BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David Boyd	Chair
J. Dennis O'Brien	Commissioner
Phyllis Reha	Commissioner
Thomas Pugh	Commissioner
Betsy Wergin	Commissioner

Alan Blum
Northstar Transmission, LLC
418 Central Ave.
Esterville, IA 51334

SERVICE DATE: August 24, 2009

DOCKET NO. IP-6686/TL-08-1120

In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota

The above entitled matter has been considered by the Commission and the following disposition made:

Approved and adopted the Findings of Fact, Conclusions of Law and Order for Northstar's 161 kV transmission line between a newly proposed Tatman substation in Petersburg Township and the Jackson substation in Jackson County, Minnesota which:

1. **Determines that the environmental assessment and record created at the public hearing address the issues identified in the environmental assessment scoping decision;**

2. **Approves the proposed route modified by the adjustments as set forth below:**

   A. **The transmission centerline should be constructed on the west side of the road, sharing road right-of-way, for the route segment that would follow along 560th Avenue from CSAH 23/Petersburg Road to approximately one-quarter mile (1,320) fee) north of the southwest corner of Section 5, Township 101N, Range 34W;**

   B. **The transmission line should be constructed along W. Ascheman Alignment Alternative 1 as identified on Figure 5 in the environmental assessment, as this is the most direct and shortest alignment within the respective route segment; and**

   C. **The route endpoint as identified and confirmed by the applicant at the public hearing would be the interconnection with the Jackson substation or Option #1. This option would alleviate the need for the proposed switching station.**

3. **issues a high voltage transmission line route permit, with appropriate conditions, to Northstar Transmission, LLC.**

The Commission agrees with and adopts the recommendations of the Office of Energy Security which are attached and hereby incorporated in the Order.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

(S E A L)

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office of energy security
Minnesota Department of Commerce

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF THE MINNESOTA OFFICE OF ENERGY SECURITY ENERGY FACILITY PERMITTING STAFF

DOCKET NO. IP-6686/TL-08-1120

Meeting Date: August 13, 2009 ..... Agenda Item # 3

Company: Northstar Transmission, LLC

Docket No. IP-6686/TL-08-1120

In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota.

Issue(s): Should the Commission find that the environmental assessment and the record adequately address the issues identified in the scoping decision? Should the Commission issue a route permit identifying a specific route and permit conditions for the proposed 161 kV transmission line project?

OES Staff: Scott Ek 651-296-8813

RELEVANT DOCUMENTS

Route Permit Application ..... October 28, 2008
Public Utilities Commission Application Acceptance Order ..... December 1, 2008
Environmental Assessment Scoping Decision ..... February 24, 2009
Environmental Assessment ..... May 29, 2009
Office of Administrative Hearings Summary of Public Comments ..... July 22, 2009

The enclosed materials are work papers of the Office of Energy Security (OES) Energy Facility Permitting (EFP) staff. They are intended for use by the Public Utilities Commission (Commission) and are based on information already in the record unless otherwise noted.

This document can be made available in alternative formats (voice/TTY) by contacting the Minnesota Relay Service at 711 or 1-800-627-3529.

DOCUMENTS ATTACHED

Figure 1 – Applicant's Proposed Route (Route Permit Application)
Figure 2A and 2B – Proposed Route
Findings of Fact, Conclusions of Law and Order
High Voltage Transmission Line Route Permit
Exhibit List

Note: Relevant documents and additional information can be found on eDockets (08-1120) or the Commission Facilities Permitting website at: http://energyfacilities.puc.state.mn.us/Docket.html?Id=19789.

STATEMENT OF THE ISSUES

Should the Commission find that the environmental assessment and the record adequately address the issues identified in the scoping decision? Should the Commission issue a route permit identifying a specific route and permit conditions for the proposed 161 kV transmission line project?

INTRODUCTION AND BACKGROUND

Northstar Transmission, LLC (Northstar or applicant) has made application to the Minnesota Public Utilities Commission for a route permit under the alternative permitting process of the Power Plant Siting Act (Minnesota Statutes 216E.04); and also applied for as certificate of need (Minnesota Statutes 216B.243). The applications are for the construction, operation, and maintenance of a 10-mile (Option #1) or 9-mile (Option #2) 161 kilovolt (kV) transmission line and substation.

The applicant indicates that the proposed project would be constructed to capture energy generated by the Northstar Wind Farm, a 200 megawatt (MW) facility located in Emmet and Dickinson counties, Iowa, and ultimately connect to the Xcel Energy Lakefield Junction-Fox Lake 161 kV #2 transmission line just east of Jackson, Minnesota.

