MPUC Docket No. E-002/CN-04-1176 (Certificate of Need)
MPUC Docket No. E-002/TL-06-1677 (Route)

STATE OF MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Certificate of Need for a 115 kV and 161 kV Transmission Line from Taylors Falls to Chisago County Substation

and

In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Route Permit for a 115 kV and 161 kV Transmission Line from Taylor Falls to Chisago County Substation SUMMARY OF TESTIMONY AT THE PUBLIC HEARINGS, FINDINGS OF FACT, CONCLUSIONS AND RECOMMENDATIONS

A prehearing conference was held on May 9, 2007, at 1:00 p.m. in the Commission's large hearing room before Administrative Law Judge Eric L. Lipman. The following persons noted their appearance:

James P. Johnson, Assistant General Counsel, Xcel Energy Services Inc., 414 Nicollet Mall, Suite 2900, Minneapolis, MN 55401, and Michael Krikava, and Catherine A. Biestek, Briggs and Morgan, P.A., 2200 I.D.S. Center, 80 South 8th Street, Minneapolis, MN 55402, appeared on behalf of Northern States Power Company d/b/a Xcel Energy (Xcel Energy).

Jeffrey L. Landsman, Wheeler, Van Sickle & Anderson, S.C., 25 West Main Street, Suite 801 Madison, WI 53703 on behalf of Dairyland Power Cooperative (Dairyland).

Valerie M. Means, Assistant Attorney General, 445 Minnesota Street, Suite 1400, St. Paul, Minnesota 55101, appeared on behalf of the Department of Commerce ("Department") for the Certificate of Need Proceeding.

Karen Finstad Hammel, Assistant Attorney General, 445 Minnesota Street, Suite 1400, St. Paul, Minnesota 55101, appeared on behalf of the Department for the Routing Proceeding.

Carol Overland, Overland Law Firm, Post Office Box 176, Red Wing, Minnesota 55066 by telephone on behalf of the City of Lindstrom, Minnesota (Lindstrom).

William Neuman, Concerned River Valley Citizens, 18837 Osceola Road, Shafer, Minnesota 55074 by telephone on behalf of Concerned River Valley Citizens (CRVC).

Robert Cupit and Bret Eknes, Minnesota Public Utilities Commission, Suite 350, 121 East Seventh Place, St. Paul, MN 55101-2147, on behalf of the Public Utilities Commission (the Commission or MPUC).¹

Proceedings in the evidentiary and public hearings for the consolidated Certificate of Need and Route Permit dockets came before Eric L. Lipman, Administrative Law Judge on September 4, 5, 6, 7 and 10, 2007. Evidentiary hearings on the Certificate of Need Docket were held on September 4, 5, and 10, 2007. Evidentiary hearings on the Route Permit Docket were held on September 6 and 7, 2007. Joint public hearings for both the Certificate of Need Docket and the Route Permit Docket were held at the Chisago Lakes Area Library at 11754 302nd Street, Chisago City, Minnesota 55012, on the evenings of September 4 and 5, 2007.

STATEMENT OF ISSUES

- 1. Have Xcel Energy and Dairyland (collectively, "Applicants") met the criteria set forth in Minnesota Statutes §§ 216B.243 and 216B.2426 and Minnesota Rules Chapter 7489 for a Certificate of Need for a 115 kV/161 kV transmission line from the Chisago County Substation in Minnesota to the Apple River Substation near Amery, Wisconsin?
- 2. Does the Applicants' proposed route from Taylor Falls to Chisago County Substation balance the needs of the state's "power supply and electric transmission infrastructure," with adjacent land uses, as set forth in Minn. Stat. § 216E.03, subd. 7 and Minnesota Rules Chapter 7489?

Background on the Joint Applications:

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Compare, Minn. Stat. § 216B.243, subd. 4 (2006) (designation by the Commission of an employee to facilitate public participation in the hearing process).

Xcel Energy and Dairyland have jointly applied for a Certificate of Need authorizing certain upgrades to the electrical transmission system serving east central Minnesota and northwestern Wisconsin. The Applicants propose to replace an existing 69 kV transmission line with a new 115 kV electric transmission line between Xcel Energy's Chisago County Substation (near North Branch) and Taylors Falls, Minnesota. Additionally, the Applicants propose to replace an existing 69 kV transmission line with a 161 kV electric transmission line between Taylors Falls, Minnesota and Dairyland's Border Substation in St. Croix Falls, Wisconsin.²

As detailed in its application materials, the Applicants maintain that the proposed 115 kV/161 kV transmission line is needed so as to provide additional transmission capacity, and to reliably serve both the existing and the future demands for electricity in east central Minnesota and northwestern Wisconsin.³

Additionally, while acknowledging that the impacts of its proposed routing fall particularly upon those who live and work along the existing corridor, the applicants maintain that the benefits to the electricity system, and the wider region as a whole, makes the proposed upgrades to the existing route the best among the possible alternatives.

The Commission will issue Orders on the Application for Certification of Need and the Routing Permit submitted by the Applicants after examination of this Report, the hearing transcripts, all written filings submitted by the public, and all filings and arguments submitted by the Applicants, the Minnesota Department of Commerce and other persons and entities interested in this matter.

Based on the evidence in the hearing record, the Administrative Law Judge makes the following:

SUMMARY OF TESTIMONY AT THE PUBLIC HEARINGS

Pursuant to Minn. R. 7848.2000, Subpart 11, the Administrative Law Judge conducted public hearings on the evenings of September 4 and 5, 2007. The public hearings were held to elicit public comment regarding the need for, and routing of, a 115 kV/161 kV transmission line from the Chisago County Substation in Minnesota to the Apple River Substation near Amery, Wisconsin.

Over the course of the two public hearings, 49 members of the public were in attendance and signed the hearing roster. Nineteen of those who registered on the hearing roster offered testimony during the hearings. Twelve written comments were submitted before the close of the post-hearing comment period on September 14, 2007.

² Exhibit 1 at 1.1.

³ See generally, Exs. 2 at Chapters 1, 4, and 8; Ex. 5 at 5-6.

See, Public Hearing Sign-In Sheets (September 4 and 5, 2007).

At the outset of the public hearings the Administrative Law Judge made introductory remarks, followed by short presentations from Robert Cupit of the Commission's staff, Dr. Steve Rakow of the Energy Division of the Department, and David Birkholz, a Program Manager with the Energy Permitting Unit of the Department of Commerce, and a presentation from the Applicants. Following these presentations, members of the public asked questions of the presenters and shared their reactions to the material presented.

A summary of the testimony rendered at these evening hearings follows below:

Remarks by Mr. Gerald Adams: Mr. Adams, a homeowner on the proposed route along First Avenue in Lindstrom, expressed concerns over routing a large transmission line along the downtown corridor. With a wider, and more heavily trafficked Highway 8 planned for the area, Mr. Adams argued that upgrading the transmission line along the existing corridor presented special risks of hazard and injury. He suggested that the line was better placed elsewhere. Further, on aesthetic grounds, he urged that the larger towers associated with an 115kV line be placed outside of the downtown area.⁵

Remarks by Mayor Keith Carlson: Mr. Carlson, a long-time resident of Lindstrom, and its current Mayor, expressed preference for either the "Under the Lakes" routing option (Lindstrom's Proposed "Option E") or an option that placed the transmission line underground along Highway 8. Mayor Carlson expressed the view that the type of transmission line towers proposed for placement along Highway 8 was appropriate for placement in rural locales, but not in an increasingly urbanized center, such as downtown Lindstrom. Additionally, Mayor Carlson argued that the City's history of collaboration and cooperation with the hosting of this transmission line should not be "made worse" as the City works to become a shopping and tourism destination.⁶

Remarks by Ms. Joan Carlson: Ms. Carlson expressed the view that the threat of power outages and blackouts, as detailed in the Applicants' presentation, was overstated – and completely at odds with her experience over many years in the area. She posited that the proposed routing was an attempt to overreach upon lower-income residents who are not as politically powerful as others in the state.⁷

Remarks by Mr. Chris DuBose: Mr. DuBose outlined the plans and steps that the City of Lindstrom has completed in recent years so as to develop the downtown corridor along Highway 8 as a tourist destination. Further, he detailed the special challenges that Lindstrom's location presents when the City attempts to attract other, non-tourism-related business and industries to the Chisago Lakes Area. He urged that the upgraded

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See, September 5, 2007 Evening Hearing, Tr. at 54-57.

⁶ See, September 4, 2007 Evening Hearing, Tr. at 40-54; see also, September 5, 2007 Evening Hearing, Tr. at 90-100.

See, September 4, 2007 Evening Hearing, Tr. at 59-60.

line either be routed underground along Highway 8, or in the alternative, routed north away from the downtown corridor.⁸

Remarks by Councilman Curt Flug: Mr. Flug, a member of the Lindstrom City Council, expressed the view that the revenues that would be generated from existing power demand would be sufficient to underwrite an underground alternative for placement of the transmission line in downtown Lindstrom. He detailed the efforts that he and other members of the Council are making to revitalize "a struggling city." Councilman Flug concluded that if underground alternatives were viable in wealthier communities, they should be viable in more modest communities, like Lindstrom, as well.⁹

Remarks by Mr. Richard Herold: Mr. Herold expressed the view that Xcel Energy had considerable land holdings in rural areas north of the City of Lindstrom and that it would be more appropriate for the Applicants to route the upgraded line along these parcels.¹⁰

Remarks by Ms. Shellene Johnson: Ms. Johnson, a former member of the Lindstrom City Council and a member of the Concerned River Valley Citizens, asserted that it was in the best interests of Minnesota residents to have the line buried along Highway 8 in Lindstrom. She pointed to the special arrangements that the Applicants have proposed for routing along the St. Croix River Bluff as setting out the proper and appropriate practice for other scenic areas – such as those in and around Lindstrom. Additionally, following a colloquy with members of the Applicants' panel, Ms. Johnson questioned whether the project was designed or intended to meet local needs. Instead, she argued that the proposal asks Minnesota residents and ratepayers to shoulder infrastructure costs, health risks and aesthetic burdens so as to efficiently service the demands of Wisconsin customers from the Chisago substation. 12

Remarks by State Representative Jeremy Kalin: Representative Kalin made a few key points during his remarks. First, he posited that analysis of local needs that were developed by Mr. Duebner – who is an employee of the Midwestern Independent System Operator – should be approached with some skepticism. As Representative Kalin noted, whereas the current 69 kV line is not a part of the MISO system, an upgraded 115 / 161 kV transmission line would join the MISO grid as "a significant asset." Secondly, Representative Kalin observed that each of the previous load forecasts that he has reviewed "have the same curve;" with each suggesting that "urgent action is needed." He concludes that "the forecasting in general ... ends up being kind of the self-fulfilling prophecy ... [to] allay this need that is supposedly out

See, September 4, 2007 Evening Hearing, Tr. at 33-37.

⁹ See, September 4, 2007 Evening Hearing, Tr. at 61-63.

See, September 4, 2007 Evening Hearing, Tr. at 27-28.

See, September 4, 2007 Evening Hearing, Tr. at 78-86.

¹² See, September 5, 2007 Evening Hearing, Tr. at 68-90.

there." Finally, characterizing the proposed overhead routing of the transmission line along Highway 8 as "the least imaginative" option, he urged pursuit of an underground alternative. In Representative Kalis' view, an underground alternative would reduce the visual impacts and preserve tourism as Lindstrom's second largest industry. 13

Remarks by Mr. Vincent Marier: Mr. Marier, a business owner along Highway 8, expressed concern as to the impact that the proposed routing will have upon the aesthetics and "small town feel" of the downtown business district. Additionally, pointing to concerns for his employees, Mr. Marier had several inquiries of the Applicants' panel and Department staff about the effects of long-term exposure to Electro-Magnetic Fields.¹⁴

Remarks by Mr. Jerry Miller: Mr. Miller, President of the Lindstrom Economic Development Authority, detailed the City of Lindstrom's efforts to capitalize upon its Swedish heritage and to develop the downtown corridor as a tourist destination. Among the challenges Lindstrom has faced in recent years was in encouraging the passengers in vehicles traveling along Highway 8 to stop and to patronize local businesses. From his perspective, placement of the transmission towers and transformers along Highway 8 is at odds with the local Economic Development Authority's development plans for the corridor. 15

Remarks by Ms. Carmelita Nelson: Ms. Nelson expressed concern that the proposed routing of the transmission line along Highway 8 would undermine the attractiveness and the viability of Lindstrom's athletic fields, Farmer's Market and the proposed "Swedish Immigrant Trail" – all of which would lie beneath the Applicants' proposed line path. Ms. Nelson also offered the view that if the benefit to be obtained was more reliable power services, Minnesotans were more than prepared to suffer power outages of a day or two; and presumably she preferred this result to the proposed route. ¹⁶

Remarks by former State Representative Peter Nelson: Representative Nelson, a former City Official and long-time resident, outlined the special challenges that Lindstrom has faced over the years in developing its commercial base. Representative Nelson argued that the combination of Lindstrom's relative distance from Interstate Highway 35, and the recent rise in the price of gasoline, have intensified the City's challenges in developing new businesses. Further, Representative Nelson argued that the placement of large transmission line support structures within along an urbanized business district was not appropriate. In his view, the added costs of an underground alternative along Highway 8 was justifiable and similar to other, earlier burdens spread across the base of ratepayers. Alternatively, Representative Nelson noted that

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See, September 4, 2007 Evening Hearing, Tr. at 64-75.

