

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Phyllis Reha  
David C. Boyd  
J. Dennis O'Brien  
Betsy Wergin

Vice Chair  
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Commissioner  
Commissioner

In the Matter of the Application of Northern States Power Company for a High Voltage Transmission Line Route Permit for the Hiawatha 115 kV Transmission Project

ISSUE DATE: February 10, 2012

DOCKET NO. E-002/TL-09-38

ORDER ISSUING ROUTE PERMIT AS AMENDED

**PROCEDURAL HISTORY**

On April 24, 2009, Northern States Power Company d/b/a Xcel Energy (Xcel) filed an application for a route permit under Minn. Stat. § 216E.03 to construct two new distribution substations and two 115 kilovolt (kV) transmission lines in south Minneapolis (the Hiawatha Project).

On May 26, 2009, the Commission accepted Xcel Energy's route permit application for the Hiawatha Project.

On June 2, 2009, the Commission issued a Notice and Order for Hearing, referring the matter of the route permit to the Office of Administrative Hearings for contested case proceedings.

On April 5 and 6, 2010, four public hearings were held at Plaza Verde in south Minneapolis.

The Administrative Law Judge (ALJ) assigned to the case held evidentiary hearings in St. Paul on thirteen days between April 12 and April 30, 2010.

On June 7, 2010, the Energy Facilities Permitting Unit of the Department of Commerce (EFP) filed its Final Environmental Impact Statement on the Hiawatha Project.

On October 8, 2010, the ALJ assigned to the case submitted her FINDINGS OF FACT, CONCLUSIONS, AND RECOMMENDATIONS (the ALJ's Report).

On October 25, 2010, Xcel Energy filed exceptions to the ALJ's Report. On November 4, 2010, Midtown Greenway Coalition filed its reply to Xcel's exceptions to the ALJ's Report and was joined in its reply by the following intervenors: Hennepin County, the City of Minneapolis, the Seward Neighborhood Group, Inc., Midtown Phillips Neighborhood Association, Inc., and the East Phillips Improvement Coalition. The Commission also received comments on the ALJ's Report from members of the public.

On November 29, 2010, shortly after the ALJ's Report on the route permit was filed, Xcel Energy filed a certificate of need application for the Hiawatha Project; the application was filed in response to legislative changes made in 2010. As a result, action on the route permit was deferred pending completion of the certificate of need proceedings.

On December 20, 2011, the EFP filed comments and recommended that the Commission adopt the ALJ's Report, with clarifications, and issue a route permit to the Applicant; the EFP's filing also included its proposed Findings and Conclusions, reflecting the EFP's proposed changes to the ALJ's Report.

On January 12, 2012, the Commission met to consider the matter, and the record closed under Minn. Stat. § 14.61, subd. 2.

## **FINDINGS AND CONCLUSIONS**

### **I. The Proposed Project**

Xcel Energy filed an application for a route permit for the Hiawatha Project to authorize construction of two new distribution stations and two 115 kV transmission lines in the Midtown District of south Minneapolis. Xcel stated that the Hiawatha Project is needed to serve the increasing electrical demands of its customers in south Minneapolis. Further, Xcel stated that the Project will increase the capacity of the electrical distribution delivery system and improve the reliability of the power supply to residences and businesses in south Minneapolis.

Xcel Energy submitted its application for a route permit for the Hiawatha Project under Minn. Stat. § 216E.03 and Minn. Rules, Chapter 7850, which require a route permit for construction of high voltage transmission lines of 100 kV or higher and longer than 1,500 feet. As part of the permitting process, an environmental review of the project is required. Specifically, Minn. Stat. §216E.03, subd. 5, requires the Commissioner of the Department of Commerce to prepare an environmental impact statement (EIS), which examines an applicant's proposal, as well as alternatives.

In addition, the permitting process requires the opportunity for public participation and authorizes the Commission to establish an advisory task force to assist in its evaluation of the project.<sup>1</sup> In this case, an advisory task force was established and assisted in identifying issues and evaluating possible impacts. The advisory task force filed a report on August 28, 2009, which included an examination of alternative line routes and substation locations.