Project Description

The project would be located in Jackson County, Minnesota, in the city of Jackson and the townships of Wisconsin, Petersburg, and Des Moines. The applicant proposed a transmission line route that would run between a newly proposed Tatman substation to be constructed near Petersburg Township and one of two potential interconnection points.

> Option #1 - The transmission line would be co-located on new double-circuit pole structures at existing pole #114 of Xcel's 161 kV Lakefield Junction to Fox Lake transmission line for approximately one mile west to the Jackson Substation.
>
> Option #2 - The transmission line would terminate at a new switching station near pole #114 of Xcel's Lakefield Junction to Fox Lake 161 kV transmission line.

The total length of the proposed transmission line would be approximately 10 miles with Option #1 and approximately 9 miles with Option #2.

As described in the route permit application, the transmission line would originate at the proposed Tatman substation located approximately one-half mile north of the Minnesota-Iowa border in Petersburg Township. The transmission line route would head north out of the Tatman substation along County State Aid Highway (CSAH) 25/560th Avenue for approximately five and one half miles to 558th Avenue and continue north two miles to CSAH 14 then traveling one-quarter mile east. At this point the transmission line route would veer slightly north-northwest traveling along property and section lines across private agricultural land to one of the two endpoints (Figure 1).

The applicant requested a proposed route of varying widths. The requested route widths and lengths vary by segment and range from 300 feet to one mile in width. The requested route width from the Tatman substation to CSAH 14 is 300 feet. The route width for the segment from CSAH 14 north is one mile and is requested to better accommodate potential routing issues when traversing private agricultural land. Should Option #1 be chosen, the route width for the additional one mile to the Jackson substation would be 200 feet.

The proposed rights-of-way also vary in width from 100 total feet along the proposed route from Tatman substation to CSAH 14 and private land north of CSAH 14 to 80 total feet where the proposed transmission line would be co-located on double-circuit poles with the existing Xcel 161 kV transmission line from pole #114 to the Jackson substation.

REGULATORY PROCESS AND PROCEDURES

Route Permit Application and Acceptance

In accordance with Minnesota Rule 7849.5040, subpart 2, "No person may construct a high voltage transmission line without a route permit from the commission. A high voltage transmission line may be constructed only within a route approved by the commission." In this case Minnesota Rule 7849.5010, subp. 9, defines a high voltage transmission line as, "...a conductor of electric energy and associated facilities designed for and capable of operating at a nominal voltage of 100 kilovolts or more either immediately or without significant modification. Associated facilities shall include, but not be limited to, insulators, towers, substations, and terminals."

The route application has been reviewed under the alternative permitting process (Minnesota Rules 7849.5500) of the Power Plant Siting Act (Minnesota Statutes 216E.04). The alternative permitting process is shorter than the full permitting procedures and does not require the applicant to propose alternative routes to the preferred route, but does require the applicant to disclose rejected route alternatives and an explanation of why they were rejected.

On September 22, 2008, Northstar filed a 10-day advance notice of intent to the Commission before submitting a route permit application in accordance with Minnesota Rule 7849.5500, subp. 2. On October 28, 2008, Northstar filed a route permit application with the Commission for the proposed Northstar 161 kV transmission line project under the alternative permitting process. The Commission accepted the route permit application as complete on October 6, 2008.

Certificate of Need Application and Acceptance

The proposed project is considered a large energy facility under Minnesota Statute 216B.2421, subd. 2(3), as it would have a capacity of 100 kV or more and exceed 10 miles in length. Therefore a certificate of need from the Commission is required for the proposed project. The applicant filed a certificate of need application with the Commission for the Northstar 161 kV transmission line project on October 28, 2008. The Commission accepted the certificate of need application as complete on January 22, 2009. In its Order, the Commission found it appropriate for the certificate of need process to proceed under the informal or expedited review process (comment and reply) rather than referring the matter to the Office of Administrative Hearings for a contested case hearing.

Combined Review and Proceedings

In the January 22, 2009, Order, the Commission encouraged the OES to combine the environmental review of the certificate of need process with the environmental assessment of the routing proposal to the extent practicable. Therefore, in accordance with Minnesota Rule 7849.7100, and as detailed in the joint scoping decision signed by the Director of OES, the certificate of need and route permit applications for this project were reviewed jointly. The public meeting and public hearing were also combined and conducted jointly.

