

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Phyllis Reha  
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Vice Chair  
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In the Matter of the Application of Northern States Power Company for a Certificate of Need for Two 115 kV High Voltage Transmission Lines in the Midtown Area of South Minneapolis

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DOCKET NO. E-002/CN-10-694

ORDER GRANTING CERTIFICATE OF NEED

**PROCEDURAL HISTORY**

**I. Petition for Certificate of Need**

On November 29, 2010, Northern States Power Company d/b/a Xcel Energy (Xcel) filed an application for a certificate of need for construction of two new distribution substations and two 115 kilovolt (kV) transmission lines in south Minneapolis (the Hiawatha Project).

On December 1, 2010, the Commission issued a notice seeking comments on the completeness of the application under applicable statutes and rules.

On February 16, 2011, the Commission issued an Order accepting the application as complete.

On March 31, 2011, the Department of Commerce (the Department) filed comments on the merits of the certificate of need application, recommending that the Commission grant a certificate of need.

On October 10, 2011, two public hearings (one in the afternoon and one in the evening) were held at Plaza Verde in south Minneapolis. Administrative Law Judge Beverly Jones Heydinger presided over the hearings and submitted her Summary of Public Comment on November 4, 2011.

**II. Environmental Report**

On April 22, 2011, under Minn. Rules, part 7849.1400, subp. 7, the Department issued a scoping decision determining alternatives and items to be addressed in the Environmental Report (the Report) regarding the Hiawatha Project and the schedule for completion of the Environmental Report.

On August 17, 2011, the Department's Energy Facility Permitting (EFP) staff issued the Environmental Report.

The Commission met to consider the matter on January 12, 2012.

## **FINDINGS AND CONCLUSIONS**

### **I. Proposed Project**

As a result of changes made by the Legislature in 2010, the Hiawatha Project requires a certificate of need under Minn. Stat. § 216B.243 and under Minn. Rules, Chapter 7849. The legislation specifically states that a certificate of need is required for a project that is:

a high-voltage transmission line longer than one mile with a capacity of 100 kilovolts or more that is located in a city of the first class in a zone within one mile of the transmission line in which population density exceed 8,000 persons per square mile, and that runs parallel to and is within one-half mile of a below-grade bike and walking path that connects with other bike paths along a river.<sup>1</sup>

Subsequent to the enactment of this legislation, Xcel Energy filed a request for a certificate of need for construction of two 115 kilovolt (kV) high-voltage transmission lines and two new distribution substations in south Minneapolis, near Hiawatha Avenue and 28<sup>th</sup> Street, and Oakland Avenue and 29<sup>th</sup> Street. The routes of the transmission lines between the substations would total approximately 1.4 to 3.8 miles depending on the final route selected. According to Xcel, the area is experiencing low voltage conditions, brown outs, and periodic interruptions in service. Xcel stated that its engineers have determined that there is a load capacity deficit requiring the Hiawatha Project and that without the new infrastructure, electrical conditions will worsen.

### **II. The Legal Standard for a Certificate of Need**

#### **A. The Initial Certificate of Need Factors**

As initially enacted, the certificate of need statute identified eight factors for the Commission to consider in evaluating the need for a proposed large energy facility<sup>2</sup> and directed the Commission to “adopt assessment of need criteria to be used in the determination of need for large energy facilities pursuant to this section.”<sup>3</sup>

The statute also prohibited the Commission from granting any certificate of need unless the applicant demonstrated that the need for electricity cannot be met more cost effectively through energy conservation and load-management measures.

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<sup>1</sup> 2010 Minn. Laws, chapter 361, article 5, section 19.

<sup>2</sup> Minn. Stat. § 216B.243, subd. 3.

<sup>3</sup> Minn. Stat. § 216B.243, subd. 1.

## **B. The Rules**

In 1983, the Commission, in compliance with its statutory obligation to establish assessment of need criteria, adopted the certificate of need rules, Minn. Rules, Chapter 7849. One of those rules, Minn. Rules, pt. 7849.0120, addressed the eight factors identified in the statute and directed the Commission to issue a certificate of need when the applicant demonstrates:

(A) the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states;

(B) a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record;

(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; 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.

## **C. Additional Statutory Requirements**

Subsequent to the adoption of the rules, Minn. Stat. § 216B.243, subd. 3, was amended to add four additional factors for the Commission to evaluate in assessing need:

(9) with respect to high-voltage transmission lines, 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 customers 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 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,<sup>4</sup>; and

(12) 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.

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<sup>4</sup> Minn. Stat. §216B.243, subd. 3a, prohibits the Commission from granting a certificate of need for any large energy facility that transmits electric power generated by means of a nonrenewable energy source unless the applicant demonstrates that it has explored using renewable resources and that total project costs of the project it proposes, including environmental costs, are lower than the cost of using renewables.

