STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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In the Matter of the Application of Xcel Energy for a Certificate of Need for the Mankato - Mississippi River 345kV Transmission Line Project in Southeast Minnesota	**Docket No. E002/CN-22-532**

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

Clean Grid Alliance, Minnesota Center for Environmental Advocacy, Fresh Energy, Sierra Club, Clean Energy Economy Minnesota, Center for Rural Affairs, Union of Concerned Scientists, the National Audubon Society, and the Citizens Utility Board of Minnesota (collectively, the "Joint Commenters") respectfully submit these Initial Comments in response to the Minnesota Public Utilities Commission's (the "Commission") Notice of Comment Period issued on January 10, 2025 in the above-referenced matter.

The Joint Commenters support granting a certificate of need for the 345 kV transmission line in Southeast Minnesota from Mankato to the Mississippi River (the "Project"). As proposed, the Project will reduce congestion, enhance system reliability, aid in the transition away from emissions-intensive generation, and provide an outlet for regional transfers of clean, affordable energy. The Project meets the requirements of Minn. Stat. § 216B.243 and Minn. R. 7849.0120

and will assist utilities in complying with Minnesota's Carbon-Free Electricity Standard.[1] Therefore, as further detailed below, the Commission should grant the request for a certificate of need in this proceeding.

BACKGROUND

Pursuant to Minn. Stat. § 216B.243, Northern States Power Company d/b/a/ Xcel Energy ("Xcel" or the "Applicant") applied for a certificate of need on April 2, 2024 to construct the Project.[2] The proposal includes a high-voltage 345 kV transmission project spanning from Mankato, Minnesota to the Mississippi River and relocation of a 161 kV transmission line between North Rochester and Chester, Minnesota. The Project, located in southeast Minnesota, would serve as a nexus to connect clean energy generation in the Dakotas to the regional load center of the Twin Cities and transmission outlets to the east.[3] In doing so, the Project will increase reliability, relieve transmission overloads, and reduce congestion.[4]

The Project consists of four separate segments. Segment 1 involves constructing a new 345 kV transmission line between the existing Wilmarth Substation and a point near the West Faribault Substation.[5] Segment 2 involves constructing a new 345 kV transmission line between the terminus of Segment 1 and the existing North Rochester Substation.[6] Segment 3 connects the existing North Rochester Substation to the Mississippi River by converting 27 miles of existing 161/345 kV transmission infrastructure into a 345/345 kV configuration and installing 16 miles of

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[1] MINN. STAT. § 216B.1691, subd. 2g (requiring all electric utilities to provide 100 percent carbon-free electricity by 2040).
[2] Application for a Certificate of Need and Route Permit for the Mankato - Mississippi River Transmission Project 1 Apr. 2, 2024, Doc. No. 20244-204917-18 [Hereinafter "Application"].
[3] *See* Midcontinent Indep. Sys. Operator (MISO), *MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Portfolio Report* 30 (2022) [Hereinafter "MTEP21 Portfolio Report"].
[4] Application at 4.
[5] *Id.* at 6.
[6] *Id.*

new 345 kV line on existing double-circuit structures.[7] Segment 4 relocates a portion of a 161 kV transmission line being displaced by Segment 3.[8] Additionally, the Wilmarth, North Rochester, and Eastwood substations are expected to be upgraded as part of the Project.[9]

Prior to being proposed to the Commission, the Project was approved by the Midcontinent Independent System Operator ("MISO") for inclusion in the Long-Range Transmission Planning ("LRTP") Tranche 1 Portfolio.[10] Tranche 1 is comprised of 18 transmission projects across the MISO Midwest region and is designed to "ensure that the regional transmission system can meet demand in all hours while supporting the resource plans and renewable energy penetration targets reflective of MISO member utilities' goals and state policies."[11] The Project represents the Minnesota portion of LRTP Project 4, which plays a pivotal role in ensuring these benefits accrue both in Minnesota and throughout the Midwest.[12] As described by MISO, LRTP 4 will help relieve constraints in the Twin Cities metro area by allowing high renewable energy flows towards and past the Twin Cities load center.[13] The Project will also reinforce the outlet towards load centers in Wisconsin, providing congestion relief and easing thermal loading.[14] Together with the broader Tranche 1 transmission buildout, the Project will help integrate and deliver renewably generated electricity, optimize regional transfer capabilities, and support adequate, reliable energy supplies in Minnesota and across the MISO region.[15]