### **II. The ALJ's Report**

The Administrative Law Judge's Report is well reasoned, comprehensive, and thorough. The ALJ held 13 days of evidentiary hearings and four public hearings. She made some 560 findings of fact and conclusions and made recommendations on all stipulated and contested issues based on those findings and conclusions.

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<sup>1</sup> Minn. Stat. § 216E.08 and Minn. Rules, part 7850.2400.

Having itself examined the record and having considered the ALJ's Report, the Commission concurs in most of her findings, conclusions, and recommendations. In a few instances, however, the Commission will make clarifications to the ALJ's Report, as delineated and explained below. On all other issues, the Commission accepts, adopts, and incorporates her findings, conclusions, and recommendations.

By the time the Commission met to consider the case, the parties had reached consensus on a route for the proposed lines, agreeing on Route D, as recommended by the ALJ. Route D is an underground route approximately 1.5 miles long that runs along the northern half of East 28<sup>th</sup> Street between the Hiawatha and Midtown Substations.

And although Xcel Energy filed exceptions to the ALJ's Report, by the time the Commission met to consider the matter, Xcel Energy had either withdrawn its exceptions or expressed its agreement with the EFP's recommended clarifications to the ALJ's Report. Concerns of other parties were raised in replies, filed in response to Xcel's exceptions.

At the Commission meeting, the parties' remaining concerns centered largely on mitigating substation impacts and on ensuring parties' opportunity to meaningfully participate in the substation design process. At the Commission meeting, Xcel concurred in those concerns and agreed with the EFP's recommended process for obtaining parties' input.

The Commission concurs with the parties on the importance of input on substation design and will incorporate changes to both the ALJ's Report and the route permit, as described below, to ensure that the opportunity for input is provided.

### **III. Modifications to the ALJ's Report**

The following modifications to the ALJ's Report include technical corrections and clarifications, which include changes recommended by the EFP and which address concerns raised by the parties in their exceptions and replies.

#### **A. Findings 137 and 191**

Midtown Greenway Coalition recommended, and the EFP concurred, that the Commission make two technical corrections to the ALJ's Report to reflect a clarification made to the record by the Metropolitan Council but not included in Findings 137 and 191 of the ALJ's Report. These technical corrections, as described below, clarify that neither the Metropolitan Council nor the Department of Transportation opposes Xcel's use of the G-4 substation site.

The Commission will therefore modify Finding 137 of the ALJ's Report to read as follows:

MnDOT owns a portion of the G-4 site that includes a lease to the Metropolitan Council, but neither MnDOT nor the Metropolitan Council are opposed to making the site available to the Applicant for a substation.

Consistent with the modification above, the Commission will modify Finding 191 of the ALJ's Report to read as follows:

MnDOT considers the property at the Hiawatha West, G-4 and G-3 sites as surplus and those parcels may be available for sale, but asserts that Site G-5 is not available because of agreements in effect with the Metropolitan Council.

**B. Finding 240**

Finding 240 currently reads as follows:

State agencies are required to consider the environmental factors before making decisions, including the routing of high voltage transmission lines, that potentially have significant environmental effect, and shall not make a decision that is likely to cause pollution, impairment, or destruction of a natural resource so long as there is a feasible and prudent alternative consistent with the public health, safety and welfare.

The Commission will modify this finding to remove the phrase: *that potentially have significant environmental effect*. The Commission finds this phrase unnecessary and potentially confusing and will therefore remove it.

**C. Finding 259**

In its exceptions, Xcel requested that a statement regarding effects on property values be removed. Specifically, Xcel had argued that the last sentence of Finding 259 of the ALJ's Report be rejected because impacts on property values are uncertain, according to the EFP's Final Environmental Impact Statement on the Hiawatha Project. Finding 259 currently reads as follows:

Also, although the effect of overhead transmission lines on home values may be difficult to measure, close proximity (within 200 to 300 feet) is one of the factors that deflates home value.