See, September 5, 2007 Evening Hearing, Tr. at 26-42.

¹⁵ See, September 5, 2007 Evening Hearing, Tr. at 42-45.

See, September 4, 2007 Evening Hearing, Tr. at 54-58.

notwithstanding the fact that a more rural placement of the transmission line might likely place it alongside property owned by his son, daughter-in-law and grandchildren he favored such an alternative over a route in downtown Lindstrom as a "much better choice" for "the greater good." ¹⁷

Remarks by Ms. Stacy Pearson: Ms. Pearson outlined the process by which the City of Lindstrom undertook its comprehensive planning efforts and how that this process persuaded City officials that pursuit of additional tourism-related dollars provided Lindstrom's best prospects for remaining vibrant. Ms. Pearson described how the unique topography of Lindstrom – situated as it is on an isthmus, with a limited industrial zone, and roadways that are not conducive to trailer-truck traffic – have combined to depress efforts to attract manufacturers to the area. Accordingly, as part of a larger effort to focus upon development of a tourism-related economy, the City has undertaken a number of renovation projects; including refurbishing the City beaches and marina; upgrades to Highway 8; founding of a visitor's center; joint ventures with the Swedish Institute, establishment of Swedish signage and upgrades to Lindstrom's "Swedish Coffee Pot" water tower; among other items. Pointing to the series of tourism-related upgrades that have been completed, Ms. Pearson concludes "I would just humbly request that somebody sympathize with us and do something other than put these poles downtown." 18

Remarks by Councilman Jim Singer: Mr. Singer, a member of the Lindstrom City Council, outlined the plans that the Council has for revitalizing the downtown corridor and development of the "Swedish Immigrant Trail." He regards the proposed placement of larger transmission towers and a higher capacity line along the points of the trail as directly at odds with the City's plan to attract tourists, grow and develop. He favors routing of the transmission line north of the City of Lindstrom.¹⁹

Remarks by Mr. Gerold Swanson: Mr. Swanson made several inquiries about the configuration of transmission and distribution under the Applicants proposal.²⁰

Remarks by Mr. Joe Tromberg: Mr. Tromberg, a member of the Chisago Lakes Restoration Association, detailed the efforts that the Association has been making to improve the tourism prospects for the City of Lindstrom. Analogizing from his work as a contractor in the Heating and Air Conditioning industry, Mr. Tromberg notes that when he would "wire a control system ... I go through a lot of work to hide those wires because they look bad. You should do the extra to go around the city." Regarding the downtown corridor as an important asset for the "entire community," Mr. Tromberg

See, September 5, 2007 Evening Hearing, Tr. at 57-66; 106-115; accord, Written Comments of P. Nelson, summarized *infra*.

¹⁸ See, September 5, 2007 Evening Hearing, Tr. at 45-51; 100-105.

¹⁹ See, September 4, 2007 Evening Hearing, Tr. at 86-88.

See, September 4, 2007 Evening Hearing, Tr. at 29-33.

favors those alignment options which route the transmission line through more rural areas.²¹

Remarks by Councilman Joseph R. Wishy: Mr. Wishy, a member of the Lindstrom City Council, echoed Mr. DuBose's remarks regarding the City's goal to establish a tree-lined tourist destination along downtown corridor. Mr. Wishy expressed the view that the willingness of the City's forefathers to accommodate earlier, lower voltage transmission lines should not foreclose the current generation of City residents from realizing their development plans.²²

Written Comments Submitted by Participants of the Public Hearing

Twelve written comments were received by the Administrative Law Judge before the close of the post-hearing comment period. A summary of the written comments follows below:

Written Comments from Gay Lynn Adams: In her written remarks, Mrs. Adams made four key points: She questioned whether the energy needs described by the Applicants could be better attained through conservation measures; she detailed what she regarded as a poor history by Xcel Energy of customer service; she linked the existing transmission line with deflated property values along 1st Avenue in Lindstrom; and she expressed grave concern over the siting of "huge metal pilings" in the downtown area.

Written Comments from Daniel D. Hoolihan: In his written remarks, Mr. Hoolihan, who is both an Electrical Engineer specializing in Electromagnetic Compatibility Engineering, and a resident of Lindstrom, Minnesota, submitted a series of technical questions about the features of the proposed route. At their core, Mr. Hoolihan's inquiries questioned the wisdom of routing a high-voltage transmission line through the downtown corridor of Lindstrom.

Written Comments from Commissioner Gary F. Gerke: In his written remarks, Mr. Gerke, a member of the Lindstrom Planning Commission urged both approval of the Certificate of Need and routing of the transmission line north of the City of Lindstrom. He argued that the proposed routing in the downtown corridor "will negate much of what the [Lindstrom Economic Development Authority is] trying to accomplish."

Written Comments from Carrie Lesnau: In her written remarks, Ms. Lesnau urged approval of an underground alignment option for the transmission line in the downtown corridor. Noting both that "[s]mall towns are about atmosphere and aesthetics, [and] part of our success is in how we look," she argued that the incremental costs associated with placing the transmission line underground along the downtown corridor, was justifiable. As Ms. Lesnau reasoned, it would "insulate the City from the

²² See, September 4, 2007 Evening Hearing, Tr. at 39-40.

²¹ See, September 4, 2007 Evening Hearing, Tr. at 75-78.

loss of benefit for our millions dollars in investment" in recent and planned improvements.

Written Comments from Superintendent Michael McLoughlin: In his written remarks, Superintendent McLoughlin of the Chisago Lakes School District, expressed concerns that the proposed transmission line alignment would traverse both Bryant Environmental Center in Taylors Falls and the Chisago Lakes Middle School. He argued that a policy of "prudent avoidance" would result in routing transmission lines away from "schools and area used by students."

Written Comments from former State Representative Peter Nelson: In his written remarks Representative Nelson detailed his view that the best route for any transmission line would be further north than the proposed alignment through the City of Lindstrom. Additionally, pointing to aspects of an earlier routing application, which do not appear in the currently proposed plan, Representative Nelson argued that the proposed routing vindicates aesthetic interests unevenly and incompletely – addressing some aesthetic interests along the St. Croix River Valley but none in the City of Lindstrom.

Written Comments from Councilman Joseph R. Wishy: In his written remarks, Councilman Wishy detailed further how the routing of the transmission line through Lindstrom's downtown corridor conflicts with the City's tourism-related objectives.

A Petition, signed by 49 residents of Minnesota, stating their objections to the routing of the 115/161 kV transmission line through the City of Lindstrom, was received.

Written Comments from Saint Croix Scenic Coalition: In its written remarks, the Coalition detailed its concerns over the "direct negative visual impact from the proposed installation of the [High Voltage Transmission Line] where, after descending the River bluff face underground, it transitions to overhead and crosses Wild Mountain Road (County Highway 16), a part of the byway, in Taylors Falls." The Coalition "vigorously oppose[s] overhead construction." Instead, it urges a continuation of the underground routing "under the St. Croix Scenic Byway at County 16 before transition to overhead for the River crossing." Submitted along with its comments were maps of the Byway and a copy of a study commissioned by the Coalition entitled "Attractiveness in the St. Croix Valley: An Analysis of Perceptual Judgment and Landscape Dimensions."

Written Comments from the Department of Natural Resources: In written comments, Matt Langan, an Environmental Planner with the DNR's Division of Ecological Services, suggested a slight revision to Table 13 of the Environmental Assessment (so as to add Mattson Lake) and noted that the proposed routing "along the western bluff of the St. Croix River is consistent with DNR's previous understanding of the project." Further, Mr. Langan went on to observe that the "DNR supports the plans for reducing the number of lines crossing the river, as well as eliminating overhead lines coming down the bluff." Concluded Mr. Langan, because "this is an existing corridor,

DNR recommends mitigation measures described in the [Environmental Assessment] be accepted, and does not recommend any additional underground crossings."

Written Comments from the Department of Commerce: In written remarks, Assistant Attorney General Karen Finstad Hammell wrote to make three key points on behalf of the Energy Permitting Staff. First, notwithstanding the claims of the City of Lindstrom and CRVC, the Department asserted that members of the public were provided a sufficient opportunity to contribute to, and comment upon, the scoping of the environmental review. Second, the Department offered its view as to the meaning and import of the Environmental Quality Board's holdings regarding noise mitigation efforts in an important decision from 2001: In the Matter of the Exemption Application by Minnesota Power for a 345/230 kV High Voltage Transmission Line Known as the Arrowhead Project.²³ Third, pointing to the Commission's request that the Department "conduct the environmental review process, including any specific requests to the ALJ concerning preparation of a report or making a recommendation to the Commission on the route," the Department asserted that "under its delegated authority, [it] is not making an additional requests for any recommendation to the Commission in the route proceeding."

Written Comments from Co-Applicant, Xcel Energy: In written remarks, counsel for Co-Applicant, Xcel Energy, Michael C. Krikava, wrote to make two clarifications regarding details in the Environmental Assessment and, as stipulated among the parties to the formal proceedings, to submit the Affidavit of Publication as a late-filed exhibit. With respect to the clarifications, Mr. Krikava detailed the amount of the incremental increase in the costs of construction for the "Around the Lakes Over Head Alternative" and the dimensions of the underground vaults and duct banks that are suggested for use in Segment 5 of the Applicants' routing proposal.

FINDINGS OF FACT

The Parties and Participants:

- 1. Northern States Power Company, a Minnesota corporation and whollyowned subsidiary of Xcel Energy Inc., is a public utility. Among other business interests, Xcel Energy owns and operates high voltage transmission lines in Minnesota and delivers electricity to its customers in Minnesota and other states.
- 2. Dairyland is a not-for-profit generation and transmission cooperative that provides the wholesale electrical requirements and other services for 25 electric distribution cooperatives and 19 municipal utilities and has a service area that extends to four states, including Minnesota and Wisconsin.²⁴

In the Matter of the Exemption Application by Minnesota Power for a 345/230 kV High Voltage Transmission Line Known as the Arrowhead Project, OAH Docket No. 10-2901-12620-2 (2001) (MEQB Docket No. MP-HVTL-EA-1-99) (http://www.oah.state.mn.us/aljBase/290112620.rt.htm).

²⁴ Ex. 26 at 2.

- 3. The City of Lindstrom intervened as a formal party in the Certificate of Need proceeding and joined as a formal participant in the Route Permit proceeding. The existing 69 kV transmission line, as well as the center line of the Applicants' proposed route travel through the City of Lindstrom.
- 4. CRVC intervened as a formal party in the Certificate of Need proceeding and joined as a formal participant in the Route Permit proceeding.
- 5. The Department is authorized by statute to participate in matters before the Commission involving utility rates and adequacy of utility services and to intervene in Certificate of Need proceedings.²⁵

Procedural Background:

- 6. On July 30, 2004, Applicants filed a petition for approval of a notice plan (Certificate of Need Notice Plan) with the Commission pursuant to Minn. R. 7829.2550 for a transmission project in east central Minnesota.
- 7. On October 6, 2004, the Commission issued an Order Approving Notice Plan with Modifications.
- 8. On June 30, 2006, Applicants filed a modified Certificate of Need Notice Plan.
- 9. On September 9, 2006, the Commission issued an Order Approving Revised Notices as Further Modified.
- 10. On October 10, 2006, Applicants filed a Notice Plan Compliance Filing required by the Commission's September 2006 order.
- 11. On November 16, 2006, Applicants filed their Certificate of Need Application. 26
- 12. On December 6, 2006, Applicants filed a notice of intent to file a Route Permit Application using the alternative permitting process with the Commission pursuant to Minn. R. 7829.5500, subp. 2 for a transmission project in east central Minnesota.
- 13. On January 5, 2007, Applicants filed a Route Permit Application²⁷ for the Chisago County transmission project under the Alternative Permitting Process, MPUC Docket No. E-002/TL-06-1677.

²⁵ See, Minn. Stat. §§ 216B.243 (7), 216C.09 (b) and 216C.10 (a) (9) (2006).

²⁶ Ex. 1.

²⁷ Ex. 3.

- 14. On January 24, 2007, Applicants filed a Notice of Route Permit Application and Public Meeting.
- 15. On February 12, 2007, the Commission issued an Order Accepting the Certificate of Need Application as Substantially Complete and directing that an Environmental Assessment be completed for both the Certificate of Need and Route Permit proceedings.
- 16. On February 12, 2006, Applicants filed a Supplemental Filing to the Certificate of Need Application and Errata.²⁸
- 17. On February 12, 2007, the Commission issued a Notice and Order for Hearing referring the Certificate of Need matter to the Office of Administrative Hearings for contested case proceedings; authorizing joint public hearings in the Certificate of Need docket and the Route Permit docket; and combining the environmental review proceedings in both the Certificate of Need and Route Permit dockets. In this Order, the Commission also authorized the EFP Staff to establish an advisory task force and develop a proposed structure and charge for the task force.
- 18. On February 22, 2007, the EFP Staff sent a letter to local government officials in the proposed route area, soliciting individuals to serve as members of the Advisory Task Force.
- 19. On February 23, 2007, the First Prehearing Conference was held before the Administrative Law Judge.
- 20. On February 26, 2007, the Administrative Law Judge issued a First Prehearing Order, establishing a schedule and setting procedures for additional proceedings. The First Prehearing Order established an intervention deadline of March 19, 2007.
- 21. On February 27, 2007, the Department held a public information meeting in Lindstrom, Minnesota to inform the public about the proposed project and the regulatory proceedings; discuss environmental, social, and economic issues of importance in the area potentially affected; and to gather public input regarding the scope of the Environmental Assessment required by Minnesota Rules 7849.5700 and the Commission's February 12, 2007 order. At the meetings, public had an opportunity to ask questions about the proposed project, to suggest alternatives, and to outline specific impacts that should be addressed by the Department in its Environmental Assessment. The public was given until March 30, 2007, to submit written comments on the scope of the Environmental Assessment.
- 22. Because of the lack of affirmative responses regarding participation in the Advisory Task Force, on March 12, 2007, the EFP Staff filed a letter to the Commission

²⁸ Ex. 2.

