

BEFORE THE STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

**In the Matter of the Application of Great River
Energy, Northern States Power Company (d/b/a
Xcel Energy) and others for Certificates of Need for
the CapX 345-KV Transmission Projects**

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) **OAH No. 15-2500-19350-2**
) **MPUC Dkt. No. CN-06-1115**
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**Direct Testimony of
Christopher T. Ellison**

**On Behalf of
Fresh Energy
Izaak Walton League of America – Midwest Office
Wind on the Wires
Minnesota Center for Environmental Advocacy**

May 23, 2008

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List of Attachments

Attachment A: Curriculum Vitae of Christopher T. Ellison

1 **I. Introduction**

2 **Q. Please state your name and business address.**

3 A. Christopher T. Ellison, Ellison, Schneider & Harris L.L.P., Attorneys at Law,
4 2015 H Street, Sacramento, CA 95811-3109.

5 **Q. On whose behalf are you testifying in this proceeding?**

6 A. Fresh Energy (FE) , Izaak Walton League of America, Inc. (League), Minnesota
7 Center for Environmental Advocacy (MCEA), and Wind on the Wires (WOW).

8 **Q. Please summarize your qualifications and experience.**

9 A. I am a founding partner of a law firm that specializes in energy and environmental
10 law. My areas of expertise include transmission, public utility and energy law,
11 land use, and renewable energy. I have advised government agencies, non-utility
12 energy developers, trade associations and regional reliability organizations. I have
13 testified before the Federal Energy Regulatory Commission as an expert witness
14 on matters of electric transmission policy. I have advised the California Energy
15 Commission Chairman and Commissioners regarding administrative hearings on
16 environmental compliance and licensing of new power plants, and on matters
17 including forecasting future statewide energy production and demand, energy
18 research and development, and setting statewide energy efficiency standards for
19 new buildings and appliances. I am a frequent speaker on electric power issues,
20 regional transmission organizations, electric market restructuring, transmission
21 access, renewable energy development, power marketing and related matters.
22 My qualifications are set forth in more detail in my resume, attached as Exhibit A.

23 **Q. What is the purpose of your testimony?**

1 A. In this proceeding, the Applicants¹ are seeking Certificates of Need (CON) for
2 three high voltage transmission lines in Minnesota. Specifically, the Applicants
3 are asking the Minnesota Public Utilities Commission (Commission) to find,
4 among other things, that the proposed facilities satisfy the criteria in Minn. Rule
5 7849.0120. I propose conditions necessary to ensure that the granting of the
6 CONs “complies with relevant policies, rules, and regulations of other state and
7 federal agencies and governments” as required by Minn. Rule 7849.0120 (D).
8
9 I am informed by counsel that Minnesota “policies, rules and regulations”
10 establish (1) a requirement that Minnesota utilities produce or procure for its retail
11 customers a significant amount of renewable energy – specifically 30% by 2020
12 for Xcel Energy (25% wind by 2020), and 25% by 2025 for all other utilities in
13 Minnesota. The Minnesota Renewable Energy Standard² (RES) will require a
14 total of 6,000 – 7,000 megawatts (MW) of procured/produced renewables by
15 2025, depending on energy efficiency and load growth; (2) the Minnesota
16 Biennial Transmission Plan statute³ requires that utilities with an RES
17 requirement identify transmission needed to meet the RES; (3) Minnesota statutes
18 encourage utilities to purchase renewable-generated power from Community

¹ The Application for a Certificate of Need was filed by Northern States Power Company (d/b/a Xcel Energy) and Great River Energy on behalf of the CapX 2020 utilities that include Central Minnesota Municipal Power Agency, Dairyland Power Cooperative, Great River Energy, Minnesota Power, Minnkota Power Cooperative, Missouri River Energy Services, Otter Tail Power Company, Rochester Public Utilities, Southern Minnesota Municipal Power Agency, Wisconsin Public Power Inc., and Xcel Energy. The Application states that “nine regional electric utilities have formalized their commitment to the CapX2020 Initiative through the execution of the Participation Agreement.” (Application at page 6.1)

² Minn. Stat. § 216B.1691 (as amended 2007).