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[7] Application at 1.
[8] *Id.* at 7.
[9] *Id.* at 15.
[10] *Long Range Transmission Planning*, MISO, https://www.misoenergy.org/planning/long-rangetransmission-planning (last visited Mar. 5, 2025).
[11] MISO, *MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Executive Summary* 1 (2022) [Hereinafter "MTEP21 Executive Summary"].
[12] Application at 4
[13] MTEP21 Portfolio Report at 30.
[14] *Id*.
[15] *See* Application at 4-5.

ANALYSIS

The Joint Commenters support the Project due to its ability to support the transition away from emission-intensive generation portfolios and reliably facilitate the transfer of clean, affordable energy from where it is produced to where it is used.[16] By enabling the reach of wind and solar resources across MISO, the Project will allow the Applicant and the State of Minnesota to more effectively pursue clean energy policies that reduce ratepayer exposure to fuel cost volatility.

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) 300 kV or more and greater than 1 mile in length; or (b) 100 kV or more with more than ten miles of its length in Minnesota.[17] The present Project comprises approximately 130 miles of new 345 kV transmission line developments and 20 miles of new 161 kV transmission lines.[18] The Project therefore qualifies as a large energy facility under both these definitions. A certificate of need must be granted before the Project moves forward.

As further detailed below, the Commission should grant a certificate of need for the Project as it meets all statutory criteria and is crucial to achieving Minnesota's Carbon-Free Electricity Standard.

I. The Project Meets the Criteria for Issuing a Certificate of Need

Minnesota law defines the criteria the Commission must consider when evaluating whether to grant a certificate of need for a large energy facility.[19] Minnesota's administrative rules,

[16] *See id.* at 5 (summarizing the need for the Project).
[17] MINN. STAT. § 216B.2421, subds. 2(2)–(3).
[18] Application at 1.
[19] MINN. STAT. § 216B.243, subd. 3.

underpinned by this statutory authority, require the Commission to issue a certificate of need upon making the following four determinations:

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.[20]

The Joint Commenters find the Project meets all four of these criteria and that the Applicant has provided sufficient justification for the Commission to issue a certificate of need.

A. Denying the Project Would Have an Adverse Effect on the Future Adequacy, Reliability, and Efficiency of Energy Supplies

In determining whether a certificate of need should be granted, the Commission must consider whether denying the Project would have an adverse effect on the adequacy, reliability, or efficiency of energy supplies to the Applicant, the Applicant's customers, or to people in Minnesota or neighboring states.[21] The Project will play an increasingly pivotal role in providing reliable energy as existing infrastructure ages and electrification and large data center loads drive up electricity demands.[22] As further detailed in Section I.C.1, the Project will mitigate current capacity issues, lower electricity losses, and drive down transmission congestion and its associated

[20] MINN. R. 7849.0120.
[21] MINN. R. 7849.0120, subp. A.
[22] *See, e.g.,* Application at 5; MTEP21 Portfolio Report at 11; Thomas Spencer & Siddharth Singh, *What the Data Center and AI Boom Could Mean for the Energy Sector*, INT'L ENERGY AGENCY, (Oct. 18, 2024).

costs.[23] These improvements will help ensure electricity generated at "existing . . . and new . . . projects can be efficiently and economically delivered" to load centers in the Twin Cities and throughout the regional grid, even as the "generation mix within the MISO footprint continues to evolve to include more renewables."[24]

The Project is designed to alleviate renewables curtailment, overheated lines, and other thermal overloading issues that occur during summer shoulder periods when wind generation is high and demand is insufficient to consume the amount of electricity created.[25] As detailed in the Applicant's reliability analysis, the Project's added capacity will alleviate grid stress and resolve thousands of thermal overloading issues at facilities throughout southern Minnesota.[26]

The Project will also reduce energy losses in Minnesota and throughout MISO, driving down generation costs for ratepayers.[27] As explained by the Applicant, energy losses must be factored in when determining how much generation is needed to serve system demand.[28] As energy losses decrease, so too does the amount of electricity needed to adequately serve customers, which is especially relevant during periods of demand growth.[29] As more load is added to the grid, reducing energy losses–and the associated generation requirements–will help offset the need for new generation facilities and improve overall system reliability.[30] The Project therefore bolsters the reliability of the regional grid and the adequacy of energy resources necessary to serve Minnesota's increasingly electrified economy.