²⁹ Ex. 518 at 6.

notifying the Commission of the lack of participation and the EFP Staff's intent to work with those government officials and members of the public to form an informal advisory group.

- 23. The City of Lindstrom asserts that the timeframe within which responsive replies were due was too compressed to facilitate meaningful participation by stakeholders.³⁰
- 24. On March 13, 2007, the EFP Staff filed a letter to local government officials in the proposed route area inviting them to participate in an informal advisory group in lieu of the formal Advisory Task Force.
- 25. On March 19, 2007, the City of Lindstrom and CRVC both filed petitions for intervention.
- 26. On March 30, 2007, the Working Group submitted its report, A View From the Ground, Alternative Routes & Least Environmental Cost Considerations for the Proposed Chisago Electric Transmission Line Project.³¹
- 27. On April 6, 2007, the EFP Staff filed its response to the City of Lindstrom's Motion to Extend the Advisory Task Force, requesting that the issue be certified to the Commission.
- 28. On April 9, 2007, the Administrative Law Judge issued Interim Orders on Intervention, granting the City of Lindstrom's petition for intervention and taking CRVC's petition for intervention under advisement pending review of supplemental filings.
- 29. On April 9, 2007, the City of Lindstrom filed with the Commission a Petition for a Contested Case in the Route Permit docket.
 - 30. On April 11, 2007, the Chisago Task Force issued its recommendations.
- 31. On April 18, 2007, CRVC filed a response to the Interim Orders on Intervention.
- 32. On April 24, 2007, the Administrative Law Judge issued a Second Order on Intervention, granting CRVC's petition for intervention.
- 33. On May 1, 2007, the Administrative Law Judge issued a Scheduling Order, scheduling a second prehearing conference on May 9, 2007, to discuss changes to the schedule set in the First Prehearing Order.
- 34. On May 1, 2007, the Commission issued an Order Denying Motion to Extend Time Frame of Advisory Task Force and Requiring Collaboration.

³⁰ See, Lindstrom's Initial Post-Hearing Brief, at 12-14.

³¹ See, Ex. 518 (Environmental Assessment), Appendix C.

- 35. On May 9, 2007, a Second Prehearing Conference was held before the Administrative Law Judge. On May 29, 2007, the Administrative Law Judge issued a Second Prehearing Order, adopting a hearing schedule and procedures applicable to both the Certificate of Need and the Route Permit proceedings.
- 36. On July 13, 2007, Applicants submitted prefiled testimony of David Duebner³², Michael P. Dunham³³, Thomas G. Hillstrom³⁴, and Charles A. Thompson.³⁵ The City of Lindstrom submitted prefiled testimony of John Olinger.³⁶ The Department submitted prefiled testimony of Dr. Stephen Rakow,³⁷ David E. Birkholz,³⁸ and Hwikwon Ham.³⁹
- 37. On August 17, 2007, Applicants submitted prefiled rebuttal testimony of David Duebner, 40 Michael P. Dunham, 41 Thomas G. Hillstrom, 42 and Charles A. Thompson. 43
- 38. On August 20, 2007, the City of Lindstrom submitted prefiled rebuttal testimony of A. Bruce Poole. 44
- 39. On August 20, 2007, the Department filed its Environmental Assessment.⁴⁵
- 40. On August 22, 2007, the Administrative Law Judge issued a Third Prehearing Order, scheduling a prehearing conference on August 28, 2007.
- 41. On August 23, 2007, Applicants moved to file additional rebuttal testimony of David Duebner in response to the City of Lindstrom testimony of Bruce Poole.
- 42. On August 23, 2007, Notice of the Public Hearings was published in the St. Paul Pioneer Press.

³² Exs. 5-6.

³³ Exs. 10-15.

³⁴ Ex. 18-19.

³⁵ Ex. 26.

³⁶ Exs. 201-205.

³⁷ Exs. 519-528.

³⁸ Ex. 517.

³⁹ Exs. 501-508.

⁴⁰ Exs. 7.

⁴¹ Exs. 16-17.

⁴² Exs. 20-22.

⁴³ Exs. 27.

⁴⁴ Exs. 206A, 206B, 207-213.

⁴⁵ Ex. 518.

- 43. On August 28, 2007, a Third Prehearing Conference was held before the Administrative Law Judge, during which the Administrative Law Judge granted Applicants' motion to file additional rebuttal testimony of David Duebner.
- 44. On August 28, 2007, the EFP Staff published Notice of the Availability of the Environmental Assessment in the EQB Monitor.
- 45. On August 29, 2007, Applicants submitted prefiled additional rebuttal testimony of David Duebner with attachments.⁴⁶
- 46. Hearings to obtain public comment were conducted at 7 p.m. on September 4 and 5, 2007, at the Chisago Lakes Area Library at 11754 302nd Street, Chisago City, Minnesota 55012. Members of the public attended both hearings and submitted comments on the record.
- 47. Evidentiary hearings in the Certificate of Need proceeding were conducted on September 4 and 5, 2007, at the Chisago Lakes Area Library at 11754 302nd Street, Chisago City, Minnesota 55012; and on September 10, 2007, at the Minnesota Department of Commerce at 85 Seventh Place East, Suite 500, St. Paul, Minnesota 55101. Witnesses for Xcel Energy, Dairyland, the City of Lindstrom, and the Department testified at the evidentiary hearings.
- 48. The public comment period and period to comment on the Environmental Assessment remained open until September 14, 2007.
- 49. On September 14, 2007, the EFP Staff filed their Comments and Request for Findings of Fact.
- 50. On September 14, 2007, Xcel Energy filed its Comments to the Environmental Assessment.

The Applicants' Proposal to Meet the Demand for Electricity:

- 51. The Applicants' Certificate of Need Application seeks authorization to construct the proposed 115 kV/161 kV transmission project.
- 52. By the Joint Certificate of Need Application, Xcel Energy and Dairyland seek certification for the replacement of an existing 69 kV electric transmission line with a new electric transmission line consisting of 115 kV and 161 kV elements between the Chisago County Substation near North Branch, Minnesota and the Apple River Substation near Amery, Wisconsin. Specifically, the proposal consists of a 115 kV transmission line from Xcel Energy's Chisago County Substation to a new Xcel Energy substation called Lawrence Creek, to be located near Taylors Falls, Minnesota.

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⁴⁶ Exs. 8 and 9.

- 53. The first five miles of the existing 69 kV transmission line, extending south from the Chisago County Substation, was built to 115 kV standards in 1995 and requires no physical change.
- 54. The line voltage from the Lawrence Creek Substation to the Border Substation in St. Croix Falls, Wisconsin would be 161 kV.
- 55. Applicants propose to place the new line underground through the land use district within the Lower St. Croix National Scenic Riverway, with the exception of the river crossing located in the vicinity of the St. Croix Falls dam. Under the proposal, the electric transmission line will continue on from the Border Substation to the Apple River Substation located near Amery, Wisconsin. In this segment, the transmission line will replace an existing 69 kV transmission line with a 161/69 kV double circuit line; upgrades which have been earlier approved by the Public Service Commission of Wisconsin.⁴⁷
- 56. The new Lawrence Creek Substation would be located on disturbed agricultural land near the City of Taylors Falls' wastewater treatment facility just outside the city's boundary in Shafer Township. Transformers and switching equipment that would be needed to accommodate 115 kV, 161 kV, 69 kV, and distribution voltages would be installed at Lawrence Creek.⁴⁸
- 57. In 2006 dollars, the transmission line project as proposed by the Applicants will cost approximately \$64,200,000.⁴⁹
- 58. If the proposed project is approved, Xcel Energy will own approximately 21 miles of the proposed transmission line located in Minnesota, at an estimated cost of \$47,472,000. Xcel Energy's affiliate Northern States Power Company, a Wisconsin corporation ("NSPW"), will own the portion of the 161 kV facilities in St. Croix Falls from the Minnesota/Wisconsin border at the St. Croix River Crossing to the Border Substation. Dairyland will own approximately 21 miles of the proposed transmission line from the Border substation to the Apple River substation, at an estimated cost of \$16,229,000.
- 59. East Central Energy, the local electric distribution cooperative serving the Shafer, Minnesota area, has agreed to defray a small portion of the project costs (\$500,000), but is not an Applicant in these proceedings.⁵⁰
- 60. In addition to the proposed transmission line, Applicants have identified the need for various equipment upgrades and a new 115/161 kV substation

⁴⁹ Exs. 1 at 4.24; Ex. 2, Table 3.1

⁴⁷ Ex. 1 at Chapters 1 and 2.

⁴⁸ Ex. 1 at 2.6.

Exs. 2 and 10 at 4. Great River Energy ("GRE") is the generation and transmission cooperative that provides power supplies to East Central Energy.

(denominated as the Lawrence Creek Substation) to be located near the City of Taylors Falls. The Applicants maintain that the development of a new substation is an integral part of the larger program of improvements to increase transmission capacity and reliability in the area.⁵¹

- 61. As proposed by the Applicants, the new transmission line would use existing corridor alignments, requiring approximately only 1.2 miles of new transmission line corridor near the new Lawrence Creek Substation. The existing 69 kV transmission line has a 50-foot wide right-of-way that lies 25 feet on each side of the transmission line centerline. The proposed 115 kV/161 kV transmission line would be built on structures that range between 60 to 90 feet tall placed at intervals of approximately 260 to 285 feet apart along the line route. ⁵²
- 62. Applicants' proposed project will also include expansion work at the Lindstrom and Shafer Substations to accommodate the switching gear, bus work and new transformers necessary to integrate a new 115 kV line into these distribution substations. Under the Applicants' proposal, these substations would be converted from 69 kV to 115 kV operations. ⁵³
- 63. If the Applicants receive a Certificate of Need to construct the transmission facilities, routing approvals must also be obtained from the Commission and local authorities to construct any approved lines. Applicants are simultaneously applying for the required Route Permit for the proposed transmission facilities using the Alternative Permitting Process. Applicants assert that that construction on an approved line could begin during calendar year 2008. Applicants estimate that the project could be operational by 2010.⁵⁴
- 64. The Department agreed that the proposed 115 kV/161 kV transmission line is needed for system reliability support in east central Minnesota and northwestern Wisconsin. The Department recommended that the Commission grant the Certificate of Need for the proposed project.⁵⁵

Development of the Proposal and Alternatives:

65. The existing 69 kV transmission system serving east central Minnesota and northwestern Wisconsin has three transmission sources: the Chisago 115-69 kV (18.75 MVA) transformer; the Arden Hills 115-69 kV (70 MVA) transformer; and the two Apple River 161-69 kV (67 MVA) transformers.

⁵² Ex. 1 at 2.5 – 2.13.

⁵¹ Ex. 1 at 2.6.

⁵³ Ex. 1 at 2.6.

⁵⁴ Ex. 1 at 2.12.

⁵⁵ Exs. 501 at 6:18-20, 8:29-30, 10:29-32 and 13:12-14; Ex. 511 at 45:18.

- 66. The system is operated with an Arden Hills-St. Croix Falls 69 kV line, a St. Croix Falls-Apple River 69 kV line, and a radial Chisago County-Lindstrom 69 kV line. Because the City of Lindstrom is served via a radially operated 69 kV line from the Chisago County Substation, if there is a fault on the Chisago County 115/69 kV transformer or on the Chisago Lindstrom 69 kV line, the customers served from the Lindstrom Substation would be without power.⁵⁶
- At the present time, only the Lindstrom Substation is served from Chisago County Substation. A switch on the existing 69 kV transmission system on the east side of the Lindstrom Substation is kept open to prevent damage to the circuit. If too much electrical current flows through the 69 kV transmission line, and the switch was closed, transformers and conductors along the line could be damaged and power outages result. ⁵⁷
- 68. The St. Croix Falls hydro-electric plant is centrally located in the system and has a maximum output of 24 MW and an average output of 12 MW. The substations in east central Minnesota served from this system include: Lindstrom, Shafer, Scandia, May, and Birch. Northwestern Wisconsin substations served from this system are: St. Croix Falls, Osceola, Farmington, Trap Rock, Border, Sand Lake, Balsam Lake, Eureka, and Milltown. ⁵⁸
- 69. Several previous studies have identified the need for improvements to the transmission system in east central Minnesota and northwestern Wisconsin in order so as to maintain service reliability in the area. Those studies include: the Hugo Area Long-Range Electric Delivery Study conducted in December 1994; the NSP Long-Range Delivery System Study, Central Twin Cities Area conducted in February 2000; and the Chisago Electric Reliability Project, Hybrid 115/161 kV Analysis conducted in September 2001. 59
- 70. The Chisago County Apple River study (attached as Appendix B to Applicants' Certificate of Need Application), was conducted to determine what system improvements might be needed in light of the improvements that have been made to the transmission system since 1996. This study was undertaken in 2004.⁶⁰
- 71. Seven different options to meet the need for electrical reliability in the east central Minnesota and northwestern Wisconsin areas were initially considered.⁶¹
- 72. Option AW: Option AW includes a Stone Lake 345-161 kV tap of the Arrowhead-Weston 345 kV line.