³ See Minn. Rule 7848 *et seq.*

1 Based Energy Development⁴ (CBED); (4) as the Applicants note, “the
2 Commission, through orders in various proceedings, including resource planning
3 dockets, has mandated that utilities purchase additional power generated by
4 renewable technology to meet customer demands.” (Application at page 6.41); (5)
5 as the Applicants note, “the 2007 Legislature recognized that substantial
6 additional transmission improvements must be made to achieve [the RES]” and in
7 fact as part of the RES required the electric utilities to file a transmission plan
8 report by November 1, 2007. (Application at page 6.43) To assure that the
9 requested CONs comply with these policies, I propose six conditions that the
10 Commission should attach to the requested CONs.

11 **II. Proposed Conditions**

12 **Q. Please discuss your first proposed condition.**

13 A. The Commission should condition the CONs on the utilities (a) signing Power
14 Purchase Agreements (PPAs) with renewable energy developers and/or
15 committing to utility-owned renewable projects utilizing the capacity from the
16 new transmission lines for renewables at least two years prior to the expected in-
17 service date of the proposed transmission lines; and (b) timely seeking
18 Commission approval of those contracts or utility-owned renewable project plans
19 so that the Commission can grant approval of the PPAs/commitments within six
20 months of the signing of the PPAs or commitments.

⁴ Minn. Stat. § 216B.1612 (as amended 2007).

1 As explained further, this approach ensures that the in-service date for the new
2 renewable energy generators will coincide with the in-service dates of the
3 proposed transmission facilities (2012 – 2015). The reason for linking the timing
4 of these two events relates to the process by which the Midwest Independent
5 System Operator (MISO) grants generators access to the transmission grid.

6
7 As the Commission is aware, the Applicants are members of MISO. As MISO
8 members, the Applicants have transferred functional control of their transmission
9 facilities to that organization. Therefore, access to the Applicant's transmission
10 facilities, including the new facilities proposed by the Applicants in this
11 proceeding, are subject to MISO rules. Under MISO rules, a utility with native
12 retail load obtains sufficient transmission capacity to serve that load by (a)
13 designating, pursuant to MISO procedures, specific generation resources as
14 "network resources"; and then (b) requesting from MISO sufficient transmission
15 capacity, in the form of "network integration transmission service," to serve those
16 designated network resources and deliver the energy to load.

17
18 However, under the MISO process there is no guarantee that because the
19 Applicants build transmission and own it they will have use of those facilities to
20 transmit power for their own loads. Likewise, there is no guarantee that because
21 the Applicants purchase power from renewable resources they will be able to
22 obtain transmission service in the quantity necessary to deliver the renewable
23 energy to retail load. Once constructed and in-service, the new transmission

1 facilities become part of the multiutility, multistate transmission network
2 managed by MISO and subject to MISO's open access rules, which are subject to
3 the jurisdiction of the Federal Energy Regulatory Commission (FERC). In short,
4 the Applicants have no particular right to use the new transmission facilities
5 simply because they have built them. Similarly, the Applicants have no particular
6 right to transmit renewable energy because they have contracted with renewable
7 energy developers or plan to construct utility-owned renewable energy projects.
8 These principles were made clear in the Xcel Energy CON proceeding for four
9 large high voltage transmission line projects in Southwestern Minnesota in 2002.⁵

10

11 The Commission needs to link the signing of PPAs and/or commitments to utilize
12 the capacity for utility-owned renewable projects to the proposed in-service dates
13 of the new transmission facilities because of the process by which the MISO
14 grants new generators (interconnection customers) access to the transmission grid.
15 As explained by the Applicants, "Once these three [transmission] projects are
16 constructed they will become part of the network of 345 kV transmission lines
17 that serve as the bulk power transport system that will allow generation
18 development to continue." (Application at page 1.15) Functional control of the
19 new transmission lines will be turned over to MISO and access to the new
20 transmission lines will be subject to and governed by MISO rules.

21

⁵ In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for Certificates of Need for Four Large High Voltage Transmission Line Projects in Southwestern Minnesota, MPUC Docket No. E-002-CN-01-1958, OAH Docket No.: 15-2500-14699-2.

1 Therefore, the Applicants must pursue transmission capacity on the new lines for
2 renewable energy PPAs or utility owned renewable energy projects to satisfy the
3 Minnesota RES through the MISO process. Pursuant to the MISO process⁶, the
4 Applicant must (a) designate specific “network resources”; and (b) procure from
5 MISO an amount of network transmission service adequate to support the
6 designated generation resources. But in order to do that the Applicants first need
7 to purchase the output of renewable energy projects or commit to building utility-
8 owned renewable energy projects and have those plans approved by the
9 Commission.