Public Information and Environmental Assessment Scoping Meeting

OES staff held a joint public information and environmental assessment scoping meeting on January 29, 2009, at the AmericInn in Jackson, Minnesota, to discuss the project with the public and gather public input into the scope of the environmental assessment (EA) to be prepared. The attendance sheet indicated that approximately 16 people attended the meeting. The public was given until February 12, 2009, to submit written and/or email comments. The OES received a total of four comment letters that were reviewed and considered during preparation of the scoping decision.

Two letters from citizens located along the proposed route voiced preference for an alternative to the segment of the applicant's proposed route that would run along 560th Avenue from CSAH 23 to 558th Street. The alternative route segment seeks to avoid approximately four homes located on the applicant's proposed route along 560th Avenue.

A third letter proposed three variations of an alignment specific alternative for the area of the proposed route where the applicant requested a 1 mile wide route width (Sections 10 and 20 north and adjacent to CSAH 14). The W. Ascheman Alignment Alternatives (I, II, and III) specify three separate alignment alternatives from CSAH 14 to the proposed switching station end point. All three suggested alignment alternatives are variations to the cross-country alignment proposed by the applicant and share at least one common segment.

The Minnesota Department of Natural Resources (DNR) also submitted a comment letter recommending the following for consideration:

- Recommend that construction of the proposed switching station should avoid any disturbance within the existing railroad right-of-way. If avoidance of the railroad right-of-way is not feasible, a botanical survey within the railroad right-of-way should be required.

- Best management practices should be identified and implemented to reduce or avoid negative impacts to loggerhead shrike (a State Threatened Species).

- Transmission line that would cross the Des Moines River should be equipped with bird flight diverters.

- Construction and operation practices that avoid the spread of invasive species and herbicide application in the proposed transmission line right-of-way should be evaluated.

The scoping decision for the environmental assessment was signed by the Director of the OES on February 24, 2009.

Environmental Assessment

Pursuant to Minnesota Rule 7849.7100, subp. 1, the OES combined the certificate of need and route permit environmental review processes for this project. Because the two processes were combined, the OES was not required to prepare an environmental report (ER) under Minnesota Rules 7849.7010 to 7848.7110. The EA did include an analysis of the alternatives required in an ER in accordance with Minnesota Rule 7849.7060, subp. 1. The EA was completed and made available on May 29, 2009.

Public Hearing

The Public Utilities Commission staff made request to the Minnesota Office of Administrative Hearings for an administrative law judge (ALJ) to preside over the joint public hearing and provide a summary of testimony.

Judge Bruce Johnson presided over the public hearing conducted on June 23, 2009. The public hearing was held at the AmericInn in Jackson, Minnesota. Approximately six members of the public attended the hearing as indicated by the sign-in sheet. A transcript of the joint public hearing was filed with the Commission on July 9, 2009.

Judge Johnson provided an opportunity for members of the public to ask questions or comment on the proposed project verbally and also advised them they could send him written comments before the end of the comment period that ended on July 6, 2009. A total of three written comments were submitted to the ALJ. The ALJ's Summary of Public Comments was filed with the Commission by the OAH on July 22, 2009. Judge Johnson's summary provides a thorough summation of comments heard during the hearing and letters received during the comment period.

During the public hearing Scott Ek with OES asked the applicant if they had decided on which interconnection or endpoint they anticipate using for the route, Option #1 or Option #2. Ben Kerl a representative for the applicant confirmed that the point of interconnection for the project is the Jackson substation (Option #1) and that by choosing this option there would be no need for the proposed switching station.

Additional information from the applicant was requested by OES on the route widths requested in the route permit application. In a letter dated June 22, 2009, the applicant refined the route widths provided in the route permit application as follows:

- A 200 foot wide route width centered on CSAH 25 from the Tatman substation to CSAH 4.

- A 166 foot wide route width centered on 560th Avenue and to 558th Avenue from CSAH 4 to CSAH 14.

- A 1,520 foot wide route width (encompassing both the proposed route and the Alignment Alternative I) that includes the W. Ascheman property (the southeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West) and 100 feet of adjacent land to the south of CSAH 14, 200 feet of adjacent land to the east of the W. Ascheman property, and 200 feet of adjacent land to the north of the W. Ascheman property.

- A 200 foot wide route width (100 feet on either side of the proposed route centerline) commencing at a point 100 feet east of the center of the southeast quarter of Section 19 and extending north for a quarter mile, then extending west for a quarter mile, then extending north for a half-mile to the proposed switching station south of Pole 114.

- A 200 foot wide route width (encompassing Xcel Energy's existing 80 foot right-of-way and extending an additional 120 feet north) from Pole 114 one mile west to the Jackson substation.