[23] Application at 45-47, 82-84.
[24] *Id.* at 47, 67.
[25] *Id.* at 69–73.
[26] *Id.* at 69–73.
[27] *Id.* at 83.
[28] *See id.* at 82.
[29] *Id.*
[30] *Id.* at 48–49, 82–83.

By resolving reliability issues, the Project will also mitigate congestion costs, which typically occur when "higher-cost generation resource[s] [are] dispatched in place of . . . lower-cost [resources] to avoid a reliability issue, such as overloading a transmission facility."[31] Currently, the MISO system lacks sufficient transmission capacity to accommodate new and existing generation facilities, which increases the prevalence of congestion and raises costs for ratepayers.[32] MISO customers paid $3.7 billion in congestion costs during 2022 alone.[33] The new transmission capacity provided by the Project and other Tranche 1 developments is therefore necessary to reduce the severity of congestion impacts and facilitate the economic deployment of energy resources.

MISO calculated that Tranche 1 offers a benefit-cost ratio of between 2.8:1 and 4:1 to MISO's Zone 1,[34] which includes most of Minnesota, western Wisconsin, and the MISO portions of the Dakotas. In other words, Zone 1 ratepayers will receive between $2.80 and $4.00 in benefits for each $1.00 they invest in building Tranche 1. The benefits to Zone 1 include $3.169 billion in congestion and fuel savings, $3.481 billion in avoided capital costs for local resource investment, $278 million in avoided transmission, between $248 million and $1.629 billion in value from avoided loss of load, and between $691 million and $2.673 billion in decarbonization benefits, for total benefits of between $7.867 billion and $11.231 billion.[35] For comparison, MISO indicates the cost of Tranche 1 lines that would be allocated to Zone 1 ratepayers is only $2.8 billion.[36]

If the Commission denies the certificate of need, congestion and thermal overloading concerns will worsen as demand and clean energy penetration increase; generators will continue

[31] *Id.* at 45.
[32] *Id.* at 39, 43, 45–46.
[33] *Id.* at 46.
[34] *LRTP Tranche 1 Portfolio Detailed Business Case*, MISO, 56 (June 25, 2022), https://cdn.misoenergy.org/LRTP%20Tranche%201%20Detailed%20Business%20Case625789.pdf.
[35] *Id.* at 57–58.
[36] *Id.*

to experience significant delays in MISO's interconnection queue; and the Applicant will face increased challenges in serving demand and reliably delivering electricity from generation hubs to regional load centers. Denying the Project would therefore have an adverse effect on the future adequacy, reliability, and efficiency of energy supplies.

B. A More Reasonable and Prudent Alternative Has Not Been Demonstrated

Minn. R. 7849.0120, subpart B requires the Commission to consider whether more reasonable and prudent alternatives to the Project have been demonstrated by a preponderance of the evidence in the record. Both the Applicant and MISO analyzed potential Project alternatives to address system needs and determined the Project was more reasonable and prudent than any alternative or combination of alternatives.[37] The alternatives considered are detailed in Chapter 5 of the Application and include different transmission endpoints, higher or lower line voltages, double- or triple-circuiting with existing lines, direct current opportunities, undergrounding, upgrading existing infrastructure, generation and non-wires alternatives, and not constructing or delaying the Project.[38]

Ultimately, the Joint Commenters find the Project is preferable to the alternatives considered and will produce net benefits for Minnesotans. That none of these alternatives are more reasonable or prudent than the instant Project supports the granting of a certificate of need.

C. The Project Will Benefit Natural and Socioeconomic Environments

In determining whether a proposed project provides benefits to society, the Commission must consider the following:

(1) The relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;

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[37] Application at 86.
[38] *Id.* at 86–107.