⁵⁶ Exs. 1 at 4.3-4.5 and 5 at 8-9.

Ex. 1 at 4.3 and Appendix B.

⁵⁸ Ex. 1, Appendix B at 2.

⁵⁹ Exs.1, Appendix B at 7; 214, 216 and 217.

Exs. 1, Appendix B and 5 at 3.

⁶¹ Exs. 1, Appendix B at 3-4 and 5 at 3-4.

- Option CA includes Chisago-Lindstrom-Shafer-Lawrence Creek 115 kV line and Lawrence Creek-St. Croix Falls-Apple River 161 kV line ("Chisago Electric Reliability Project"), with both line sections hosting bundled phase conductors.
- 74. Option CA1: Option CA1 includes a Chisago-Lawrence Creek 115 kV line, a new Lawrence Creek Substation, a Lawrence Creek-St. Croix Falls-Border 161 kV line, and a Border-Apple River 161/69 kV double circuit line. 62 Option CA1 also includes a single conductor per phase instead of bundled conductor for each phase.
- 75. Option DF: Option DF includes reconfiguration of the 69 kV system in east central Minnesota and northwestern Wisconsin, upgrading the Chisago County Substation 115-69 kV transformer and adding reactive support. Option DF would separate the transmission system in the northeastern Twin Cities from the transmission This separation would be accomplished by system in northwestern Wisconsin. operating a circuit breaker at the St. Croix Falls Substation to interrupt the flow of electricity. This alternative option would require construction of new lines and electrical components in both Minnesota and Wisconsin. The required additions include a higher capacity transformer at the Chisago County Substation and capacitor installations at Lindstrom and Scandia. Further, a new three mile, 69 kV transmission line circuit would be installed between St. Croix Falls and the Border Substation. This transmission line circuit would run through the City of St. Croix Falls and would not replace any existing circuits. Other facets of this alternative include upgrading the existing 69 kV line from Border Tap to Apple River to a higher capacity 69 kV line and upgrading the 115 kV line from the King Substation to the Willow River Substation to a higher capacity 115 kV line. The 115 kV line from the Red Rock Substation to the River Falls Substation would be upgraded by replacing the existing 115 kV conductors with higher capacity 795 kcmil 26/7 ACSS conductors.⁶³
- Option GN: Option GN is a distributed generation option which includes 76. 20 MW of generation at Lawrence Creek Substation, 50 MW generation at Apple River substation, and 50 MW generation at Hurley Substation. Further, the existing Wheaton generation (located at Eau Claire, Wisconsin and owned by NSPW) would be run as required.
- 77. Option KP: Option KP includes converting the King-Pine Lake-Hydro Lane-T Corners 115 kV line to 161 kV operation, converting the Red Rock-Crystal Cave 115 kV line to 161 kV operation and constructing a second Pine Lake-Apple River 161 kV line.
- Options RB and RBD: Option RB includes rebuilding the existing 78. Chisago-St. Croix Falls-Hugo 69 kV line and St. Croix Falls-Apple River 69 kV line, upgrading the Chisago 115-69 kV transformer, and installing a new 115-69 kV transformer at the Hugo Substation. Option RBD consists of installing a new, higher

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Exs. 1, Appendix B at 4 and 5 at 4-5.

capacity 69 kV transmission line from the Chisago County Substation to a new substation, called the Lawrence Creek Substation, near Taylors Falls. The line from Lawrence Creek to the St. Croix Falls Substation in Wisconsin, as well as the river crossing line, would also be replaced with a higher capacity 69 kV line. The existing 115-69 kV transformer at the Chisago County Substation would be replaced with a larger, 187 MVA unit and other electrical components would be upgraded to higher capacity.⁶⁴

- 79. Option RC: Option RC includes placement of either a new 161 kV or a 230 kV transmission line from the Rock Creek Substation and crossing the Saint Croix River on, or near, the Highway 70 Bridge.
- 80. Options AW, KP, RC do not upgrade the 69 kV system in east central Minnesota and northwestern Wisconsin and, therefore, do not address the local area load serving needs. Consequently, these options were not pursued in depth by the Applicants. ⁶⁵
- 81. Similarly, because Option CA did not address, or mitigate, the cross tripping of the existing Eau Claire-Arpin 345 kV line it was not pursued in depth by the Applicants. ⁶⁶
- 82. Because the initial analysis demonstrated that the Arden Hills-Lawrence Creek 69 kV line upgrade could be deferred, Option RB became option RBD.⁶⁷
- 83. Option GN, the distributed generation option, was rejected from further consideration because of its high cost. The net cumulative present value to install and operate the distributed generation option from 2005 to 2034 was \$185,000,000. It was therefore determined to be economically infeasible.⁶⁸
- 84. From this field of eight alternatives, the Applicants focused upon the three alternatives that it regarded as the most "electrically viable": Options CA1, DF and RBD. 69
- 85. Option CA1: Option CA1, the proposed project, provides long-term load serving capability to the local area transmission system between Chisago, St. Croix Falls, Arden Hills, and Apple River Substations. It has a 50 percent greater load serving capability than the 69 kV Rebuild Alternative (Option RBD detailed below). With 115 kV lines in Minnesota and 161 kV in Wisconsin, the proposed project also fits well into the design of the area transmission system and provides for operating flexibility. Among the

⁶⁴ Exs. 1, Appendix B at 4 and 5 at 4.

⁶⁵ Ex. 1, Appendix B at 4 and 21.

⁶⁶ *Id*.

⁶⁷ *Id.* at 5.

ob Id.

⁶⁹ *Id*, at 4.

competing alternatives, the proposed project is also the least cost plan. Even when the costs of underground construction in the St. Croix National Scenic Riverway are included, the cost of the proposed project totals \$64,200,000 in 2006 dollars.⁷⁰

- 86. Option DF: Option DF provides adequate load serving to east central Minnesota loads only until approximately 2012, when the line voltages would are projected to be inadequate. Further, this option aggravates the 115 kV tie line loads between Minnesota and Wisconsin. For this reason, Option DF necessarily implies a rebuilding of the Red Rock-River Falls 115 kV line and the King-Willow River 115 kV line. Assuming underground construction in the St. Croix National Scenic Riverway, the cost of this reconfiguring 69 kV option totals \$89,220,000 in 2006 dollars.⁷¹
- 87. Option RBD: Option RBD provides long-term load serving to the local area, but does not compare favorably to the cost and performance of the Applicants' proposal. The proposed project can serve approximately 50 percent more local area load than Option RBD and, unlike Option RBD, significantly improves tie line flows from Minnesota to Wisconsin. Lastly, assuming underground construction in the St. Croix National Scenic Riverway, the cost of the rebuild 69 kV option in 2006 dollars is \$81,770,000.⁷²
- 88. Assessing costs and performance of the alternatives, the Applicant's transmission planning engineers concluded that the proposed project was the best option to address the need for system reliability in east central Minnesota and northwestern Wisconsin.⁷³

The Applicants' Proposal for Routing the Transmission Line:

- 89. By their Route Permit Application, Xcel Energy and Dairyland seek a permit for their proposed project that will upgrade the existing 69 kV transmission line from the Chisago County Substation to the St. Croix River in Taylors Falls, Minnesota to 115 kV/161 kV. The proposed project has six distinct segments in Minnesota, which are described below:⁷⁴
- 90. <u>Segment 1 Chisago Substation to Karmel Avenue (No Construction)</u>: Segment 1 is a 4.9 mile segment of an existing line between the Chisago County Substation to a point approximately 900 feet west of the intersection of Karmel Avenue and Stacy Trail County State Aid Highway ("CSAH") 19. The existing transmission line is currently operated at 69 kV but is capable of operating at 115 kV and would not require any alteration.⁷⁵ The double circuit 115/69 kV portion of the route exits the

Exs. 1 at 4.24-25 and Appendix B at 4; 2 at 3.11.

⁷¹ Exs. 1 at 4.17, 4.24 and Appendix B; 2 at 3.11.

⁷² See, Exs. 1 at 4.24; 2 at 3.11.

⁷³ Ex. 1 at 4.24-25.

⁴ Ex. 3 at 13 – 18.

⁷⁵ Ex. 3 at 13.

Chisago County Substation to the west, turning south immediately for approximately 1,600 feet, before turning east along a field edge for approximately 2,000 feet. The transmission line then turns south for 3.5 miles, crossing CSAH 14 until it reaches Stacy Trail/CSAH 19. At this point the double circuit line separates and the proposed route follows the existing 69 kV transmission line along CSAH 19 east for approximately 3,300 feet.

- 91. Segment 2 Karmel Avenue to Lindstrom Substation (Rebuild from 69 kV to 115 kV): Segment 2 begins approximately 900 feet west of the intersection of Karmel Avenue and Stacy Trail/CSAH 19 and terminates at the Lindstrom Substation. It is approximately 2.2 miles in length. From its starting point west of Karmel Avenue, the route follows Stacy Trail CSAH 19 approximately 1.9 miles east to Lincoln Road. From Lincoln Road, the line turns south for approximately 1,280 feet to the Lindstrom Substation. The line will enter the Lindstrom Substation from the west. The existing structures along this segment are not now capable of supporting the proposed 115 kV line and will be replaced.
- 92. Segment 3 Lindstrom Substation to Shafer Substation Tap (Rebuild from 69 kV to 115 kV): As the 115 kV transmission line exits the Lindstrom Substation to the south it will follow the existing 69 kV transmission line Right of Way (ROW) through the cities of Lindstrom and Center City for approximately 2.8 miles to the Shafer Substation. The existing structures in this segment are not capable of supporting the proposed 115 kV line and will likewise be replaced. The proposed transmission line will continue along the alignment of the existing 69 kV line and follow U.S. Highway 8 from a point east of Elm Street to Center City. In Center City, the proposed line will deviate from U.S. Highway 8 and will continue northeast along the existing transmission ROW, crossing the northeastern edge of South Center Lake to the tap point in the Shafer Substation.
- 93. Segment 4 Shafer Substation Tap to a Newly Developed Lawrence Creek Substation (Rebuild from 69 kV to 115 kV): East of the Shafer Substation tap point, the proposed route follows County Road 82 310th Street for approximately 6.1 miles, until it reaches the site for the new Lawrence Creek Substation. The existing structures in this segment are not capable of supporting the proposed 115 kV line and will be replaced. The new substation is proposed to be located in the southwest quarter of Section 26, Township 34N, Range 19W. In order to enter the new Lawrence Creek Substation, the transmission line will need to follow a new alignment for approximately 0.22 miles north from County Road 82 310th Street in the vicinity of the half section of Section 26. Approximately 0.49 miles of the existing transmission line would be removed as a result of this rerouting. At the Lawrence Creek Substation, the voltage of the transmission line will change from 115 kV to 161 kV. The existing 69 kV line from Arden Hills, Minnesota will be doubled-circuited with the 115 kV line on the new 0.22 mile segment as it terminates at the Lawrence Creek Substation. Additionally,

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approximately 0.25 miles of the existing Arden Hills single-circuit 69 kV line will be rerouted so as to re-position the line for the double-circuit segment.⁷⁶

- 94. Segment 5 Lawrence Creek Substation to CSAH 20 (Rebuild from 69 kV to 161 kV): Segment 5 is a 1.4-mile 161 kV segment from the proposed Lawrence Creek Substation to the top of the west bluff of the St. Croix River at Chestnut Street CSAH 20. This segment is along a new alignment for approximately 0.4 miles east of the Lawrence Creek Substation, at which point the line turns northeast and follows the existing 69 kV line corridor for approximately one mile. The existing structures in the rebuild portion of this segment are not capable of supporting the proposed 161 kV line and will be replaced.
- 95. Segment 6 CSAH 20 to St. Croix Falls Substation (Rebuild from 69 kV to 161 kV): Segment 6 follows the existing 69 kV line for approximately 0.7 miles from the top of the west bluff to the St Croix River crossing. So as to mitigate the visual impacts to the St. Croix River Valley, the 161 kV transmission line is proposed to be constructed underground from the top of the bluff to the base of the bluff at Trunk Highway 95. From Trunk Highway 95 east to the river crossing, the proposed line will be constructed above the ground. As part of the proposed upgrades, Xcel Energy will remove the existing overhead transmission line and the existing distribution lines from the west bluff. At the river crossing, the Project will result in a net reduction of 10 wires crossing the river (the removal of 15 existing wires crossing the river and installation of three conductors and two shield wires).
- 96. <u>Wisconsin Segment</u>: Crossing the St. Croix River, the proposed transmission line continues to the St. Croix Substation in Wisconsin. In the St. Croix Substation, the line would be routed underground. The line would travel east along Louisiana Avenue, and then south on Blanding Woods Road, into an industrial park. The underground 161 kV transmission line would then turn east and continue underground beneath Pine Street and East Pine Street to the Dairyland Border Substation. Near the Dairyland Border Substation, the 161 kV transmission line would transition to an overhead transmission line that would be double-circuited with an existing Dairyland 69 kV transmission line. The line would then follow an existing alignment southward to the Sand Lake Substation and generally eastward to the Apple River Substation. The Public Service Commission of Wisconsin ("PSCW") has already approved the route for this portion of the proposed line that will be located in Wisconsin.