In the same June 22, 2009, letter the applicant also refined the rights-of-way required for the project as follows:

- A 100-foot right-of-way from the Tatman substation to CSAH 4.

- An 83-foot right-of-way from CSAH 4 to CSAH 14.

- A 100-foot right-of-way from CSAH 14 to pole #114.

- A 200-foot right-of-way from pole #114 to the Jackson substation.

Standards for Permit Issuance

The Power Plant Siting Act sets standards and criteria and outlines the factors to be considered in determining whether to issue a permit for a high voltage transmission line (Minnesota Statute 216E and Minnesota Rules 7849.5900). The law also allows the Commission to place conditions on high voltage transmission line permits (Minnesota Statute 216E.03 and Minnesota Rule 7849.5960).

Staff Analysis and Comments

The applicant's proposed transmission line route, the Withers/Ascheman Alternative, and the W. Ascheman Alignment Alternatives were examined in detail in the environmental assessment and at the public hearing along with suggestions made by the DNR. The two suggested routing alternatives either share at least one common segment or are within the applicant's requested route width, therefore, the OES has concluded the impacts identified in the environmental assessment associated with proposed route were generally the same for the two proposed alternatives. For that reason staff focused only on the areas of potential difference.

In weighing the differences of the preferred and alternative routes for the proposed project, staff was guided by the state's policy of choosing locations that minimize adverse human and environmental impact while insuring continuing electric power system reliability and integrity (Power Plant Siting Act, Minnesota Statute 216E).

Findings of Fact, Proposed Route Permit, and Record

Staff has prepared Findings of Fact, Conclusions of Law and Order and a High Voltage Transmission Line Route Permit. The Findings indicate that the alternative permitting process has been conducted in accordance with Minnesota Rules 7849.5500 to 7849.5720, identify route impacts and mitigation measures, and make conclusions of law. The route permit includes measures to ensure the line is constructed in a safe, reliable manner and that impacts are minimized or mitigated. A list of documents that are part of the record in this proceeding is included on the attached Exhibit List.

Withers/Ascheman Alternative

The alternative route segment seeks to avoid approximately four homes located on the applicant's proposed route along 560th Avenue, the closest of which would be approximately 175 feet from the proposed alignment, as indicated by the applicant. The Whithers/Ascheman Alternative would veer northwest and follow along Petersburg Road/CSAH 23 instead of continuing north along 560th Avenue. At the north-south property line dividing the northeast quarter of Section 7, the proposed alternative would head north following an existing fence line/property boundary joining the proposed route at the point where 560th Avenue runs direct north.[1] This alternative deviates from the proposed route by approximately 1,470 feet to the west, but would not add to the total length of the project. In addition, the route would follow property/fence lines.

The alternative would however travel cross-country creating approximately 1.67 miles of new transmission right-of-way along privately owned land and potentially impact approximately four residences not currently impacted by an existing overhead line or right-of-way easements, the closest of which would be approximately 100 feet or less.

The applicant has indicated that this alternative would be feasible and has approached the property owners along this alternative route segment, but still supports the route as proposed in the route permit application.

W. Ascheman Alignment Alternatives

The three proposed alignment alternatives are located in the area of the proposed route where the applicant requested a 1 mile wide route width (Sections 10 and 20 north and adjacent to CSAH 14). The alternative consists of three different alignment specific alternatives from CSAH 14 to the proposed switching station or pole #114 end point. All three suggested alignment alternatives are variations to the cross-country alignment proposed by the applicant and share at least one common segment.[2] These alignment alternatives are minimal in their deviation from the preferred alignment and are located within the route width requested by the applicant. There would be no new or additional impacts attributed to any of these alignment alternatives.

The approximate length of the proposed alignment and the alternative alignments are as follows: Proposed Alignment (~8,529 feet), Alignment Alternative I (~5,882 feet), Alignment Alternative II (~8,235 feet), and Alignment Alternative III (~8,529 feet). The most direct and shortest route alignment is Alignment Alternative I. This alignment configuration would likely have fewer poles, fewer corner structures, and less transmission line proliferation when compared to the proposed alignment and the other alternative alignments.

[1] Exhibit 14 – Figures 2 and 3.
[2] Exhibit 14 – Figure 5.

The applicant has indicated that that Alternative Alignment I is the preferred alignment among the proposed and alternatives and has already approached the property owners along this alternative and has tentative agreements in place.

Conclusions

OES staff has reviewed Northstar's proposed transmission line route. The proposed route and the alternatives were examined in detail in the environmental assessment and at the public hearing. OES staff concludes that the applicant's route identified in the route permit application together with their proposed alignment utilizing existing township and county road rights-of-way along with the following adjustments identified below is the most reasonable and prudent route that best minimizes adverse human and environmental impacts (Figures 2A and 2B).