(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….[39]

The Project meets these criteria and delivers substantial benefits in Minnesota and throughout MISO. The transmission capacity provided by the Project will reduce reliability risks and create new opportunities to economically deploy clean energy resources. This diversification of energy supplies reduces exposure to fuel cost volatility, lowers system emissions, and promotes economic growth in Minnesota's energy sector. For these reasons the Joint Commenters find the Project provides significant benefits to society as required by Minn. R. 7849.0120 subpart C.

1. The Project Supports Overall State Energy Needs

The Commission must consider the relationship between the Project and Minnesota's energy needs.[40] This Project will help fulfill state energy needs by reducing congestion and improving the flow of clean energy from the Dakotas to Twin Cities and other load centers in the MISO Midwest region.[41]

The transmission lines in Tranche 1, including this Project, are described as "no-regrets" or "least-regrets" developments because they are foundational to solving long-standing concerns regarding the reliability and efficiency of the regional grid, even under the most conservative of MISO's future forecasts.[42] While this Project was developed as part of a broader portfolio, it was

[39] Minn. R. 7849.0120, subp. C.
[40] Minn. R. 7849.0120, subp. C(1).
[41] MTEP21 Portfolio Report at 30.
[42] MTEP21 Executive Summary at 1.

also individually justified by MISO and the Applicant based on regional and local needs.[43] MISO identified this Project as a critical component of the Tranche 1 portfolio as it was the most effective option to maintain regional reliability in southern Minnesota.[44] This corridor of the grid facilitates the transfer of wind generation out of the Dakotas and into Minnesota. However, it is heavily constrained with thermal overloads, which contribute to reliability concerns.[45] The Project is designed to alleviate this stress on the current system by providing an additional transmission outlet for renewable energy.

The Project is especially needed to relieve load concerns between the Wilmarth and North Rochester substations.[46] This portion of the Project parallels several 345 kV transmission lines that are heavily congested at times of high-generation transfers from southwestern Minnesota and northwestern Iowa. By creating additional capacity between Wilmarth and North Rochester, the Project contributes to a more reliable transmission system and enables better access to geographically diverse clean energy resources.[47]

MISO calculated that Tranche 1 will increase import capacity into Zone 1 by 658 MW, from 5,412 MW to 6,070 MW.[48] MISO documents that this expansion provides reliability and resilience benefits under both normal operating conditions and under extreme weather that can cause a localized loss of thermal or renewable generation.[49] As Minnesota increases its use of wind and solar generation, it will become increasingly valuable for the state to be able to export power when renewable output is high and import power when local renewable resources are experiencing

[43] Application at 62.
[44] *Id.*
[45] *Id.*at 62, 70–71.
[46] *Id.* at 62–63.
[47] *Id.*
[48] *LRTP Tranche 1 Portfolio Detailed Business Case*, MISO, 29 (June 25, 2022), https://cdn.misoenergy.org/LRTP%20Tranche%201%20Detailed%20Business%20Case625789.pdf.
[49] *Id.* at 29, 32.

a lull in output. By resolving these transmission capacity issues, the Project will help fulfill state energy needs as generation portfolios change and energy demand increases. Ultimately, each of the system improvements provided by the Project will contribute to overarching State energy goals and help ensure Minnesotans are provided with clean, reliable energy for years to come.

2. The Project Will Produce Socioeconomic and Environmental Benefits

In making its certificate of need determination, the Commission must compare the effects of the facility on natural and socioeconomic environments with those of not building the facility.[50] Here, the Project will provide socioeconomic benefits by lowering congestion costs, mitigating price volatility, reducing carbon emissions, and creating jobs.

The Project will reduce ratepayer exposure to volatility in fuel prices by diversifying access to generation resources.[51] Providing an additional outlet for generation from the Dakotas not only enhances reliability but also creates socioeconomic benefits by facilitating access to low-cost clean energy coming from the wind-rich Dakotas. Because clean energy sources do not incur the same fuel costs as fossil plants, customers will be less exposed to fuel market volatility and could experience more stable rates over time. As noted above, MISO calculated that Tranche 1 will provide Zone 1 with $3.169 billion in congestion and fuel cost savings.

In addition to lowering fuel cost exposure for Minnesotans, the Project provides significant economic benefits by relieving congestion and contributing to emissions reductions. Relieving the congestion issues discussed in Section I.A is expected to provide up to $3.8 billion in savings across the MISO region within 40 years of the Project's in-service date.[52]

[50] MINN. R. 7849.0120, subp. C(2).
[51] *See* Application at 61.
[52] *Id.* at 73.