**III. The Department’s Comments and Environmental Report Regarding Xcel Energy’s Application for a Certificate of Need**

**A. The Department’s Comments on the Merits of Xcel’s Certificate of Need Application**

In its comments filed March 31, 2011, the Department examined Xcel Energy’s application for a certificate of need with respect to criteria established in statute and rule and explained why it believed the application met those criteria. An itemization of the criteria addressed and the Department’s recommendations regarding them follows:

Regulatory Criteria: Minn. Rules, part 7849.0120	Where Addressed in the Department’s March 31, 2011 Comments	The Department’s Statement
7849.0120 A(1)	II.A.1.a	The Department stated that the accuracy of the forecast of demand is not relevant to a determination of need because the area has already experienced historical demand greater than the ability of the infrastructure to reliably provide service.
7849.0120 A(2)	II.B.2	The Department determined that energy conservation will not be able to address issues related to meeting existing demand at the levels indicated in the petition.
7849.0120 A(3)	II.E.2	The Department stated that it is not aware of any relevant promotional practices of Xcel.
7849.0120 A(4)	II.C.1.a	The Department stated that renewable generation is not competitive and that lower voltage alternatives are inferior.
7849.0120A(5)	II.D	This is addressed in the Environmental Report filed by the OES.
7849.0120 B (1)	II.C.2	The Department determined that the size is reasonable; the type is reasonable; and the timing is reasonable.
7849.0120 B (2)	II.C.3	The Department determined that proposed alternative A1 is the least cost alternative.
7849.0120 B (3)	II.C.4	The Department concluded that use of the Commission’s externality values is unlikely to alter the cost rankings.
7849.0120 B (4)	II.C.5	The Department concluded that each of the alternatives would result in equivalent or inferior reliability.
7849.0120 C (1)	II.A.1.b	The Department concluded that the proposed Project is not directly related to overall state energy needs; it is necessary to restore reliable service in the local area.

7849.0120 C (2)	II.D	This is addressed in the Environmental Report filed by the OES.
7849.0120 C (3)	II.D	This is addressed in the Environmental Report filed by the OES.
7849.0120 C (4)	II.D	This is addressed in the Environmental Report filed by the OES.
7849.0120 D	II.E.1	The Department concluded that the record does not demonstrate that Xcel will fail to comply.

<b>Statutory: Criteria Minn. Stat. § 216B.43</b>	<b>Where Addressed in the Department's March 31, 2011 Comments</b>	<b>The Department's Statement</b>
§216B.243, subd. 3 (5) and (9)	II.A.2	The Department determined that the line has no significant impact (beyond enhanced reliability in the area where it would be built).
§216B.243, subd. 3a and § 216B.2422, subd. 4	II.B.1	The Department concluded that renewable generation is not a reasonable alternative.
§216B.2426	II.C.6	The Department concluded that distributed generation is not a reasonable alternative.
§216B.1694, subd. 2 (a) (5)	II.C.7	The Department determined that this requirement does not apply because the proposed facility is not a generation facility.
§216B.243, subd. 3 (10) and compliance with § 216B.1691	II.E.3.a	The Department stated that the Commission has found that Xcel is in compliance and has therefore met this statutory criterion.
§216B.1612 (c)	II.E.3.b	The Department concluded that Xcel has made significant efforts towards C-BED projects and therefore concluded that Xcel has met this criterion.
§216B.243, subd. 3 (12)	II.E.4	The Department concluded that this requirement does not apply because the proposed project is not a generating plant and does not propose to interconnect a new generating plant.

§216B.243, subd. 3 (10); compliance with 216B.2425, subd. 7	II.E.5	The Department determined that there is sufficient time to allow events to develop before a date certain is warranted.
§216H.03, subd. 1 & 3	II.E.6	The Department concluded that the Hiawatha Project may lower power sector carbon dioxide emissions.

Having analyzed the standards established in Minn. Stat. § 216B.243 and Minn. Rules, part 7849.0120, the Department recommended that the Commission grant a certificate of need to Xcel Energy for the Hiawatha Project.

## **B. The Department’s Environmental Report**

In response to the scoping decision, the EFP staff prepared and filed an Environmental Report on August 17, 2011 analyzing the potential impacts associated with the proposed Hiawatha Project and the impacts of the following alternatives to the Project: 1) a no-build alternative; 2) a demand-side management/conservation alternative; 3) purchased power; 4) facilities of a different size or type; 5) upgrading of transmission lines; and 6) other generation alternatives, including fossil fuel technologies, renewable resource technologies, and emerging technologies. Section 4 of the Environmental Report evaluated these alternatives in detail to determine their feasibility and availability. Section 5 of the Report examined the impacts of the Hiawatha Project on the affected environment.

### **1. Project Alternatives**

The Environmental Report stated that the no-build alternative was not feasible because without the Project, the voltage support issue occurring in the area would not be addressed and would likely cause an unacceptable negative effect on the local economy due to the unreliable electrical service in the area.

The Report stated that the demand-side management/conservation alternative is not a feasible alternative because it would require an unrealistic amount of conservation.

The Report stated that the purchased power alternative is not a feasible alternative because it would not solve any system inadequacies in the area. Power, either produced or purchased, would be transferred and delivered along an inadequate transmission system, and it is likely that voltage support issues in the area would continue and require Xcel to upgrade the transmission line to deliver purchased power to the area.