CONCLUSIONS

1. The Public Utilities Commission and Administrative Law Judge have jurisdiction to consider the Application for a Certificate of Need.

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The exact alignment of the 115 kV line and 69 kV line will be determined after the location of the Lawrence Creek Substation has been finalized. See, Ex. 3 at 40.

- 2. The Commission issued an Order Accepting Certificate of Need Application as Substantially Complete on February 12, 2007.
- 3. Minn. Stat. § 216B.243 provides that a Certificate of Need is required for a "large energy facility" as that term is defined in Minn. Stat. § 216B.2421. A large energy facility includes "any high voltage transmission line with a capacity of 100 kilovolts or more with more than ten miles of its length in Minnesota or that crosses a state line." Minn. Stat. § 216B.2421, subd. 2 (3).
- 4. The proposed 115 kV/161 kV transmission line constitutes a large energy facility and requires a Certificate of Need from the Commission before construction may begin.

I. Analysis of the Need for the Facilities

- 5. Minn. Stat. § 216B.243, subd. 3 and subd. 3a set forth the statutory requirements for large energy facilities. The provisions relevant to a Certificate of Need for a high voltage transmission line are:
 - a. Subd. 3. Showing required for construction. No proposed large energy facility shall be certified for construction unless the applicant can show that demand for electricity cannot be met more cost effectively through energy conservation and load-management measures and unless the applicant has otherwise justified its need. In assessing need, the commission shall evaluate:
 - (1) the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;
 - (2) the effect of existing or possible energy conservation programs under sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand;
 - (3) the relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report prepared under section 216C.18, or, in the case of a high-voltage transmission line, the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under section 216B.2425;
 - (4) promotional activities that may have given rise to the demand for this facility;

- (5) benefits of this facility, including its uses to protect or enhance environmental quality, and to increase reliability of energy supply in Minnesota and the region;
- (6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation;
- (7) the policies, rules, and regulations of other state and federal agencies and local governments;⁷⁷

* * *

- (9) with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota;
- (10) whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 and 216B.2425, subdivision 7, and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities or upgrades identified under section 216B.2425, subdivision 7;
- (11) whether the applicant has made the demonstrations required under subdivision 3a;⁷⁸
- b. Subd. 3a. Use of renewable resource. The commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric

Subdivision 3(8) is inapplicable to the transmission facilities proposed here as they are intended to provide transmission not generation. *Compare*, Minn. Stat. § 216B.243 (3) (8) (2006) ("any feasible combination of energy conservation improvements, required under section 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically").

Subdivision 3(12) is inapplicable because it relates solely to generating plants: "if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk."

power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source. For purposes of this subdivision, "renewable energy source" includes hydro, wind, solar, and geothermal energy and the use of trees or other vegetation as fuel.

- 6. Further, Minn. Stat. § 216B.2426 provides that "the Commission shall ensure that opportunities for the installation of distributed generation, as that term is defined in section 216B.169, subdivision 1, paragraph (c), are considered in any proceeding under section 216B.2422, 216B.2425, or 216B.243." Minn. Stat. § 216B.169 defines distributed generation as: "(c) 'High-efficiency, low-emissions, distributed generation' means a distributed generation facility of no more than ten MW of interconnected capacity that is certified by the commissioner under subdivision 3 as a high-efficiency, low-emissions facility."
- 7. Minn. R. 7849.0120 provides that a Certificate of Need for a high voltage transmission line shall be granted if it is determined that:
 - 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, considering:
 - (1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;
 - (2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;
 - (3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;
 - (4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand:

- (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, considering:
 - (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;
 - (4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives:
- C. by a preponderance of the evidence on the record, 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, 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;
 - (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

- 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.
- 8. In addition, Minn. R. 7849.0230 requires that the Department prepare an Environmental Report evaluating the proposal and any alternatives. Because the Applicants are simultaneously seeking a Route Permit under the Alternative Permitting Process governed by Minn. R. 7849.5500 to 7849.5720, the Commission, in its February 12, 2007 order, combined the environmental review in both the Certificate of Need and Route Permit Dockets. The Commission directed that the environmental assessment completed in the Alternative Permitting Process address the Certificate of Need analysis of alternatives.
- 9. Applicants bear the burden of proving the need for the proposed facilities and demonstrating that the criteria set for in statute and rule have been satisfied.
- 10. The best supported system plan option is the Applicants' proposed 115 kV and 161 kV transmission line from the Chisago County Substation to Taylors Falls. As detailed below, this plan is appropriate and sound when measured against the alternative approaches set forth in Minn. Stat. § 216B.243, subd. 3 and subd. 3a. Additionally, the Applicants' proposal satisfies the functional criteria set forth in Minn. R. 7849.0120.
- 11. None of the alternatives that were considered yield commensurate benefits to consumers, ratepayers and the public at large. ⁷⁹

Minn. R. 7849.0120, Criteria A (1) - Forecast Accuracy:

- 12. The service area for the proposed 115 kV/161 kV line (from the Chisago County Substation to Taylors Falls) has experienced substantial population growth and growth in the amounts of electricity used.⁸⁰
- 13. The population of Chisago County is projected to increase by 24 percent from 2005 to 2020; Washington County's population is projected to increase by 43 percent by 2020; and the population of Polk County in Wisconsin is projected to increase by 18 percent by 2020.⁸¹
- 14. Likewise, demand and energy use is increasing in east central Minnesota and northwestern Wisconsin. For example, in 2000 there were 2,100 hours when

⁷⁹ Compare, Minn. R. 7849.0110 (2007) ("the Commission shall consider only those alternatives proposed before the close of the public hearing and for which there exists substantial evidence on the public record as to the criteria set forth in Part 7849.0120").

⁸⁰ Ex. 1 at 1.6 - 1.11.

⁸¹ Ex. 2 at S1.

demand in the 69 kV study region exceeded 50 MW; and in 2002, there were 2,980 hours of demand above 50 MW. The peak electric power demand is expected to grow at a rate of 2.3 percent to 3.1 percent annually – and could reach 118 MW by 2015. 82

- 15. The Department concluded that the peak demand forecasts provided in the Applicants' Certificate of Need Application are reasonable and that a need exists for increased transmission capacity in the area to ensure reliable local electricity service.⁸³
- 16. When evaluating the performance of the electric transmission system, electrical engineers utilize computer simulations of the interconnected system to evaluate performance under a range of scenarios and to evaluate the performance of alternative solutions. In simulations, critical pieces of equipment and critical circuits are assumed to be removed from service in various power demand circumstances to evaluate the ability of the remaining system to perform under such a contingency. As part of the analysis, three different conditions of demand were modeled. First, the peak electrical demand at distribution substations was modeled. Second electrical demand at the time of winter peak was modeled. Third, simulations of off-peak periods during summer months when power transfers tend to be high were modeled. Each of these three system conditions were simulated at forecasted levels of demand in the study area for 2002, 2006, 2011, and 2015.⁸⁴
- 17. The Applicants forecast that electricity demand will continue to grow and thus the risk or exposure to power failure increases with time. For example, Table 4.3 of Applicants' Certificate of Need Application illustrates peak electrical demand at area substations through the year 2015. The forecasts reveal that the demand for electricity already exceeds the capacity of the system in the event that the 69 kV transmission system experiences an equipment failure. Because system demand already exceeds capacity many time throughout the year, changes in forecasts of growth merely extend the length of exposure to the risk of power system failure. In the event of foreseeable outages, the current system will not be adequate to maintain service during periods of moderate to high demand. Service to customers would be interrupted until either the failure is repaired, or until loads on the system are reduced to the point electric service can be restored.
- 18. Applicants have provided reasonable forecasts for east central Minnesota and northwestern Wisconsin and sufficient evidence to demonstrate the need for the proposed 115 kV and 161 kV transmission line.

Ex. 1 at 4.10. Xcel Energy provided additional information regarding forecast of demand and electric energy consumption in the study area. See Ex. 1 at Appendix A.

⁸³ Exs. 501 at 13; 519 at 45:16 - 18.

⁸⁴ Ex. 1 at 4.13 - 4.14.

⁸⁵ Ex. 1 at 4.11.

⁸⁶ Exs. 1 at 4.11 - 4.13; 5 at 5-6.

⁸⁷ See generally, Ex. 1 at 4.3 – 4.5.

Minn. R. 7849.0120, Criteria A (2) - The Palliative Effects of Conservation:

- 19. Demand side management ("DSM") is capable of reducing the need for system improvements needed to serve increased load by reducing demand. No program of conservation improvements, that could reduce the demand in the local Chisago County and northwestern Wisconsin, has been identified, such that the proposed upgrades would not be needed.
- 20. The Department concurs with the Applicants' assessment that while DSM can reduce the rate of growth, it is unlikely that it would be able to reduce actual existing load levels.⁸⁸
- 21. Accordingly, even if conservation measures could address the energy needs, so as to keep the current demand from rising a matter that is far from certain upon this record the existing 69 kV transmission system is not well suited to meet needs in the event of a serious contingency. Conservation efforts are not likely to sufficiently depress demand so as to improve the contingent load serving capability of the existing 69 kV transmission system and permit reliable service to the substations in the area.⁸⁹

Minn. R. 7849.0120, Criteria A (3) – The Effects of Promotional Practices:

22. The Applicants' general claims that both population and electricity demand in the service area are on the rise were not contradicted. There was no evidence in the record linking this rise in demand for electricity to promotional or marketing practices of the Applicants.

Minn. R. 7849.0120, Criteria A (4) – The Feasibility of Smaller Facilities:

23. There was no evidence that existing or planned facilities that do not require a Certificate of Need could meet the reliability needs identified in the Certificate of Need Application.

Minn. R. 7849.0120, Criteria A (5) – Efficiencies of the Proposed Facilities:

24. The proposed project includes a series of efficient new uses of existing resources. First, the upgrades of 69 kV lines to 115 kV facilitates the completion of a 115 kV transmission loop to Arden Hills, and contributes to overall system reliability. Second, terminating at 115 kV at the Chisago County Substation would take advantage of the existing Chisago County Substation 345-115 kV transformer capacity, thus eliminating the need for additional transformers at the Chisago County Substation. 90 Third, building the transmission line from the Chisago County Substation to the new Lawrence Creek Substation at 115 kV, and upgrading to 161 kV to the new Lawrence

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⁸ See. Ex. 519 at 12:17-22.

⁸⁹ Exs. 5 at 11-12; 519 at 11 – 13.

⁹⁰ Ex. 1 at 4.19.

Creek Substation would enable the Lindstrom and Shafer Substations to be converted more economically and re-utilize existing distribution transformers. Additionally, transforming from 115 kV to 161 kV at the proposed Lawrence Creek Substation would provide for efficient integration of the upgraded facilities with the Dairyland 161 kV system in northwestern Wisconsin.

25. The criteria established in Minn. R. 7849.0120 (A) support granting the Certificate of Need.

Minn. R. 7849.0120, Criteria B (1) – The Size, Type and Timing of Alternatives:

- 26. Applicants included a detailed engineering analysis in the Certificate of Need Application that examined three alternative system improvements to meet the reliability issues facing east central Minnesota and northwestern Wisconsin.⁹¹
- 27. After considering capital costs, system electrical losses, technical performance and a number of other factors, Applicants selected the 115 kV/161 kV line proposed in the Certificate of Need Application.
- 28. In evaluating available options, Applicants evaluated a direct current ("DC") transmission line. A DC circuit is generally a feasible alternative for transporting power long distances without intermediate connections. Because the objective of the proposed project is to improve the transmission system load serving reliability in east central Minnesota and northwestern Wisconsin, and not to directly transport large amounts of energy over long distances, ⁹² Applicants established that a DC circuit was not a viable alternative.
- 29. Applicants appropriately evaluated undergrounding as an alternative. Specifically, Applicants considered undergrounding in the St. Croix National Scenic Riverway. Applicants propose undergrounding the 161 kV transmission line in St. Croix National Scenic Riverway, except for the river crossing, in order to acquire necessary permits from the Minnesota Department of Natural Resources ("DNR"), the U.S. National Park Service ("NPS"), and the U.S. Army Corps of Engineers ("ACOE").
- 30. Applicants also addressed the possibility of generation alternatives. While it is technically possible that generation capabilities could be located within those areas, both in terms of meeting energy needs in the event of an outage, and the costs of such solutions, local generation is a poor alternative to the proposed upgrades. Three or four 25 to 40 MW generators would need to be placed near source points within the study area in order to ensure the power supply at the same level of reliability

93 *Compare*, Minn. R. 7849.0260 (B) (7) (2007).