The following adjustments to the applicant's proposed route should be included in the route decision:

- The transmission centerline should be constructed on the west side of the road, sharing road right-of-way, for the route segment that would follow along 560th Avenue from CSAH 23/Petersburg Road to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W.

- The transmission line should be constructed along W. Ascheman Alignment Alternative I as identified on Figure 5 in the environmental assessment, as this is the most direct and shortest alignment within the respective route segment.

- The route endpoint as identified and confirmed by the applicant at the public hearing would be the interconnection with the Jackson substation or Option #1. This option would alleviate the need for the proposed switching station.

Commission Decision Options

A. Approve and adopt the Findings of Fact, Conclusions of Law and Order for Northstar's 161 kV transmission line between a newly proposed Tatman substation in Petersburg Township and the Jackson substation in Jackson County, Minnesota which:

   1. determines that the environmental assessment and record created at the public hearing address the issues identified in the environmental assessment scoping decision;
   2. approves the proposed route modified by the adjustments as described in the Conclusions above; and
   3. issues a high voltage transmission line route permit, with appropriate conditions, to Northstar Transmission, LLC.

B. Approve and adopt the Findings of Fact, Conclusions of Law and Order as above while imposing any further permit conditions as deemed appropriate.

C. Amend the Findings of Fact, Conclusions of Law and Order and route permit as deemed appropriate.

D. Make some other decision deemed more appropriate.

Energy Facility Permitting Staff Recommendation: Staff Recommends Option A.

