and repurpose interconnection rights to bring renewable energy onto the grid. These actions are fundamentally important to reducing emissions in the electricity sector and improving environmental quality throughout Minnesota.

The Energy Information Administration ("EIA") reports that Sherco produced approximately 9.9 million tons of CO_2 emissions in 2022.[52] This figure has since been reduced through the closure of Sherco Unit 2.[53] By providing the transmission capacity necessary for replacement renewable energy to come online, the Project can help Xcel finalize its exit from coal by 2030 and create a healthier environment for all Minnesotans.

[47] Minn. R. 7849.0120, Subp. (C)(3).
[48] Revised Certificate of Need Application at 12.
[49] Revised Certificate of Need Application at 12, Appx. C at 26.
[50] Revised Certificate of Need Application, Appx. C at 4, 39.
[51] Minn. R. 7849.0120, Subp. (C)(4).
[52] Energy Info. Admin., *Emissions by Plant and by Region: 2022* (Nov. 1, 2023), *https://www.eia.gov/electricity/data/emissions/*.
[53] Xcel Energy, Press Release, *Xcel Energy Retires First Coal Unit at Minnesota Power Plant* (Jan. 4, 2024), https://stories.xcelenergy.com/ArticlePage/?id=Xcel-Energy-retires-first-coal-unit-at-Sherco.

iv. The Project complies with applicable rules and regulations.

The Joint Commenters appreciate Xcel's efforts to engage with stakeholders, landowners, and federal, state, local, and tribal governments in its development of the Certificate of Need proposal. It is our understanding that the Company will continue to actively engage with these entities and agencies throughout the permitting and site selection processes to ensure all necessary legal and regulatory approvals are obtained. Thus far, the record does not demonstrate the design, construction, or operation of the Project is in violation of the policies, rules, or regulations of any agencies or governments.

B. The Commission Should Not Impose Additional Requirements as a Condition of Granting the Certificate of Need.

We do not believe any additional requirements need to be imposed as a condition of granting the Certificate of Need at this time.

C. The Joint Commenters Do Not Have Additional Issues or Concerns.

As captured throughout these Comments, the Joint Commenters find the Project will provide numerous benefits to Minnesotans by enabling the transition to cleaner energy resources. We find Xcel has sufficiently justified the Project's importance and met the statutory and rule requirements for the Commission to grant a Certificate of Need. We have no further issues or concerns relating to the Project at this time.

III. CONCLUSION

A Certificate of Need must be granted by the Commission upon making the determinations set forth in Minn. R. 7829.0120. As captured throughout the Company's Application, and as reiterated in these Comments, the Project meets these requirements. The Project bolsters the reliability and adequacy of energy supplies, provides societal benefits in a manner compatible with protecting natural and socioeconomic environments, conforms to applicable rules and regulations, and meets needs that cannot be adequately served by alternatives. For these reasons, the Joint Commenters support Xcel's request for a Certificate of Need and recommend the Commission grant the Company's Application.

Sincerely, September 6, 2024

/s/ Brandon Crawford
Brandon Crawford
Regulatory Advocate
Citizens Utility Board of Minnesota
651-300-4701, ext. 7
brandonc@cubminnesota.org

/s/ Cora Hoffer
Cora Hoffer
Clean Energy Policy Associate
Center for Rural Affairs
507-513-8545
corah@cfra.org

/s/ Amelia Vohs
Amelia Vohs
Climate Director
Minnesota Center for Environmental Advocacy
651-287-4864
avohs@mncenter.org

/s/ Elizabeth Wheeler
Elizabeth Wheeler
Senior Counsel, Director of Regulatory Advocacy
Clean Grid Alliance
651-644-3400
ewheeler@cleangridalliance.org

/s/ Rachel Wiedewitsch
Rachel Wiedewitsch
Senior Policy Associate, Clean Electricity
Fresh Energy
651-726-7569
wiedewitsch@fresh-energy.org