10
11 It is important that the Commission require the Applicants to take the above steps
12 by a date certain because the demand for transmission capacity in the MISO
13 footprint far exceeds the amount of transmission capacity currently available and
14 will for the foreseeable future.⁷ This is particularly problematic for renewable
15 energy projects – especially wind farm development – due to the timing mismatch
16 between how quickly a wind farm can be developed (12-18 months) versus the
17 time needed to study, permit and construct a high voltage transmission line (5-7
18 years). For these reasons, the Commission should require the Applicants to sign
19 PPAs and/or commit to utility-owned renewable energy projects sufficiently in
20 advance of the in-service date of the new transmission lines to ensure that
21 approval of the contracts by this Commission, subscription of the transmission
22 capacity through the MISO process and construction of the generation facilities

⁶ See Module B, Section 30 of the MISO Transmission and Energy Market Tariff (TEMT).

⁷ It is a well known fact that transmission capacity is a huge limiting factor to renewable energy development in Minnesota.

1 can occur prior to such in-service date. Specifically, utilities should sign PPAs
2 with renewable energy developers and/or commit to utility-owned renewable
3 projects utilizing the capacity from the new transmission lines for renewables at
4 least two years (preferably earlier) prior to the expected in-service date of the
5 proposed transmission lines. Furthermore, utilities should timely seek
6 Commission approval of those contracts or commitments so that the Commission
7 can grant approval within six months of the signing of the PPAs or commitments.
8 This timeline would allow the in-service date of the renewable energy generators
9 and the proposed in-service date of the transmission facilities to match.

10

11 Several additional conditions are required to achieve the timing match and to
12 assure to the highest likelihood that the capacity from the new transmission lines
13 will be used to transmit energy from renewable resources.

14 **Q. Please discuss your second proposed condition.**

15 A The Commission should condition the CONs to require the Applicants to make a
16 compliance filing with the Commission within 30 days of obtaining the
17 conditional CON from this Commission to provide details on how the Applicants
18 propose to allocate the new transmission capacity among the Applicants. The
19 compliance filing must address (a) how much capacity will be enabled by the
20 three new transmission facilities; (b) specifically by MW by Applicant, how the
21 Applicants propose to allocate the capacity enabled by the three new transmission
22 facilities; and (c) the exact type of MISO transmission service the Applicants

1 intend to seek to service the renewable-generated electricity to be carried by the
2 new lines.

3

4 For example, the Applicants may choose to allocate the new transmission capacity
5 along similar lines to what they have done in Figure 1-11: Potential Development
6 of 345 kV Transmission Projects. (Application page 1.29) The Applicants have
7 projected percentages of total line length ownership for each one of the three
8 proposed transmission lines. The Applicants have also indicated that given a
9 number of factors that are still uncertain at this time, these percentages may vary.
10 However, the Applicants as a whole have committed to constructing the three
11 transmission facilities and as such have committed to enabling a certain amount of
12 new transmission capacity. Therefore, while the Applicants have flexibility in
13 allocating transmission capacity amongst themselves, they must be required to
14 show how they will use the total transmission capacity to deliver renewable
15 energy resources.

16 **Q. Please discuss your third proposed condition.**

17 A. The Commission should condition the CONs on the Applicants signing PPAs or
18 committing to utility-owned renewable energy projects within the timeframe of
19 the Minnesota RES milestones, or earlier. The Minnesota Renewable Energy
20 Objective sets a milestone for 2010 and thereafter the Minnesota RES contains
21 milestones of 2012, 2016, 2020 and 2025. The Applicants have stated a need for
22 the three proposed transmission lines to meet the 2016 milestone⁸ and therefore
23 the Applicants need to sign PPAs or commit to constructing utility-owned

⁸ See Minn. Stat. § 216B.1691 Subd. 2a.

1 renewable projects well before that to allow the time to take the steps necessary
2 with MISO to obtain transmission capacity to deliver the energy from the
3 PPAs/utility-owned renewable projects to retail load. Several of the Applicants
4 have stated a desire to purchase the output from and/or construct utility-owned
5 renewable projects ahead of the RES milestones.⁹ Given these facts and
6 circumstances, the third proposed condition is appropriate and necessary.