The Report stated that facilities of a different size or type would not be appropriate because they would not fit well with the 115 kV/345 kV system serving the Twin Cities. The metropolitan distribution system includes substations that are designed to accommodate 115 kV voltages. And although a higher voltage transmission alternative could provide additional capacity, the need for that additional capacity is not forecasted. Further, additional capacity would substantially increase cost.

The Report stated that based on a review of two studies (the South Minneapolis Electric Distribution Delivery System Long-Term Study and the South Minneapolis Interconnection Study, both provided by Xcel in its certificate of need application), the EFP concluded that upgrading existing transmission lines is not a feasible alternative because it would result in using lower voltage alternatives that are inferior to the proposed Hiawatha Project.

The Report also examined numerous generation alternatives, including fossil fuel technologies (including simple cycle natural gas combustion turbines, natural gas micro-turbines, and reciprocating engines), renewable resource technologies (including solar, solar thermal, biomass, and geothermal), and emerging technologies (including energy storage, and fuel cells).

Based on the extensive analysis of generation alternatives, the EFP concluded that, at this time, implementation of any single alternative or combination of alternatives is not feasible. The Report stated that many of the elements needed to integrate and implement a combination of energy sources either do not exist, or are not sufficiently developed to accommodate a mix of energy sources.

## **2. Project Impacts**

Section 5 of the Environmental Report addressed the impacts of the Hiawatha Project.

Under Minn. Rules, part 7849.0120 (C), a certificate of need must demonstrate by a preponderance of the evidence on the record that 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.

To ensure compliance with this requirement, the EFP staff conducted a thorough review and submitted a lengthy report on the potential effects of the project on the human, natural, and socioeconomic environments. The analysis included an assessment of the various resources within the affected environment, the potential impact on those resources, and mitigative measures that could be implemented to ameliorate the effects.

Specifically, the Environmental Report examined potential effects of the Hiawatha Project regarding: the proximity to structures; land use, zoning and planning; archaeological and historical resources; socioeconomic conditions; environmental justice; safety and health; recreation and tourism; aesthetics; water resources; flora; fauna; rare and unique natural resources; air quality and climate; noise; utility systems/infrastructure; and transportation and public services.

The most severe impacts foreseen appeared to be the potential for permanent displacement of existing businesses by the two new substations depending upon the sites chosen, the temporary disruption of business activity and traffic patterns by project construction, and the visual and aesthetic impact of the towers and lines, especially if the lines were not undergrounded. The Report did not suggest the presence of severe and irreversible environmental effects that would outweigh the harm resulting from persistently unreliable service.

#### **IV. The Commission's Analysis and Action Regarding Xcel Energy's Application for a Certificate of Need**

Minn. Rules, part 7849.1800, subp. 2, requires the Commission to determine, at the time it makes a final decision on a certificate of need application, whether the Environmental Report and the record created in the matter address the issues identified by the Scoping Decision issued under Minn. Rules, part 7849.1800, subp. 7. Having reviewed the Environmental Report issued by the EFP on August 17, 2011, the Commission finds that it and the record as a whole do in fact adequately address the issues identified by the Scoping Decision.

The Commission, having taken into consideration all the factors identified in statute and rule, finds that Xcel Energy has proved the need for the Hiawatha Project in south Minneapolis and will grant the Applicant a certificate of need.

Throughout the duration of the Commission's proceedings, no person raised contested issues of material fact or requested to refer the matter for contested case proceedings. The Department recommended, after the lengthy analysis summarized above, that the Commission should grant Xcel a certificate of need. As shown above, the Department based its recommendation to grant the certificate of need on its examination of each of the four criteria listed in Minn. Rules, part 7849.0120.

Having reviewed the Department's comments, the Commission will accept the Department's soundly grounded findings and recommendations. Based on those findings, augmented by the Department's Environmental Report, the application, and the record as a whole, the Commission makes findings on these four points:

First, based on a consideration of the factors set forth at Minn. Rules, part 7849.0120 (A), the Commission concludes that denying Xcel's application would likely harm the future adequacy, reliability, or efficiency of the energy supply to Xcel's customers.

Second, based on a consideration of the factors set forth at Minn. Rules, part 7849.0120 (B), the Commission concludes that a more reasonable and prudent alternative to Xcel Energy's proposed facility has not been demonstrated by a preponderance of the evidence on the record.

Third, based on a consideration of the factors set forth at Minn. Rules, part 7849.0120 (C), the Commission concludes that the preponderance of the evidence on the record demonstrates that Xcel's proposed facility will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.

Fourth, 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 the relevant policies, rules, and regulations of other state and federal agencies and local governments. See Minn. Rules, part 7849.0120 (D).

## ORDER

1. The Commission hereby finds that the Environmental Report in this matter adequately addresses the issues identified in the Environmental Assessment Scoping Decision.
2. The Commission hereby finds that Xcel Energy has met the statutory and rule criteria for a certificate of need and therefore grants Xcel Energy a certificate of need for the Hiawatha Project.
3. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar  
Executive Secretary



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