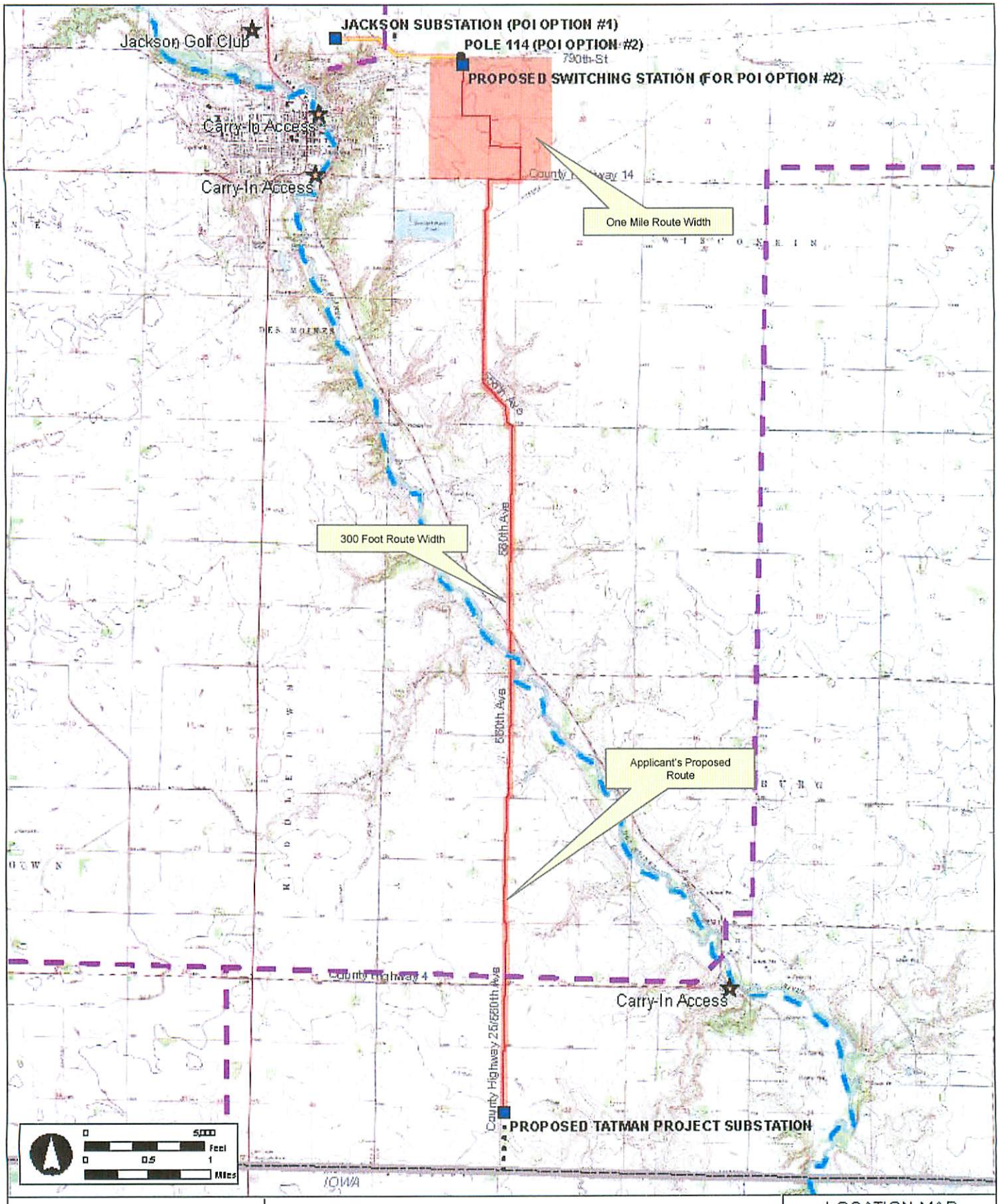


FIGURE 1
Applicant's Proposed Route
(Route Permit Application)

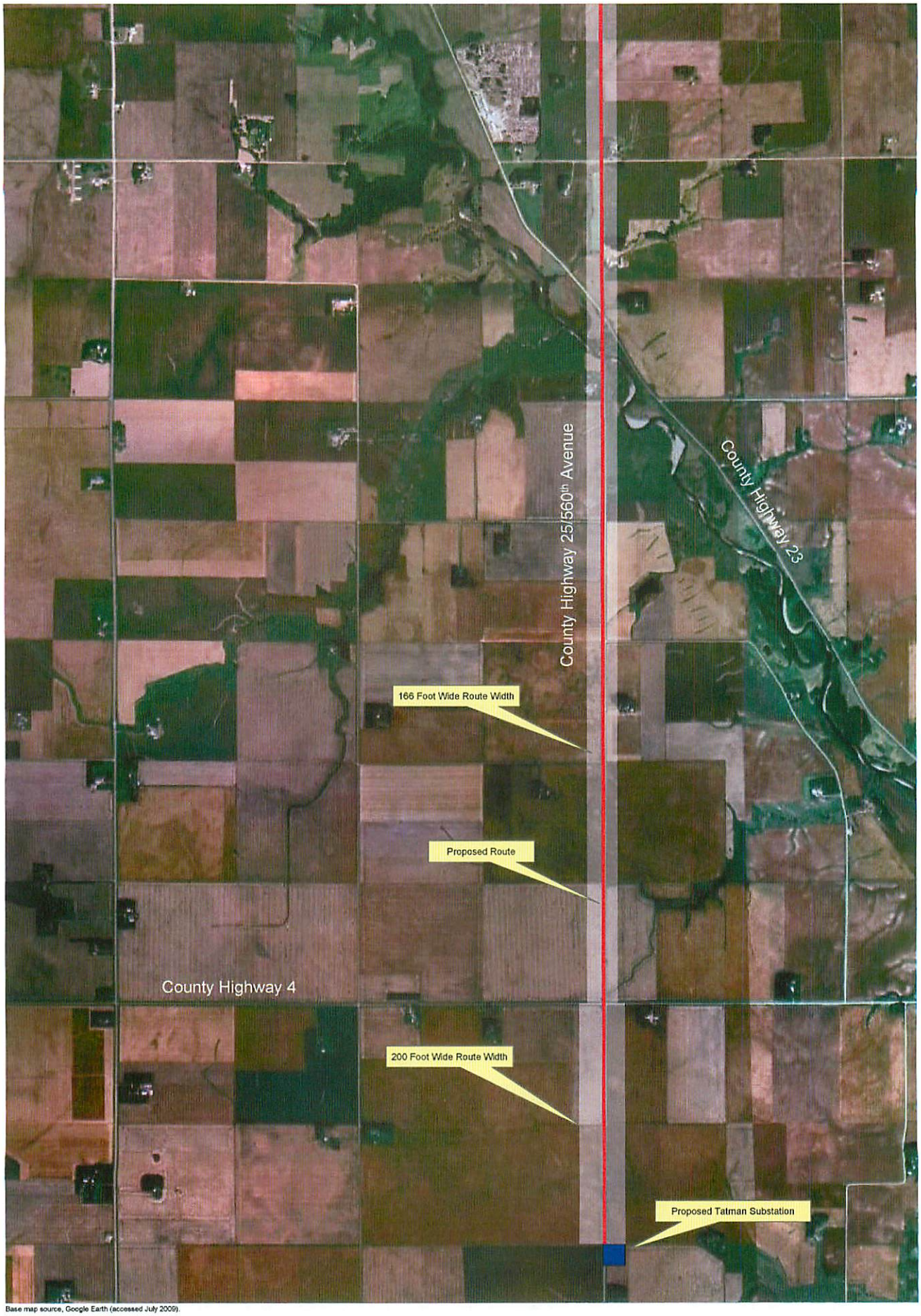
Northstar Transmission, LLC
Docket No. TL-08-1120