7 **Q. Please discuss your fourth proposed condition.**

8 A. The Commission should condition the CONs on the Applicants committing to
9 make to MISO, within 30 days of obtaining the conditional CONs from this
10 Commission, transmission service requests for network (firm) transmission
11 service on the MISO Open Access Same Time Information System (OASIS) for
12 the total amount of new capacity enabled by the three proposed transmission lines
13 for the output from renewable resources at power injection points reflected in the
14 Application. Under the MISO tariff, the Applicants have the option of seeking to
15 serve Network Load or Native Load. In their compliance filing pursuant to
16 proposed Condition No. 2, above, the Applicants should specify which type of
17 load they intend to apply to serve. In my view, the most appropriate service is
18 Network Integration Transmission Service (NITS). However, the Applicants
19 should be given an opportunity to address the appropriate service in the context of
20 the compliance filing (and all stakeholders should be given an opportunity to
21 comment further on this issue at that time).

⁹ See In the Matter of Northern State Power Company d/b/a Xcel Energy's Application for Approval of Renewable Energy Plan, Minnesota Public Utilities Commission Docket No. E-002/M-07-1558.

1 A. The condition should further require the Applicants to work with the renewable
2 energy generators to enable timely interconnection service under the appropriate
3 MISO tariff provision (e.g., Attachment R, X, etc.) of the MISO Transmission and
4 Energy Markets Tariff (TEMT). The Applicants must also provide MISO with the
5 appropriate documentation to complete the transmission requests within the time
6 frame required by the MISO TEMT and MISO Business Practices. This condition
7 is necessary because the Applicants must request and receive transmission
8 capacity to deliver the renewable energy output to their native load.

9 **Q. Please discuss your fifth proposed condition.**

10 A. The Commission should condition the CONs on the Applicants committing to
11 designate the new renewable resources as Network Resources pursuant to the
12 MISO TEMT. The Applicants should seek this designation as soon as MISO
13 allows them to under the MISO rules, but no later than 10 days after the
14 Commission approves PPAs and/or the commitment to construct utility-owned
15 renewable resources.

16 **Q. Please discuss your sixth proposed condition.**

17 A. The Commission should condition the CONs on the Applicants committing to
18 report to the Commission any proposed changes at the regional or federal level
19 that could affect the conditions the Commission places on the CONs. A number of
20 changes to the MISO tariff and business practices are being discussed or will
21 shortly be discussed at the regional and federal level including MISO Generator
22 Interconnection Queue Reform.

1 This condition is necessary because of the ongoing changing nature of regional
2 and federal transmission policy. The MISO has a number of transmission and
3 transmission-related issues to take up with stakeholders in the near future
4 including transmission cost allocation, RECB, the open season concept for new
5 transmission, several cross border issues with neighboring transmission entities,
6 and similar proposals. This condition will ensure that the Commission's policies
7 are appropriately updated as MISO policies evolve. This condition is also
8 important to maintain continued consistency between state and federal rules
9 applicable to these new transmission facilities.

10 **III. Conclusion**

11 **Q. How do your proposed conditions relate to the legal standards applicable to**
12 **this CON proceeding?**

13 A. The Applicants must show, among other things, that the proposed facilities
14 comply “with relevant policies, rules, and regulations of other state and federal
15 agencies and governments,” as required by Minn. Rule 7849.0120 (D). By
16 implementing the conditions proposed herein, the Commission will help advance
17 “relevant policies, rules, and regulations.”

18 For example, the Minnesota RES¹⁰ establishes, with respect to utility resource
19 planning and CON, a preference for renewable energy in general, and
20 procurement obligations in the amount of 6,000 – 7,000 MWs of renewables by
21 2025. Furthermore, Minnesota statutes encourage utilities to purchase renewable-
22 generated power from CBED.¹¹ The Commission has also mandated that utilities

¹⁰ Minn. Stat. § 216B.1691 (as amended 2007).

¹¹ Minn. Stat. § 216B.1612 (as amended 2007).

1 procure additional renewable power. (Application at page 6.41) The Legislature
2 has also recognized the need for transmission improvements to meet RES goals.
3 (Application at page 6.43.) My proposed conditions are based on the assumption
4 that transmission capacity in the Midwest, including the capacity from the new
5 transmission facilities proposed by the Applicants, is available to nonrenewable
6 resources on the same terms it is available to renewable resources. This
7 assumption makes clear that, absent conditions requiring the Applicant to take all
8 actions necessary to assure that the new transmission capacity is in fact available
9 to wind generators having PPAs with the Applicants, and/or available to utility-
10 owned renewable resource projects, the new transmission capacity could be used
11 by nonrenewable sources, a result inconsistent with preferences established by the
12 Minnesota legislature and the Commission.