⁹¹ Ex. 1 at 4.21 - 4.25 and Appendix B.

⁹² Ex. 1 at 4.21.

⁹⁴ Exs. 1 at 8.4; 18 at 11-12.

⁹⁵ *Compare,* Minn. R. 7849.0260 (B) (1) (2007).

as the proposed transmission project. Two or three generating units would need to operate to provide protection from the possibility of a transmission failure, and a spare unit would need to be in place so as to accommodate planned or forced outages of one of the generating units. These generators would be dedicated to meeting only local energy needs, because the existing 69 kV transmission system is not capable of transmitting sufficient power elsewhere along the grid. A typical 25 MW gas fired combustion turbine costs about \$30 to \$35 million. A 40 MW unit costs approximately \$40 to \$45 million Accordingly, the cost of generation would be substantially higher than the cost of the proposed transmission upgrade project, and the resulting delivery system would be less reliable than if the proposed transmission upgrade is constructed. Applicants correctly concluded that the addition of generation to the system is not a sensible alternative to the proposed project. ⁹⁶

- 31. Applicants also concluded that the use of renewable generation resources also would not be an adequate alternative to the proposed transmission project. Renewable generation sources, such as wind generation, would be an intermittent resource only and, therefore, would not serve the identified need in the east central Minnesota and northwestern Wisconsin areas.⁹⁷
- 32. Likewise, the scale of a local wind generation alternative would be massive with the Department projecting that a comparable solution would require the deployment of between 180 and 300 wind turbines. ⁹⁸
- 33. The Department shares the Applicants' assessment that generation is not an appropriate alternative for the proposed project.⁹⁹ Applicants have provided sufficient justification for eliminating additional generation (including renewable generation) as a viable alternative.
- 34. The proposed transmission line provides the most reasonable and efficient means of meeting electricity service reliability issues in east central Minnesota and northwestern Wisconsin.¹⁰⁰
- 35. Based upon the reliability concerns in east central Minnesota and northwestern Wisconsin, Applicants have demonstrated that the size, type and timing of the proposed transmission facilities is more appropriate than other alternatives.

Minn. R. 7849.0120, Criteria B (2) – Comparing the Cost of Alternatives:

36. The Department reviewed Applicants' screening analysis of the final three alternatives and concluded it was reasonable. 101

⁹⁶ Exs. 1 at 4.19-4.21; 5 at 12.

⁹⁷ Ex. 5 at 13:1-5.

⁹⁸ Ex. 518 at 25.

⁹⁹ Ex. 519 at 37:5-9.

¹⁰⁰ See, Ex. 1 at 4.24 - 4.25.

- 37. After conducting its own analysis, the Department concluded that Applicants' proposal was the least cost proposal. 102
- 38. Applicants have demonstrated that the cost of the proposed facilities and the energy to be supplied by the proposed facilities are more reasonable and prudent than that of the alternatives.

¹⁰¹ Ex. 519 at 17:10-12.

¹⁰² Ex. 519 at 24:8 to 25:1-3.

Minn. R. 7849.0120, Criteria B (3) - Comparing the Impacts of Alternatives:

- 39. The primary public benefit of the proposed project is its elimination of the current capacity limitations, and overall reliability limits, in the existing 69 kV transmission system in east central Minnesota and northwestern Wisconsin. 103
- 40. The proposed project and the alternatives have similar environmental impacts. Land uses across the proposed and alternative project areas include a mixture of agriculture, residential, commercial and recreational uses. Communities in the project area include Lindstrom, Center City, Shafer, and Taylors Falls in Minnesota and St. Croix Falls in Wisconsin.¹⁰⁴
- 41. Because the proposed project and the 69 kV Rebuild Alternative involves the replacement of an existing transmission line with a new conductor on taller structures, Applicants asserted that there would be no significant incremental adverse impacts that would prevent the project or this alternative from being executed. These options would use the centerline of the existing 69 kV transmission line with minimal additional widened right-of-way corridor. 105
- 42. The 69 kV Reconfiguration Alternative requires a higher-capacity upgrade of the existing 115 kV transmission lines from King Substation to the Willow River Substation and from the Red Rock Substation to the River Falls Substation. The land use in this alternative project area is non-residential urban or built-up land. Communities in the project area include Oak Park Heights, Stillwater, and Bayport. 106
- 43. Applicants found no significant land use or environmental issues that would prevent its proposal from being implemented. Nor did Xcel Energy find any environmental issues that would impose an extraordinary cost to mitigate. 107

Minn. R. 7849.0120, Criteria B (4) – Comparing the Reliability of Alternatives:

- 44. Based upon Xcel Energy's engineering analysis, all of the options studied appear to meet applicable North American Electric Reliability Corporation ("NERC") system reliability standards.
- 45. Among the competing alternatives the proposed project offers the best overall electrical results because it addresses existing and projected load serving needs; it will perform well under "system intact" conditions; it will perform well under a

¹⁰³ Ex. 1 at 8.3 - 8.4.

¹⁰⁴ Ex. 1 at 7.1.

¹⁰⁵ Ex. 1 at 7.1-7.8.

¹⁰⁶ Ex. 1 at 7.10.

¹⁰⁷ Ex. 18 at 4.

variety of contingent loading scenarios and voltages; and offers the prospect of the least system losses. 108

Minn. R. 7849.0120, Criteria C (1) – The Effect Upon Energy and Capacity Needs:

46. The proposed project will improve service reliability to east central Minnesota and northwestern Wisconsin. The proposed facilities are upgrades to local load serving capabilities and will have a small impact upon the state's overall energy and capacity needs.

Minn. R. 7849.0120, Criteria C (2) – Natural and Socioeconomic Environments:

47. Without the proposed upgrades, or other alternative, electricity customers in east central Minnesota and northwestern Wisconsin will be at ever increasing risk of system failures, low voltages and unplanned blackouts. These risks increase over time. 109

Minn. R. 7849.0120, Criteria C (3) – Inducements to Future Development:

48. There is no evidence in the record that the proposed project will induce future development in the area beyond the development and population growth that is already anticipated. Indeed, to the extent that the record speaks to this point at all, the record suggests that localities in the service area face genuine challenges in spurring hoped-for residential and commercial development.

Minn. R. 7849.0120, Criteria C (4) – Socially Beneficial Outputs:

- 49. The proposed project offers improved system longevity, efficiency, capacity and reliability to the residents and businesses in east central Minnesota and northwestern Wisconsin.
- 50. By utilizing the existing 69 kV centerline and placing the line underground in the St. Croix River Valley, the proposed project minimizes potential environmental, land use, and aesthetic effects. 112
- 51. The criteria set forth in Minnesota Rule 7849.0120(c) support granting Certificates of Need for the proposed 115 kV and 161 kV transmission line.

¹¹⁰ Compare, 2001 Laws of Minnesota, Ch. 212, Art. 7, Section 31.

¹⁰⁸ See, Exs. 1, Appendix B and 5 at 5 - 6.

¹⁰⁹ Ex. 5 at 13.

¹¹¹ Compare generally, September 5, 2007 Evening Hearing, Tr. at 43-50 and 61-62.

¹¹² Ex. 1 at 4.24-4.25.

Minn. R. 7849.0120, Criteria D - Federal, State and Local Requirements:

- 52. Applicants have committed to comply with all relevant policies, rules, and regulations of state and federal agencies and local governments relating to the construction and operation of the proposed transmission line, including but not limited to the National Electric Safety Code ("NESC") and NERC standards. There was no evidence in the record to the effect that the Applicants could not, or would not, comply with these parallel requirements.¹¹³
 - 53. The criterion set forth in Minnesota Rule 7849.0120(D) has been satisfied.

The Requirements of Minnesota Rule 7849.0230:

- 54. The Department timely completed the Environmental Assessment required by the Commission's February 12, 2007 Order.
- 55. Asserting that the "proposed line would be located in essentially the same place as the existing line," and that "[o]perating the transmission line at the higher voltage level of 115 kV would also not result in a significant environmental impact, the Department concluded that the proposed project "would have no significant unavoidable adverse impacts" 114

The Requirements of Minnesota Statutes § 216B.243:

- 56. The proposed project also satisfies the applicable criteria established in Minn. Stat. § 216B.243, Subd. 3:
 - (a) The proposed project will ensure safe and reliable service to the Applicants' customers during peak periods. 115
 - (b) The need for the proposed project cannot be avoided through the use of energy conservation programs. 116
 - (c) The proposed project will have a positive impact on serving the needs of electricity customers in the region. 117
 - (d) The needs addressed by the proposed project were not prompted by the promotional and marketing activities of the Applicants. 118

¹¹³ Ex. 18 at 6-7.

¹¹⁴ Ex. 518 at 78.

¹¹⁵ Compare, Minn. Stat. § 216B.243, subd. 3 (1) (2006).

¹¹⁶ Compare, Minn. Stat. § 216B.243, subd. 3 (2) (2006) with Ex. 501 at 6:13-14.

¹¹⁷ Compare, Minn. Stat. § 216B.243, subd. 3 (3) (2006).

¹¹⁸ Compare, Minn. Stat. § 216B.243, subd. 3 (4) (2006).

- (e) The proposed project will increase reliability of the energy supply in east central Minnesota and northwestern Wisconsin.¹¹⁹
- (f) The needs addressed by the proposed project could not be effectively met, and these system upgrades avoided, through load-management programs or new distributed generation. 120
- (g) The proposed project will comply with the policies, rules and regulations of federal, state and local governments.¹²¹
- (h) In comparison to other transmission or generation options, the proposed project enhances "regional reliability, access ... [and] deliverability" of electric power, "improve[s] the robustness of the transmission system" and does so for "lower costs for electric consumers in Minnesota." 122
- 57. Applicants have met the requirements of Minn. Stat. § 216B.243, subd. 3 (10).
- 58. The Commission has determined that both Applicants are meeting the good faith effort requirement of the renewable energy objectives statute; and the Department shares the view Applicants have satisfied this statutory requirement.¹²³
- 59. Applicants explored the possibility of generating power by means of renewable energy sources and demonstrated that the proposed project is less costly than power generated by wind turbines. The requirements of Minn. Stat. § 216B.243, subd. 3a have been satisfied. 124
- 60. The Applicants have complied with all applicable substantive and procedural requirements for a Certificate of Need.
- 61. The record in this proceeding demonstrates that the Applicants have satisfied the criteria set forth in Minn. Stat. § 216B.243 and Minn. Rule 7849.0120.
- 62. No party or person has demonstrated by a preponderance of the evidence that there is a more reasonable and prudent alternative to the proposed 115 kV/161 kV transmission line.
- 63. The Department has prepared an appropriate Environmental Assessment that reasonably addresses all of the subjects identified in the Scoping Decision.

¹¹⁹ *Compare*, Minn. Stat. § 216B.243, subd. 3 (5) (2006).

¹²⁰ Compare, Minn. Stat. § 216B.243, subd. 3 (6) (2006).

¹²¹ Compare, Minn. Stat. § 216B.243, subd. 3 (7) (2006).

¹²² Compare, Minn. Stat. § 216B.243, subd. 3 (9) (2006).

¹²³ Ex. 519 at 42:8-14.

¹²⁴ Ex. 5 at 13:1-5; *compare also*, Ex. 519 at 10 - 11.

64. No conditions on the Certificates of Need are necessary.

II. Analysis of the Proposed Routing

- 65. Minnesota Statute § 216E.03, subd. 2 provides that "[n]o person may construct a high-voltage transmission line without a route permit from the commission [and that a] high-voltage transmission line may be constructed only along a route approved by the commission."
- 66. An applicant may seek a Route Permit using the alternative permitting process if the proposed project is a high-voltage line between 100 and 200 kV. 125
- 67. The Commission authorized the use of the alternative permitting process for the Applicants' proposed 115 kV and 161 kV transmission line.
- 68. Because the Applicants are applying for the Route Permit through the alternative permitting process, the Applicants are not obliged to propose alternative sites or routes those that are included in their application.¹²⁶
- 69. However, during the scoping process for the Environmental Assessment, "any person may suggest an alternative site or route" to be evaluated by the Electricity Facility Permitting Staff of the Department.¹²⁷
- 70. The EFP Staff timely completed the Environmental Assessment required by Minnesota Rule 7849.5700 and the Commission's February 12, 2007 Order.

Statutory Criteria for Assessing the Route Permit Application:

- 71. Minn. Stat. § 216E.03, subd. 7, provides that the Commission's route permit determinations "must be guided by the state's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure." The statute further provides that to "facilitate the study, research, evaluation, and designation of sites and routes, the commission shall be guided by, but not limited to, the following considerations":
 - (1) Evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic

¹²⁵ See, Minn. Stat. § 216E.04 (2) (3) (2006).

¹²⁶ Compare, Minn. R. 7849.5530 (2007).

¹²⁷ Compare, Minn. R. 7849.5700 (2) (B) (2007).

values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

(2) Environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state:

* * *

- (5) Analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
- (6) Evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
- (7) Evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;¹²⁸
- (8) Evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;
- (9) Evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
- (10) Evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;
- (11) Evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved; and,
- (12) When appropriate, consideration of problems raised by other state and federal agencies and local entities. 129

This factor is not applicable to a project subject to the alternative permitting process. *See,* Minn. R. 7849.5520 (3) (2007) (providing that under the alternative permitting process, the applicant need not propose any alternative sites or routes to the preferred site or route).