Legend

- Recreation Site
- Water Trail (Des Moines River)
- Grant In Aid Snowmobile Trails
- Substation
- Existing Pole
- Proposed Transmission Line
- Collector Line
- Proposed Upgrade of Existing Xcel Transmission Line
- Transmission Line Corridor
- State Boundary

Sources: MN Land Management Information Center (LMIC), MN Data Deli, MN DNR, U.S. FWS, National Geographic TOPO! Pro, ESRI

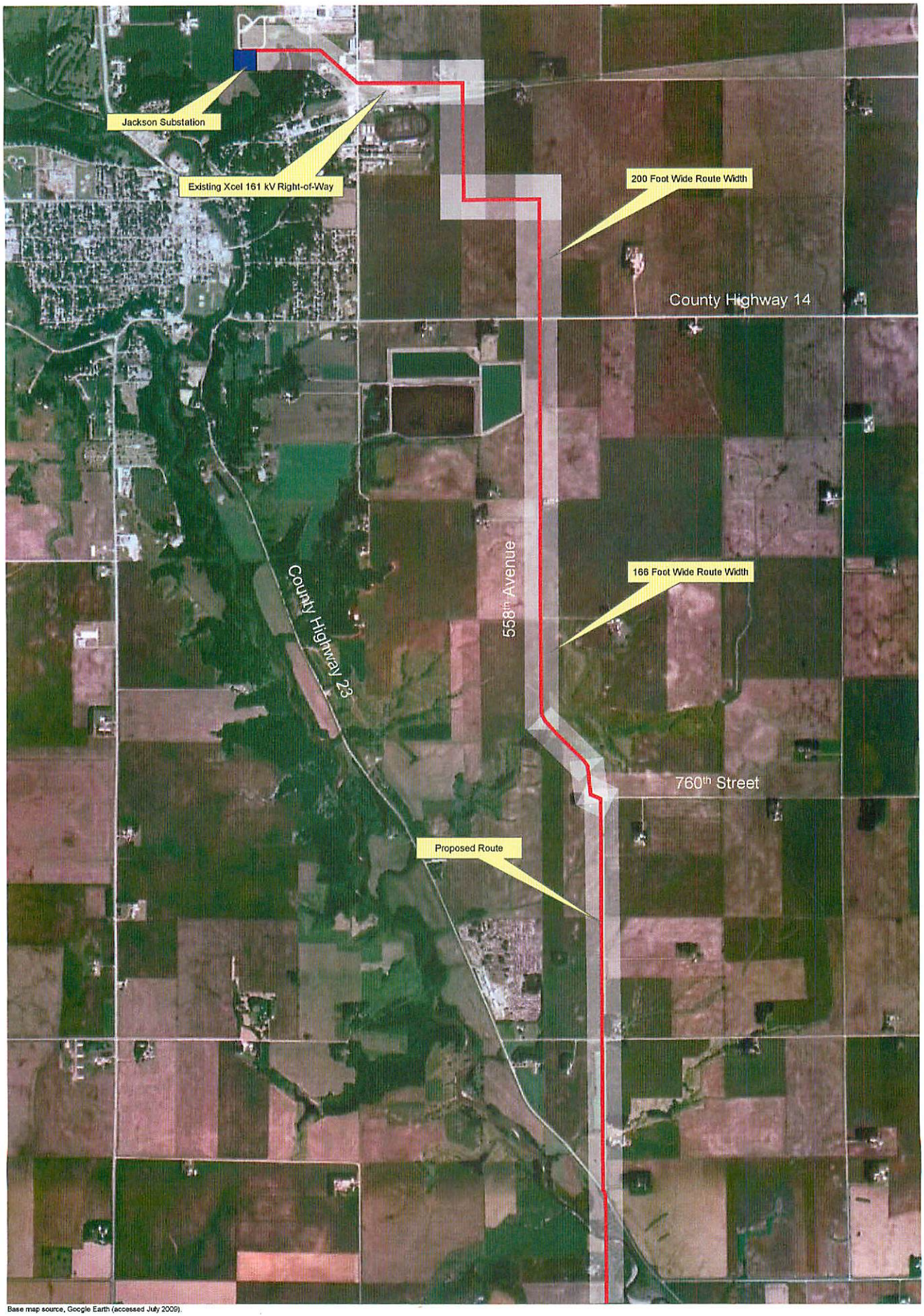
LOCATION MAP



Base map source, Google Earth (accessed July 2009).