The carbon reductions achieved by this Project, which are discussed more thoroughly in Section I.C.4., also have both environmental and economic value. The carbon reductions expected in the first 20 years of the Project will create a cleaner, healthier environment for Minnesotans and have an economic benefit ranging from $30.4 million to $251.0 million across the MISO footprint, depending on the cost of carbon and resource mix tested.[53]

The socioeconomic impacts to local communities where the Project is located are also expected to be beneficial. The Applicant estimates the Project will create 50-100 construction jobs that pay prevailing wages. As transmission construction is underway, local businesses could see revenue increases associated with sales to utility personnel and contractors. The renewable generation development in Minnesota that will be enabled by the Project, as discussed in the next section, would drive even larger increases in local economic development and job creation.

Ultimately, the Project has clear environmental and socioeconomic benefits, and Minnesota customers will be better off with the Project than without it.

3. The Project Will Induce Future Developments in Clean Energy Technologies

The Commission must consider the effects of the proposed facility in inducing future developments.[54] The Project will enable new energy projects in the region to interconnect to the grid by resolving the capacity shortfalls discussed in Section I.A, which impact the viability of new energy projects.[55] Additional transmission capacity is needed to deliver the electricity generated by these developments.[56] Without additional capacity, new generation facilities cannot interconnect to the grid, creating a build-up of completed generation projects waiting to "go

[53] *Id.* at 81–82.
[54] MINN. R. 7849.0120, subp. C(3).
[55] Application at 43–45.
[56] *Id.* at 39.

online."[57] Without transmission upgrades, the cost of network upgrades needed to facilitate interconnection falls to the facility making the interconnection request, which may render them uneconomic and cause them to be withdrawn from the interconnection queue.[58]

Data compiled by Lawrence Berkeley National Laboratory documents the time between initial interconnection requests and interconnection agreements for new generation projects in MISO.[59] Queue backlogs have trended upwards, with it now typically taking 3-4 years to progress from interconnection request to interconnection agreement.[60] Moreover, only about 15% of proposed generator projects that enter the MISO queue have been successfully completed.[61] A significant factor driving the high rate of queue withdrawal is that interconnection costs in MISO more than tripled between 2018 to 2021.[62] There are currently up to 198 such interconnection requests amounting to over 35,000 MW of energy that are conditioned on the Project.[63] MISO has calculated that Tranche 1 will increase the import limit into Zone 2 (Zone 1's neighbor to the east, comprised of eastern Wisconsin and Michigan's Upper Peninsula), by 1,035 MW.[64] Transmission capacity on this path, which is increased by the Project, is critical for enabling additional renewable generation development in Minnesota and western MISO as it allows that generation to be exported to the east when it exceeds demand in Minnesota. By resolving these overarching capacity issues, the Project will facilitate new clean energy generators interconnecting to the grid,

[57] *Id.* at 44.
[58] *Id.* at 44–45.
[59] John Rand, et al., *Queued Up: 2024 Edition: Characteristics of Power Plants Seeking Transmission Interconnections As of the End of 2023,* LAWRENCE BERKELEY NATIONAL LABORATORY, 35 (April 2024), https://emp.lbl.gov/sites/default/files/2024-04/Queued%20Up%202024%20Edition_1.pdf.
[60] *Id*. at 35.
[61] *Id.* at 29.
[62] Joachim Seel, et al., *Interconnection Cost Analysis in the Midcontinent Independent System Operator (MISO) Territory*, LAWRENCE BERKELEY NATIONAL LABORATORY, 1 (Oct. 2022), https://eta-publications.lbl.gov/sites/default/files/berkeley_lab_2022.10.06-_miso_interconnection_costs.pdf.
[63] Application at 84.
[64] *LRTP Tranche 1 Portfolio Detailed Business Case*, MISO, 29 (June 25, 2022), https://cdn.misoenergy.org/LRTP%20Tranche%201%20Detailed%20Business%20Case625789.pdf.

which will be critical for meeting the State's energy policies and delivering cost-effective electricity to end-use consumers.