Regulatory Criteria for Assessing the Route Permit Application:

- 72. Minnesota Rule 7849.5910 provides that when determining whether to issue a route permit for a high voltage transmission line, the Commission shall consider the following relevant factors:
 - A. Effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
 - B. Effects on public health and safety;
 - C. Effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
 - D. Effects on archaeological and historic resources;
 - E. Effects on the natural environment, including effects on air and water quality resources and flora and fauna;
 - F. Effects on rare and unique natural resources;
 - G. Application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
 - H. Use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;

* * *

- J. Use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. Electrical system reliability;
- L. Costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. Adverse human and natural environmental effects which cannot be avoided; and

Subdivision 7(b)(3)-(4) are likewise inapplicable as the proposed transmission facilities are intended to provide transmission but not generation. See, Minn. Stat. § 216E.03 (7) (b) (3) and (4) (2006).

- N. Irreversible and irretrievable commitments of resources. 130
- 73. Neither Minnesota Rule 7849.5930 (governing prohibited routes of high voltage transmission lines through wilderness and parks and natural areas), nor 7849.5940 (governing prohibited sites for large electric power generating plants) are applicable to the proposed project route.

Minn. R. 7849.5910, Criteria A – Effects Upon Human Settlements:

- 74. In order to obtain the necessary permitting for the proposed project from the Minnesota Department of Natural Resources ("DNR"), the U.S. National Park Service ("NPS"), and the U.S. Army Corps of Engineers ("ACOE"), the Applicants proposed to place the transmission line underground in the vicinity of the St. Croix National Scenic Riverway, crossing the river overhead at the same point as the existing 69 kV transmission line. The proposed project will result in a net reduction of 10 wires crossing the St. Croix River (the removal of 15 existing wires crossing the river and the installation of three conductors and two shield wires). 131
- 75. While all three of the alternatives studied by the Applicants meet the systems anticipated requirements through at least 2015, the proposed project's higher voltage provides 50 percent greater load serving capability and it is the upgrade option that with the fewest additional elements.
- 76. Applicants do not anticipate that any existing homes or businesses will be displaced by the proposed route.
- 77. While there were reports in the public hearing record of irritating noise levels from the current 69 kV transmission line, the greater weight of the evidence is that noise impacts of the proposed project will be minimal. 132
- 78. The primary impacts of the proposed project will be aesthetic. The supporting structures for the line, towering 60 to 90 feet above the ground, at intervals of approximately 260 to 285 feet apart along the line route, will impact the view sheds along the line route. 133
- 79. To the extent that the proposed project will negatively impact the view shed above the Swedish Immigrant Trail, the routing will have an impact upon cultural values within the proposed project area.¹³⁴

Minn. R. 7849.5910 (I) (2007) is inapplicable to the transmission facilities proposed here as they are intended to provide transmission but not generation.

¹³¹ See, Ex. 3 at 15.

¹³² Compare, September 5, 2007 Evening Hearing, Tr. at 28 and 55 with Ex. 518 at 38 - 40.

¹³³ Compare generally, Ex. 3 at 13 - 35.

See, Ex. 201 at 6; Testimony of Todd Clarkowski, Vol. 4, at 80 - 82.

- 80. There is not evidence in the record to suggest that the proposed project will impact the delivery of public services; except that, in a generalized fashion, improvements in the overall reliability of the electricity transmission system, will, as it does other enterprises, contribute to the timely delivery of public services. ¹³⁵
- 81. Any impacts to traffic will be minimized through coordination with MnDOT and county and city transportation departments.

Minn. R. 7849.5910, Criteria B – Effects Upon Public Health and Safety:

- 82. No effects on public health or safety are anticipated if the proposed project is implemented.
- 83. The proposed project would be constructed to comply with NESC and Xcel Energy guidelines and standards.
- 84. The underground portion of the proposed transmission line will be marked appropriately and inaccessible to the public.
- 85. The maximum electric field associated with the proposed project is 0.70 kV/meter underneath the conductors measured at one meter above the ground, which is significantly less than the EQB's maximum standard of 8 kV/meter. The maximum magnetic field for the upgraded line would be 56 milligaus at the edge of the right-of-way (25 feet from the centerline).
- 86. The Minnesota Department of Health has concluded that the cumulative evidence from scientific studies on the effects of exposure to EMF does not yet show that EMFs cause negative health effects. 136
- 87. As noted above, asserting that the "proposed line would be located in essentially the same place as the existing line," and that "[o]perating the transmission line at the higher voltage level of 115 kV would also not result in a significant environmental impact," the Department concluded that the proposed project "would have no significant unavoidable adverse impacts"¹³⁷

¹³⁵ Ex. 518 at 35.

¹³⁶ See, Ex. 3 at 43 - 44.

¹³⁷ Ex. 518 at 78.

Minn. R. 7849.5910, Criteria C - Effects Upon Land-Based Economies:

- 88. Expansion of existing rights-of-way for the proposed route will be minimal along the rebuild portion of the route; new rights-of-way or easements will generally be confined to the area for the Lawrence Creek Substation and new transmission lines near that substation.
- 89. There is no evidence in the record of anticipated impacts upon current mining or forestry in the proposed project area.
- 90. The impacts on agricultural lands will be minimal, consisting of possible short-term crop damage in the course of constructing the line in the right-of-way, and long-term agricultural land conversion due to pole placement and substation construction in the Lawrence Creek Substation area. Approximately 4.1 acres of land will be converted from agricultural use by construction of the Lawrence Creek Substation.
- 91. To the extent that the proposed project negatively impacts the view sheds above the Swedish Immigrant Trail, and discourages the taking (and marketing) of commemorative photographs of Lindstrom's "Swedish Coffee Pot" water tower, 138 the proposed alignment has a negative impact upon Lindstrom's tourism-related goals and objectives.

Minn. R. 7849.5910, Criteria D – Effects Upon Historic Resources:

- 92. As noted above, to the extent that the proposed project will negatively impact the view shed above the route of the Swedish Immigrant Trail, the routing will have an impact upon historical resources within the proposed project area.¹³⁹
- 93. It is not anticipated that the proposed route will have any impacts on previously identified archaeological resources.

Minn. R. 7849.5910, Criteria E – Effects Upon the Natural Environment:

94. The proposed project's impact to the natural environment, including effects on air and water quality resources and flora and fauna will be minimal and short-term. Any impacts will occur during the construction of the line (e.g., temporary impacts on air quality due to construction-related emissions and on wetlands).

Minn. R. 7849.5910, Criteria F – Effects Upon Unique Natural Resources:

95. The proposed project is not anticipated to have any impact on rare and unique resources because 97 percent of the line is a rebuild along the existing corridor

¹³⁸ Compare generally, September 5, 2007 Evening Hearing, Tr. at 92 - 93.

See generally, September 5, 2007 Evening Hearing, Tr. at 91 - 94.

of the 69 kV transmission line, and the new portion of the route in the Lawrence Creek Substation area is within previously disturbed agricultural land.

96. Xcel Energy has committed to working with the DNR to determine appropriate mitigation actions when necessary.

Minn. R. 7849.5910, Criteria G – The Benefits of Specific Design Options:

- 97. The proposed project substantially mitigates environmental effects. By utilizing the existing rights-of-way, the Applicants have sought to reduce and avoid impacts to human settlement, land-based economies and natural resources.
- 98. Yet, as detailed further below, because the "Around the Lakes Over Head Alternative" avoids the special and definite tourism-related impacts associated with routing the line along the City of Lindstrom's downtown corridor, it best balances the various needs of regional customers.

Minn. R. 7849.5910, Criteria H – Uses of Existing Topographic Features:

99. Ninety-seven (97) percent of the proposed transmission line uses the same rights-of-way as the existing 69 kV transmission line that it will replace. Poles will be placed on section lines and field breaks where possible.

Minn. R. 7849.5910, Criteria J – Uses of Existing Transmission Systems:

100. Ninety-seven (97) percent of the proposed transmission line uses the same rights-of-way as the existing 69 kV transmission line that it will replace.

Minn. R. 7849.5910, Criteria K – Effects Upon Electrical System Reliability:

101. As provided in the Applicants' Certificate of Need Application, the proposed project is critical to maintaining the reliability of the current 69 kV transmission system serving east central Minnesota and northwestern Wisconsin.

Minn. R. 7849.5910, Criteria L – The Costs of Implementing the Design:

- 102. The proposed 115/161 kV transmission line and substation upgrades are estimated at a total construction cost of \$64,200,000 (assuming underground construction through the St. Croix National Scenic Riverway). 140
- 103. The average annual maintenance costs are about \$500 per mile of transmission line. 141

¹⁴⁰ Exs. 2 at 3.11; 10 at 4:23-25.

¹⁴¹ Ex. 10 at 6:9-10.

- 104. The proposed route uses existing transmission line corridors to the maximum extent possible, which will minimize land acquisition costs.¹⁴²
- 105. As detailed in the Memorandum below, notwithstanding the \$1.4 million added incremental costs associated with the "Around the Lakes Over Head Alternative," this alternative path is one that the Commission should closely consider. By avoiding the special and definite tourism-related impacts associated with routing the line along the City of Lindstrom's downtown corridor, the "Around the Lakes Over Head Alternative" best balances the various needs of regional customers. 143

Minn. R. 7849.5910, Criteria M – Avoiding Adverse Effects:

106. The unavoidable impacts to human and natural environment from the proposed project are minimal. Construction-related activities would cause short-term impacts, mainly in the form of disturbed soils, potential dust emissions, and temporary traffic disruption associated with construction equipment and material delivery.

Minn. R. 7849.5910, Criteria N – Irretrievable Commitments of Resources:

- 107. There are very few commitments of resources associated with the proposed project that are irreversible and irretrievable but include those resources primarily related to construction.
- 108. Construction resources that will be used include concrete, steel and hydrocarbon fuel.
- 109. If the 115 /161 kV transmission line were removed in the future, the land could be restored to its prior condition and put to a different use.

Analysis of Statutory Factors Under Minnesota Statute § 216E.03, subdivision 7:

- (1) Evaluation of research and investigations relating to the effects on land, water and air resources of high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment.
- 110. See, Conclusions 74 106.

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¹⁴² Ex. 10 at 12:21-25.

See generally, Ex. 20, Figure 1, at 13; Testimony of Thomas Hillstrom, Tr. Vol. 2A, at 69.

- (2) Environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state.
- 111. See, Conclusions 74 to 106.
 - (5) Analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired.
- 112. See, Conclusions 74 to 81 and 88 to 93.
 - (6) Evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted.
- 113. See, Conclusions 94 to 96 and 106.
 - (8) Evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way.
- 114. See. Conclusions 68 to 70.
 - (9) Evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations.
- 115. See, Conclusions 74 to 81, 88 to 101 and 106.
 - (10) Evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications.
- 116. See. Conclusions 9 to 46.
 - (11) Evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved.
- 117. See. Conclusions 107 to 109.
 - (12) When appropriate, consideration of problems raised by other state and federal agencies and local entities.

- 118. Applicants considered the requests and requirements of the DNR, the NPS and the ACOE when it proposed undergrounding the proposed transmission project in the St. Croix National Scenic Riverway. 144
- 119. There is no evidence in the record that the proposed route will violate the rules of any other state agency or government department.
- 120. Any of the foregoing Findings of Fact that are more properly designated as Conclusions are adopted as such and incorporated by reference.

Based upon on the foregoing Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATIONS

- 1. The Administrative Law Judge recommends that the application for a Certificate of Need a 115 kV/161 kV transmission line from the Chisago County Substation near North Branch, Minnesota to the Apple River Substation near Amery, Wisconsin, be GRANTED.
- 2. The Administrative Law Judge recommends that the Routing Permit be GRANTED, AS MODIFIED by the "Around the Lakes Over Head" option.

Dated this 19th day of November, 2007.

s/Eric L. Lipman
ERIC L. LIPMAN
Administrative Law Judge

MEMORANDUM

While the Conclusions set forth above detail the Administrative Law Judge's analysis of the factual record, three arguments that were featured in the post-hearing submissions deserve a more detailed discussion.

The Department's Request that the ALJ Not Submit a Recommendation with Respect to the Line Routing:

As noted above, pointing to the Commission's request that the Department "conduct the environmental review process, including any specific requests to the ALJ concerning preparation of a report or making a recommendation to the Commission on the route," the Department asserted that "under its delegated authority, [it] is not making

¹⁴⁴ Exs. 1 at 7.4 - 7.5; 18 at 11 - 12; *accord,* Written Comments of M. Langan.

an additional requests for any recommendation to the Commission in the route proceeding." ¹⁴⁵

While acknowledging the special (and indeed, indispensable) relationship between the Department's Energy Facility Permitting staff, and the Commission, in the view of Administrative Law Judge the Department over-reads the various delegation orders in this matter. First, the various referral Orders issued by the Commission on February 12 and May 1, 2007 do not speak directly to omitting recommendations. The relevant orders are much broader charters to the Department and the Office of Administrative Hearings; principally, to undertake the work that is needed to establish a complete record for later review.