Midtown Greenway Coalition recommended making no change to Finding 259. The EFP, however, recommended eliminating the parenthetical regarding distance from homes; the EFP stated that the record does not support use of a quantified distance. Xcel concurred with the EFP's recommendation. The Commission also concurs with the EFP to remove the parenthetical and will therefore modify Finding 259 to read as follows:

Also, although the effect of overhead transmission lines on home values may be difficult to measure, close proximity is one of the factors that deflates home value.

**D. Finding 296**

In its exceptions, Xcel challenged the ALJ's statements contained in Finding 296 regarding the Hiawatha Project's potential adverse impact on use of the Midtown Greenway bicycle and

pedestrian trail. Midtown Greenway Coalition recommended no change to this finding. The EFP also recommended that no change be made, and Xcel withdrew its proposed recommendation to change the finding.

Upon closer examination, however, the Commission finds that a more accurate description would be to state that Route A1 *may* be more likely to deter use, rather than stating (as the finding currently reads) that Route A1 *would* be more likely to deter use. The Commission will therefore modify Finding 296 of the ALJ's Report to read as follows:

Route A1 may be more likely to deter use of the bicycle and pedestrian trail than the alternative routes because of its proximity to and visibility along the Midtown Greenway.

### **E. Findings 314, 315, 321, 328, and 457**

In its exceptions, Xcel had recommended changes to Findings 314, 315, 321, 328, and 457, which contain descriptions made by the World Health Organization (WHO) in its 2007 Report (the WHO Report)<sup>2</sup> regarding potential health effects of electromagnetic field (EMF) exposure. Midtown Greenway Coalition recommended making no changes to these findings. The EFP concluded that these findings create stronger conclusions about EMF exposure than the WHO report supports and recommended changes that more accurately reflect the information contained in the WHO Report.

The Commission concurs with the EFP that changes to these findings are necessary to provide a more accurate description of the scientific evidence contained in the record regarding potential health impacts and will therefore make the following modifications to the ALJ's Report consistent with the EFP's recommended changes.

#### **1. Finding 314**

The last sentence of Finding 314 of the ALJ's Report currently reads as follows:

Although the evidence failed to demonstrate causation, the WHO concluded that the evidence is sufficiently strong to remain a concern.

The Commission finds the following modification, as recommended by the EFP, to be a more accurate description of statements contained in the WHO Report and will therefore modify Finding 314 to read as follows:

Although laboratory and biophysical/mechanistic evidence has failed to demonstrate causation, the WHO concluded that the evidence is sufficiently strong to remain a concern and that further research in this area is warranted, but due to the uncertainties about the existence of chronic effects (like childhood leukemia), international exposure guidelines should not "be reduced to some arbitrary level in the name of precaution" and only little to no cost precautionary procedures should be used.

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<sup>2</sup> The WHO Report, Environmental Health Criteria 238, Extremely Low Frequency Fields, 2007 at 11-20.

## **2. Finding 315**

Finding 315 of the ALJ's Report currently reads as follows:

Epidemiological studies have consistently shown an association between magnetic fields above 3 to 4 milligauss (mG) and childhood leukemia.

The Commission finds the following modification to be a more accurate description of statements contained in the WHO Report and will therefore modify Finding 315 to read as follows:

Epidemiological studies have consistently shown an association between magnetic fields above 3 to 4 milligauss (mG) and childhood leukemia, but virtually all laboratory and mechanistic evidence fails to support such a relationship between magnetic fields and necessary changes in biological function.

## **3. Finding 321**

The last sentence of Finding 321 of the ALJ's Report currently reads as follows:

Magnetic field levels for persons living on the second or third floor (from 6 to 10 meters above ground) of a dwelling within 25 feet of Route A1 are 10 to 15 times the level of concern identified by the WHO and epidemiological literature associating transmission lines with childhood leukemia.