13
14 Additionally, while FERC and the MISO require open access to transmission,
15 they do not intend to frustrate state policies or renewable development. In fact,
16 FERC policies recognize, encourage and support wind and other renewable
17 development. For example, in November 2004 FERC issued a Staff Briefing
18 Paper: "Assessing the State of Wind Energy in Wholesale Electricity Markets."
19 That paper identified issues facing wind development and sought "to further the
20 development of wind energy in wholesale markets."¹² Furthermore, in Order
21 2003-A, FERC generally recognized that certain standard interconnection
22 provisions could disadvantage generators relying on non-synchronous technology,
23 namely wind generation. In order to avoid further exacerbating the obstacles that

¹² FERC Staff Briefing Paper, "Assessing the State of Wind Energy in Wholesale Electricity Markets," p. 7.

1 wind generation currently faces, the Commission allowed several deviations to
2 the interconnection standards to accommodate newer technologies, such as wind
3 generators. In this and several other instances, the FERC has adopted policies
4 intended to assist renewable energy facilities in gaining access to needed
5 transmission consistent with open access principles. My recommended
6 conditions are consistent with this approach and FERC policies, rules, and
7 regulations.

8 **Q. Please summarize your proposed conditions and recommendations to the**
9 **Commission.**

10 A. The Commission should condition the CONs on the Applicants taking a series of
11 actions to minimize the risk of non-renewable generators using available new
12 transmission capacity in place of renewable generators. The Commission should
13 condition the CONs as follows:

14 Require the Applicants to:

15 1. Commit to (a) signing PPAs with renewable energy developers and/or
16 commit to utility-owned renewable generation projects that utilize the capacity
17 enabled by the new transmission lines at least two years prior to the expected in-
18 service date of the proposed transmission lines; and (b) timely seek Commission
19 approval of those contracts and/or commitment to utility-owned renewable
20 generation projects so that the Commission can grant approval of the
21 PPAs/utility-owned projects within six months of the signing of the PPAs or
22 commitments.

1 2. Make a compliance filing with the Commission within 30 days of
2 obtaining the conditional CONs from the Commission to provide details on how
3 the Applicants propose to allocate the new transmission capacity among the
4 Applicants. The compliance filing must address (a) how much capacity will be
5 enabled by the three new transmission facilities; (b) specifically by MW by
6 Applicant, how the Applicants propose to allocate the capacity enabled by the
7 three new transmission lines; and (c) the exact type of MISO transmission service
8 the Applicants intend to seek to service the renewable-generated electricity to be
9 carried by the new lines. The compliance filing should also specify which type of
10 load Applicants intend to serve, Network Load or Native Load, and stakeholders
11 should be given the opportunity to comment further on which is the appropriate
12 service.

13 3. Sign PPAs and/or commit to utility-owned renewable generation projects
14 within the timeframe of the Minnesota RES milestones, or earlier depending on
15 the proposed in-service dates of each segment of the three new transmission lines.

16 4. (a) Make to MISO, within 30 days of obtaining the conditional CONs
17 from the Commission, Transmission Service Requests for the total amount of new
18 capacity enabled by the three proposed transmission lines to deliver the output
19 produced by renewable generators per Condition No. 1 and for wind generators to
20 deliver to load the annual energy produced; (b) work with the renewable energy
21 generators to enable timely interconnection service under the appropriate MISO
22 tariff provision; and (c) provide MISO with the appropriate documentation to

1 complete the transmission requests within the timeframe required by the MISO
2 TEMT and MISO Business Practices.

3 5. Designate the new renewable resources as Network Resources pursuant to
4 the MISO TEMT, Module B, III, Section 30 – Network Resources, within 10 days
5 after the Commission approves PPAs and/or the commitment to construct utility-
6 owned renewable resources.

7 6. Commit to report to the Commission until the proposed transmission lines
8 are fully in service any proposed changes at the regional or federal level that
9 could affect the conditions the Commission places on the CONs.

10 **Q. Does this conclude your direct testimony?**

11 A. Yes.