4. The Project Will Protect and Enhance Environmental Quality Through Emissions Reductions

Finally, the Commission must consider the proposed facility's socially beneficial uses, including its uses to protect or enhance environmental quality.[65] As discussed previously, this Project will increase Minnesota's access to renewable generation by allowing better utilization of existing resources to our west and enabling new projects to be constructed and interconnected to the grid. By increasing access to and utilization of renewable energy, the Project will lower harmful pollutants in Minnesota and the region, thereby enhancing environmental quality.

Air emissions associated with fossil fuel production and consumption include the greenhouse gas carbon dioxide as well as particulate matter, sulfur dioxide, nitrogen oxides, mercury, and other hazardous air pollutants.[66] The adverse environmental and health impacts of these hazardous pollutants will be incrementally alleviated as Minnesota transitions to clean energy resources that are not dependent on emissions-producing fuels. Between fostering new renewable energy developments and enabling fossil fuel plant retirements, the Applicant anticipates the Project will reduce emissions by 2.42 to 5.25 million metric tons over the first 20 years of operation.[67] Using the most conservative figure, this would be akin to avoiding the burning of 2.69 billion pounds of coal[68] or planting 40 million trees and letting them grow for ten years.[69]

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[65] MINN. R. 7849.0120, subp. C(4).
[66] *Coal Explained*: *Coal and the Environment*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/energyexplained/coal/coal-and-the-environment.php (last visited Mar. 26, 2025).
[67] Application at 80.
[68] *See Greenhouse Gas Equivalencies Calculator*, U.S. ENV'T. PROT. AGENCY, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results (last visited Mar. 26, 2025) (using the EPA's calculator to calculate the greenhouse gas equivalency of 2.42 million metric tons of CO2).
[69] *Id.*

These emissions reductions would occur during the time period when it is most critical to reduce emissions in order to stave off the worst impacts of climate change.[70]

Modeling using the U.S. Environmental Protection Agency's ("EPA's") Avoided Emissions and Generation Tool ("AVERT") shows that the Tranche 1 lines will greatly reduce emissions of carbon dioxide and multiple other air pollutants across MISO by enabling the interconnection of 20,100 MW of new renewable generation.[71] The AVERT tool was built by the EPA to quantify the impact of renewable energy and other measures on air pollution emissions,[72] and has been widely used for emissions benefit analysis. The tool statistically estimates which power plants in a region experience reduced emissions of sulfur dioxide (SO_2), fine particulate matter under 2.5 micrometer ("$PM_{2.5}$"), nitrogen oxides ("NO_x"), volatile organic compounds ("VOCs"), ammonia ("NH_3"), and carbon dioxide ("CO_2") due to the deployment of renewable energy or energy efficiency. AVERT's "Midwest" region, which roughly approximates the footprint of MISO, was used for this analysis.

The AVERT tool indicates that delivering 20,100 MW of additional renewable generation to the Midwest region would annually displace over 37 million short tons of carbon dioxide, more than 50 million pounds of SO_2, 41 million pounds of NO_x, 4.6 million pounds of $PM_{2.5}$, over 1.2 million pounds of VOCs, and nearly 1.5 million pounds of NH_3.[73] The renewable generation

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[70] *See Urgent Climate Action Can Secure a Livable Future for All*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, (Mar. 20, 2023), https://www.ipcc.ch/2023/03/20/press-release-ar6-synthesis-report/ (noting that feasible and effective solutions already exist to help reduce greenhouse gas emissions and that implementing these solutions is critical to preventing the worst outcomes of climate change) (last visited Mar. 26, 2025).

[71] *LRTP Tranche 1 Portfolio Detailed Business Case*, MISO, 18 (June 25, 2022), https://cdn.misoenergy.org/LRTP%20Tranche%201%20Detailed%20Business%20Case625789.pdf.

[72] *See Avoided Emissions and Generation Tool (AVERT) Web Edition*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/avert/avert-web-edition (last visited Mar. 26, 2025).

[73] *See* Direct Test. of Michael Goggin at 48–49, In re Application of Michigan Electric Transmission Company, LLC for an Act 30 Certificate of Public Convenience and Necessity for the Construction of a Major Transmission Line Between Oneida Substation in Eaton County and Nelson Road Substation in Gratiot County, Michigan, Docket No. U-21471 (Mich. Pub. Serv. Comm'n Dec. 04, 2024).

enabled by Tranche 1 will directly benefit Minnesota residents by displacing emissions from in-state fossil generators, as well as emissions from fossil generators in other MISO states that can impair air quality and thus human health and the environment in Minnesota.