The Commission finds the following modification, as recommended by the EFP, to be a more accurate description of statements contained in the WHO Report and will therefore modify Finding 321 to read as follows:

Magnetic field levels for persons living on the second or third floor (from 6 to 10 meters above ground) of a dwelling within 25 feet of Route A1 are 10 to 15 times the 3 to 4 mG exposure by epidemiological studies that the WHO recognizes as the level at which an increased risk of childhood leukemia has been reported, but one-twentieth the level the WHO recommends as the exposure guideline (ICNIRP, 1998-833 mG) without evidence of a link between exposure to magnetic fields and childhood leukemia.

## **4. Finding 328**

Finding 328 of the ALJ's Report currently reads as follows:

Underground transmission alternatives with lower magnetic and electric fields would reduce the safety and health impacts of the Hiawatha Project. If Route D is constructed, an alignment closer to the center of East 28<sup>th</sup> Street would place the transmission line farther from residential homes, children and other pedestrians.

The Commission concurs with the EFP that the first sentence, which is unnecessary and likely overly broad, should be removed. Finding 328 will therefore be modified to read as follows:

If Route D is constructed, an alignment closer to the center of East 28<sup>th</sup> Street would place the transmission line farther from residential homes, children and other pedestrians.

#### **5. Finding 457**

The third sentence of Finding 457 of the ALJ's Report reads as follows:

At 25 feet from the wall or fence, the highest projected level is 2.02 mG, which is below the WHO recommendation of 3 to 4 mG.

The Commission finds the following modification, as recommended by the EFP, to be a more accurate description of statements contained in the WHO Report and will therefore modify Finding 457 to read as follows:

At 25 feet from the wall or fence, the highest projected level is 2.02 mG, which is below the 3 to 4 mG level that has been associated with an increased risk for childhood leukemia in epidemiological studies.

#### **F. Conclusion 7**

The second sentence of Conclusion 7 of the ALJ's Report contains a general statement that the Commission will modify by adding the phrase *in this instance*. This modification clarifies that the Commission's determinations made in this case regarding placing the lines underground are related to the specific facts contained in the record of this case. Conclusion 7 will therefore be modified to read as follows:

Although it is the least expensive alternative in this instance, cost, convenience and efficiency are not sufficient reason to select a route that has the potential to impair a protected resource.

#### **G. Recommendations 1-4**

In its exceptions, Xcel recommended that changes be made to Recommendations 2 and 3 to direct Xcel to confer with elected representatives of the City of Minneapolis and Hennepin County on substation design and placement, instead of requiring Xcel to consult with the City and the County on substation placement. Midtown Greenway Coalition raised concerns that Xcel's exceptions to the ALJ's recommendations would limit community involvement in substation design and mitigation.

In response to both parties' concerns, the EFP recommended changes to Recommendations 1-4 of the ALJ's Report to ensure input from all parties on substation design, including input from Phillips West Neighborhood Association. The EFP also recommended changes to ensure that construction will be aimed at minimizing adverse effects not only on persons living and working in close proximity to the area, but also on those biking in close proximity to the area. Xcel concurred with the EFP's recommendations.

The Commission, too, concurs with the EFP's recommendations and will modify Recommendations 1-4 to ensure that meaningful opportunity for input on substation design is provided, that Phillips West Neighborhood Association is included and that construction minimizes adverse effect on persons living, working, *and biking* in close proximity to the area. The Commission will therefore modify Recommendations 1 through 4 of the ALJ's Report to read as follows:

That the Commission issue to Northern States Power Company, dba Xcel Energy, the following permit for the Hiawatha HVTL Project:

1. A route permit to construct a high voltage transmission line underground along Route D, with a route width of 80 feet. The transmission line alignment shall be developed in consultation with the City of Minneapolis, and shall be as close to the center of 28th Street as possible, with due regard for the existing infrastructure, in order to assure that the alignment is at the greatest reasonable distance from the sidewalk and residential structures, and minimizes the removal or destruction of mature trees along the adjacent boulevard.
2. The route permit shall include the Hiawatha West Substation site. The substation shall be designed and constructed to minimize the impact of the project on the persons living, working and biking in close proximity to it to the extent practicable. The HVTL Route Permit shall contain procedures that allow an opportunity for the parties of record to provide input into a) placement of the Hiawatha West Substation on the approved site, and b) the substation's wall design, lighting and landscaping. These efforts will be made to minimize disruption to the current and planned Midtown Greenway bicycle and pedestrian trails, to minimize the aesthetic impact, and to assure compatibility with the surrounding structures to the extent practicable.
3. The route permit shall include the Midtown North Substation site. The substation shall be designed and constructed to minimize the impact of the project on the persons living, working and biking in close proximity to it to the extent practicable. The HVTL Route Permit shall contain procedures that allow an opportunity for the parties of record and Phillips West Neighborhood Association to provide input into a) placement of the Midtown North Substation on the approved site, and b) the substation's wall design, lighting and landscaping. These efforts will be made to minimize disruption to the current and planned Midtown Greenway bicycle and pedestrian trails, to minimize the aesthetic impact, and assure compatibility with the surrounding structures to the extent practicable.
4. The route permit shall require the Permittee to obtain all required local, state, and federal permits and licenses, comply with the terms of those permits and licenses, and comply with all applicable rules and regulations.

#### **IV. EFP Findings and Conclusions**

The Commission will adopt the EFP's Findings and Conclusions, which adopt the ALJ's Report, including modifications as described above.

## **V. Changes to Draft Route Permit**

In addition to the changes described above, the Commission will hereby amend section 4.1 of the draft route permit as set forth below.

In the first paragraph of 4.1, under “Substation Design Consultation,” the first sentence will be modified to read as follows:

The substations shall be designed and constructed, to the extent practicable, in a manner that: 1) minimizes the impact of the project on the persons living, working and biking in close proximity to the substations,

The fourth paragraph of section 4.1 will be modified to read as follows:

The Applicant shall allow the Commission, the parties of record, and the Phillips West Neighborhood Association a minimum of 60 days to review and provide comments on the preliminary design of the substations.

## **VI. Cost Allocation**

In response to questions raised by parties on the issue of cost allocation,<sup>3</sup> the Commission has requested that Xcel make a filing on this issue in light of the Commission’s decision to underground the lines along Route D. At the Commission meeting, Xcel concurred with the Commission and stated that it would address the issue of cost allocation in a separate filing to be made in approximately 30 days.

## **VII. Conclusion**

With the determinations described above, the Commission finds that Xcel has complied with the requirements governing the permitting process for high-voltage transmission lines, as set forth in Minn. Statute, Chapter 216E and Minn. Rules, Chapter 7850. A route permit will be issued in the form attached.

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<sup>3</sup> The Department had requested in its March 31, 2011 comments in the certificate of need proceeding in Docket No. E-002/CN-10-694, that the Commission direct Xcel to identify, in relevant rate proceedings, which set of customers should pay for undergrounding costs. Xcel filed reply comments on April 29, 2011, stating that under the unique circumstances of this case, the Company requested policy guidance from the Commission on the issue in either the certificate of need proceeding or the route permit proceeding.

## ORDER

1. The Commission hereby adopts the ALJ's Report, as modified herein, which:
  - a. Determines that the environmental impact statement addresses the issues identified in the Scoping Decision.
  - b. Designates the transmission line route and location of the Hiawatha and Midtown substations as the route and sites for the construction and implementation of the Hiawatha Project and associated facilities.
  - c. Issues a Route Permit, with appropriate conditions, to Xcel Energy in the form attached.
2. The Commission hereby adopts the EFP's Findings and Conclusions, as described herein.
3. The Commission hereby issues the route permit to Xcel Energy with the changes described herein and in the form attached.
4. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar  
Executive Secretary



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