Second, while agreeing with the Department that the Commission's Orders provide that the EFP staff may request the Office of Administrative Hearings to undertake particular assignments related to the combined dockets, the best reading of the directives is that the Commission was extending a helping hand (or more precisely, the hands of its agents, the OAH) should the Department require any assistance. It is not the best reading of those Orders to say that the power to request additional services from OAH implies a delegation of the Commission's authority to have Administrative Law Judges refrain from other activities. Indeed, it seems that if the Commission wanted the OAH only to undertake those tasks that were later assigned by the Department, the various referral Orders would have made the point plain.

Third, the rationale – from the perspective of the Commission – of having the Administrative Law Judge develop Findings of Fact and Conclusions, but not to undertake the last, short step of rendering a Recommendation, is not at all clear. Indeed, truncating the work at the very last moment does not seem to be a natural or economical dividing line for the work load that has been delegated. The Department's reading of the Commission's Orders, therefore, is not one that follows directly or easily from the surrounding circumstances.

Fourth, particularly in circumstances like this case, where the Department's methods in developing the Environmental Assessment has come under vigorous attack, the public's clear expectation is that the Office of Administrative Hearings was hired, in part, to render an independent assessment of the contents of the hearing record. While the Department's EFP staff is undoubtedly the Commission's principal team of advisors on routing matters, ti is not clear from the referral Orders (or surrounding statutes and regulations) that it is to be the only advisor. To the contrary, the proceedings in the combined dockets stand for the proposition that detailed advice and recommendations will come to the Commission from all quarters.

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See, Written Comments of the Department of Commerce, at 7.

¹⁴⁶ Compare, Minn. R. 7849.5710 (2) (2007) ("The hearing examiner shall not prepare a report or make any recommendation to the commission unless the commission requests the hearing examiner to do so").

See, e.g., Initial Post-Hearing Brief of the City of Lindstrom, at 12 - 17 and 23 - 26.

¹⁴⁸ Compare generally, Minn. Stat. § 216E.03 (11) (2006).

Finally, because the Administrative Law Judge's views are merely recommendations, which the Commission is free to ignore in whole or in part, the risk of harm that might follow from uttering those last few words seems slight. If the Administrative Law Judge has misread the Commission's Orders and instructions, ignoring the proffered recommendations is a ready and very easy cure.

The Claimed Failure of the Department to Hire an Electrical Engineer:

In its papers, the City of Lindstrom argues that the analysis undertaken by the Department's Energy Facility Permitting staff should be wholly discounted by the Commission because the Department did not route either the underlying application or elements of the Environmental Assessment to an electrical engineer for review. Blasting the Department's proffered analysis in the CON proceeding as a "farce" and an "abdication of duty," the City argues that the Department staff is not qualified to advise the Commission as to the need for the proposed facilities. 150

Notwithstanding its very sharp tone, the City's argument runs far ahead of the accompanying law. The City points to no statute or regulation requiring the referral of the Department's draft materials to an electrical engineer and the Administrative Law Judge is aware of no such requirement. At best, the City's critique blends both scientific and political objections to the Department's analysis; but the criticism is not rooted in the law.

The Around the Lakes Alternative and the Case of People for Environmental Enlightenment and Responsibility Inc., v. Minnesota Environmental Quality Council:

In its Post-Hearing briefs, the Applicants rely heavily upon the decision of the Minnesota Supreme Court in *People for Environmental Enlightenment and Responsibility Inc.* ("PEER"), v. Minnesota Environmental Quality Council, 266 N.W.2d 858 (Minn. 1978) for the proposition that upgrades along existing transmission lines are strongly favored over the proliferation of new HVTL routes. While the Applicants' summary of the decision in *PEER* is accurate, it is, in the judgment of the Administrative Law Judge, incomplete. When read in its entirety, the factual circumstances and the Court's analysis in *PEER* leads to a contrary conclusion and details why the Commission should closely review the "Around the Lakes Over Head" routing option.

In *PEER*, the Court focused upon properly balancing the interests of the 35 homeowners who lived adjacent to transmission line alternative "Route 7," against the public's broader environmental interests in Long Lake and a 130-acre parcel of virgin, old-growth oak woods that lay underneath the path of transmission line alternative

See, Initial Post-Hearing Brief of the City of Lindstrom, at 3, 17 and 21.

¹⁵⁰ *Id.*, at 13 and 17.

¹⁵¹ See, e.g., Applicants' Joint Initial Post-Hearing Brief at 31 and 39.

"Route 3." In *PEER*, the Minnesota Environmental Quality Council staff favored a "Route 7" routing alternative, whereas the applicant-utilities and the homeowners both favored routing the transmission line along "Route 3." 152

This case is factually different than *PEER*, in ways that are significant to the later analysis. First, a choice between the Applicants' favored route along the existing transmission line corridor, and the "Around the Lakes Over Head" option, does not implicate the same type of unique and "noncompensable" environmental assets as was the case in *PEER*. Indeed, to the extent that the record speaks of unique regional assets deserving special guardianship, those assets exist along the proposed route in downtown Lindstrom and not along the more rural path around Chisago Lake. 154

Secondly, the Minnesota Supreme Court remanded the proceedings in *PEER* so that the agency could complete the type of inquiries that are furnished by this record namely, whether the homes proposed for condemnation "are, because of their unique characteristics, not replaceable." ¹⁵⁵ In the view of the Administrative Law Judge, this record goes very far in establishing such uniqueness. The particular topography of Lindstrom - situated as it is on an isthmus, with a limited industrial zone, and with roadways that are not conducive to trailer-truck traffic - combine to very dramatically reduce Lindstrom's development options if it is not to be a retail and tourism center. Likewise, the serial and coordinated efforts that the City has undertaken to develop a tourism-related economy make clear that its claims are not pretextual; geared only to avoid the receipt of the transmission line that is needed by the wider region. ¹⁵⁶ Indeed. in a powerful reply to suggestions of N.I.M.B.Y. - "Not in My Back Yard" - both the current and the former Mayor of Lindstrom each urged that the upgraded line be routed closer to their own families so as to avoid the projected impacts upon the downtown corridor. 157 By itself, this fact makes the *PEER* case distinguishable and augers for the Commission's close review of the "Around the Lakes Over Head" alternative.

E.L.L.

¹⁵² See, PEER, 266 N.W.2d at 862.

¹⁵³ *Id.* at 874.

¹⁵⁴ See, Conclusions 91, 92 and 105.

¹⁵⁵ See, PEER, 266 N.W.2d at 874.

See, e.g., Ex. 201 at 6; Testimony of Todd Clarkowski, Vol. 4, at 80 - 82; September 5, 2007 Evening Hearing, Tr. at 45-51 and 100-105.

See, September 4, 2007 Evening Hearing, Tr. at 40-41; September 5, 2007 Evening Hearing, Tr. at 114-15.



MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

600 North Robert Street Saint Paul, Minnesota 55101

Voice: (651) 361-7900

TTY: (651) 361-7878

Fax: (651) 361-7936

Mailing Address: P.O. Box 64620 St. Paul, Minnesota 55164-0620

November 19, 2007

See Attached Service List

Re: In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Certificate of Need for a 115 kV and 161 kV Transmission Line from Taylors Falls to Chisago County Substation and In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Route Permit for a 115 kV and 161 kV Transmission Line from Taylor Falls to Chisago County Substation

OAH NO.: 8-2500-17840-2

PUC DOCKET NO. E-002/CN-04-1176; E-002/IL-06-1677

Dear Parties:

The document listed below has been filed with the E-Docket system and served as specified on the attached service list.

Summary of Testimony at the Public Hearings, Findings of Fact, Conclusions and Recommendations
Service List as of 8/22/07

Sincerely,

s/Eric L. Lipman

ERIC L. LIPMAN Administrative Law Judge

Telephone: (612) 341-7601

ELL:dsc Enclosure

SERVICE LIST

In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Certificate of Need for a 115 kV and 161 kV Transmission Line from Taylors Falls to Chisago County Substation and In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Route Permit for a 115 kV and 161 kV Transmission Line from Taylor Falls to Chisago County Substation

OAH Docket No. 8-2500-17840-2 MPUC Docket No. E-002/CN-04-1176 (Certificate of Need) MPUC Docket No. E-002/TL-06-1677 (Route)

All Parties have agreed to E-File documents at: www.edockets.state.mn.us.

Filing with E-dockets shall constitute service on the Public Utilities Commission, the Department of Commerce and the Office of Administrative Hearings. As of this date, all parties have agreed to accept service by e-mail at the e-mail addresses listed below. However, where indicated, parties have requested that the e-mail be followed by mail or delivery of a hard copy. In the event that a pleading or attachment cannot be filed and served electronically, it must be filed and served on each of the parties at the addresses listed.

Documents that contain trade secret or nonpublic data may be e-filed, but may not be copied or served electronically.

Burl Haar (E-Filing or 15 Copies, No IRs) Executive Secretary Minnesota Public Utilities Commission 121 East Seventh Place - Suite 350 St. Paul, MN 55101-2147	Sharon Ferguson (E-Filing or 4 Copies) Docket Coordinator MN Department of Commerce 85 7th Place East - Suite 500 St. Paul, MN 55101-2198
James P. Johnson Xcel Energy 5th Floor 414 Nicollet Mall Minneapolis, MN 55401-1993 James.p.johnson@xcelenergy.com	Michael Krikava Catherine Biestek Briggs and Morgan 2200 IDS Center 80 South 8 th Street Minneapolis, MN 55402 mkrikava@briggs.com cbiestek@briggs.com

Julia E. Anderson Valerie M. Means Telecommunications & Energy Division Office of the Attorney General 1400 Bremer Tower 445 Minnesota Street St. Paul, MN 55101-2131 Julia.Anderson@state.mn.us	Jeffrey L. Landsman Niles Berman Joshua Gildea Wheeler. Van Sickle & Anderson 25 West Main Street - Suite 801 Madison, WI 53703-3398 jlandsman@wheelerlaw.com
Valerie.means@state.mn.us Curt Nelson OAG-RUD 900 NCL Tower 445 Minnesota Street St. Paul, MN 55101-2130	Charles Thompson Dairyland Power Cooperative P.O. Box 817 3200 East Avenue South LaCrosse, WI 54602-0817 cat@dairynet.com
SaGonna Thompson Xcel Energy 5th Floor 414 Nicollet Mall Minneapolis, MN 55401-1993	Carol A. Overland Overland Law Office P.O. Box 176 Red Wing, MN 55066 overland@redwing.net
John Olinger City of Lindstrom 13292 Sylvan Avenue Lindstrom, MN 55045 jolinger@cityoflindstrom.us	Bill Neuman Shellene Johnson c/o Bill Neuman 18837 Osceola Road Shafer, MN 55074 ayelink@frontiernet.net
	COURTESY COPY TO REPORTER: (Pleadings, Testimony, No IRs) Janet Shaddix Shaddix & Associates Suite 122 9100 West Bloomington Freeway Bloomington, MN 55431 jshaddix@janetshaddix.com

SUPPLEMENTARY NOTICE LIST:

Persons listed below are not on the official service list of this proceeding. These persons are not currently formal parties or participants in this matter. The intervention deadline in this matter is 4:30 p.m. on Monday, March 19, 2007.

Persons seeking to join as parties (with rights to service copies) must contact the Administrative Law Judge. The following persons are receiving this mailing to ensure that they have notice of the opportunity to participate in this proceeding:

Todd J. Guerrero Lindquist & Vennum 4200 IDS Center Minneapolis, MN 55402	Christopher Greenman Excelsior Energy Suite 305 11100 Wayzata Boulevard Minnetonka, MN 55305
Tod Sherman MN/DOT Metropolitan Division 1500 West County Road B2 Roseville, MN 55113	Charles and Gloria Wilberg Trout Brook Farm 2414 75th Avenue Osceola, WI 54020
John C. and Laura A. Reinhardt 3552 26th Avenue South Minneapolis, MN 55406	

Email List

Burl.Haar@state.mn.us

Sharon.Ferguson@state.mn.us

James.p.johnson@xcelenergy.com

mkrikava@briggs.com

cbiestek@briggs.com

Julia.Anderson@state.mn.us

Valerie.means@state.mn.us

ilandsman@wheelerlaw.com

jgildea@wheelerlaw.com

cat@dairynet.com

overland@redwing.net

iolinger@citvoflindstrom.us

ayelink@frontiernet.net

jshaddix@janetshaddix.com

STATE OF MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS ADMINISTRATIVE LAW SECTION PO BOX 64620 600 NORTH ROBERT STREET ST. PAUL, MINNESOTA

CERTIFICATE OF SERVICE

Case Title:

In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Certificate of Need for a 115 kV and 161 kV Transmission Line from Taylors Falls to Chisago County Substation

and

In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative for a Route Permit for a 115 kV and 161 kV Transmission Line from Taylor Falls to Chisago County Substation OAH Docket No. 8-2500-17840-2

MPUC Docket No. E-002/CN-04-1176; E-002/IL-06-1677

Denise Collins, certifies that on the 19th day of November, 2007, she E-filed a true and correct copy of the attached the Summary of Testimony at the Public Hearings, Findings of Fact, Conclusions and Recommendations and Service List as of 8/22/07; via the Minnesota Department of Commerce's website to the following individuals:

See Attached Service List