Because the Project supports the State's energy needs, reduces cost volatility, enables future clean energy interconnections, and protects environmental quality, the Commission should find that it benefits society and grant a certificate of need.

D. The Project Complies with Relevant Policies, Rules, and Regulations

In order for a certificate of need to be granted, the record must not demonstrate that the design, construction, or operation of the Project is in violation of the policies, rules, or regulations of state and federal agencies and local governments.[74] It is the Joint Commenters' understanding that the Applicant has worked diligently throughout this proceeding to collaborate with all relevant governments and agencies in the development of the Project. We are not aware of any instances of policies, rules, or regulations being violated, which supports granting a certificate of need.

II. The Project Helps Achieve Minnesota's Carbon-Free Standard

In addition to the above considerations for granting a certificate of need,[75] the Commission must also consider how the project supports Minnesota's Carbon-Free Electricity Standard.[76]

In 2023, Minnesota enacted a carbon-free standard requiring the electricity delivered to Minnesota customers to be generated or procured from 100% carbon-free technologies by 2040.[77] To comply with this law, Minnesota needs to increase the share of electricity generated from

[74] MINN. R. 7849.0120, subp. D.
[75] *See* MINN. STAT. § 216B.243; MINN. R. 7849.0120.
[76] *See* MINN. STAT § 216B.243, subd. 3(10) (in assessing need, the commission shall consider whether "the applicants are in compliance with applicable provisions of section 216B.1691"); MINN. STAT § 216B.1691, subd. 2g (defining Minnesota carbon-free standard for electricity).
[77] *See* Minn. Stat. § 216B.1691, subds. 2d, 2g; *see also* Minn. Stat. § 216B.1645, subd. 2a.

carbon-free resources statewide, which in 2022 was only 31%.[78] Minnesota utilities will need to build a significant amount of clean energy generation with future developments in the next 16 years, with a great deal of that being built in the next *six* years.[79] This Project is a step in the right direction, providing much-needed additional transmission capacity that allows renewable energy projects to connect to the grid and deliver carbon-free electricity to Minnesota customers.

Furthermore, Minnesota's electricity consumption will likely increase as we approach 2040.[80] The needed changes in Minnesota's electricity generation portfolio will require additional transmission in the region to ensure that clean electricity can reach load centers.[81] As coal and fossil fuel generation sources are retired, this Project will help deliver wind and solar energy to replace that lost generation and address the expected growth in demand.[82]

The Joint Commenters believe this Project and other planned transmission projects are central to meeting the State's 2040 Carbon-Fee Electricity Standard.

CONCLUSION

The Commission is required to issue a certificate of need for the Project upon making the four determinations detailed in Minnesota Administrative Rule 7849.0120. The Applicant has provided sufficient evidence for making all four determinations. The Project will enhance the adequacy, reliability, and efficiency of energy supplies by increasing transmission capacity and resolving thermal loading, congestion, and energy loss issues. Environmental and socioeconomic benefits will accrue by enabling clean, lower-cost clean energy to be integrated onto the grid,

[78] *Minnesota: State Profile and Energy Estimates*, U.S. ENERGY INFO. ADMIN., https://eia.gov/state/?sid=MN#tabs-4 (last visited Mar. 25, 2025).
[79] *See* Application at 52 (Predicting that the energy industry will change as much in the next 5 years as it has in the last 35 years.).
[80] MTEP21 Portfolio Report at 11 (explaining how the transition towards electrification will impact electricity demand).
[81] *See* Application at 39.
[82] *Id.* at 60.

thereby reducing exposure to fuel cost volatility and lowering greenhouse gas emissions. Finally, the Project will be critical to meeting the statutory mandate to deliver 100% carbon-free electricity to Minnesota customers by 2040. As proposed, the Project conforms to applicable rules and regulations and meets needs that cannot be adequately addressed by alternatives. For these reasons, the Joint Commenters support the Applicant's request for a certificate of need.

Respectfully Submitted, Dated: March 28, 2025

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