FIGURE 2A
Proposed Route
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

N
W E
S
Not to Scale



Base map source, Google Earth (accessed July 2009).

FIGURE 2B
Proposed Route
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

N
W E
S
Not to Scale

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David Boyd	Chair
J. Dennis O'Brien	Commissioner
Phyllis Reha	Commissioner
Thomas Pugh	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota.	ISSUE DATE: DOCKET NO. IP-6686/TL-08-1120 FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER ISSUING A ROUTE PERMIT TO NORTHSTAR TRANSMISSION, LLC FOR A 161 KILOVOLT TRANSMISSION LINE AND ASSOCIATED FACILITIES

The above-captioned matter came before the Minnesota Public Utilities Commission (Commission) on August 13, 2009, acting on an application by Northstar Transmission, LLC (applicant), for a route permit to construct a new 161 kilovolt (kV) transmission line between a newly proposed Tatman substation to be constructed near Petersburg Township, in Jackson County, Minnesota, and one of two potential interconnection points:

> Option #1 - The transmission line would be co-located on new double-circuit pole structures at existing pole #114 of Xcel's 161 kV Lakefield Junction to Fox Lake transmission line for approximately one mile west to the Jackson Substation.
>
> Option #2 - The transmission line would terminate at a new switching station near pole #114 of Xcel's Lakefield Junction to Fox Lake 161 kV transmission line.

A public hearing was held on June 23, 2009, at the AmericInn in Jackson, Minnesota. The hearing was presided over by Judge Bruce Johnson, Administrative Law Judge (ALJ) for the Minnesota Office of Administrative Hearings (OAH). The hearing continued until all persons who desired to speak had done so. The comment period closed on July 6, 2009, at 4:30 p.m.

STATEMENT OF ISSUE

Should the Commission find that the environmental assessment and the record adequately address the issues identified in the scoping decision? Should the Commission issue a route permit identifying a specific route and permit conditions for the proposed 161 kV transmission line project?

Based upon all of the proceedings herein, the Commission makes the following:

FINDINGS OF FACT

The Applicant

1. Northstar Transmission, LLC, (applicant) is a Delaware limited liability company. Emmet County Energy, LLC is the sole member and 100 percent owner of Northstar Transmission, LLC.[1] Emmet County Energy, LLC, is a community-owned wind energy development company and Edison Mission Group, a subsidiary of Edison International.[2]

2. Northstar Transmission, LLC, will build, own and operate the new 161 kV transmission line and associated facilities. Following is contact information for Northstar Transmission, LLC: Alan Blum, Northstar Transmission, LLC, 418 Central Avenue, Esterville, IA 51334, Phone: (712) 362-7272, Email: alan.blum@blumandleonard.com.

The Project

3. The applicant has proposed to construct a 161 kV transmission line route that would run between a new Tatman substation in Petersburg Township to the Jackson substation in Jackson County, Minnesota, utilizing one of two potential interconnection points as identified in the route permit application:

   a. Option #1 - The transmission line would be co-located on new double-circuit pole structures at existing pole #114 of Xcel's 161 kV Lakefield Junction to Fox Lake transmission line for approximately one mile west to the Jackson Substation.

   b. Option #2 - The transmission line would terminate at a new switching station near pole #114 of Xcel's Lakefield Junction to Fox Lake 161 kV transmission line.

   The total length of the proposed transmission line would be approximately 10 miles with Option #1 and approximately 9 miles with Option #2.[3]

4. The project is located in Jackson County, Minnesota.

5. The applicant indicates that the proposed project will be constructed to capture energy generated by the Northstar Wind Farm, a 200 megawatt (MW) facility located in Emmet and Dickinson counties, Iowa, and connect to the Xcel Energy Lakefield Junction-Fox Lake 161 kV #2 transmission line just east of Jackson, Minnesota.[4]

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[1] Fredrikson & Byron, P.A. *Application for Certificate of Need Northstar Transmission Line Project*. Northstar Transmission, LLC. October 28, 2008.
[2] Exhibit 14 at 1.
[3] Exhibit 2 at 1.
[4] Exhibit 14 at 1.

6. The transmission line will be supported by direct-embedded galvanized steel poles with braced posts for approximately 9 miles of the route. These tangent structures would average 75 feet in height with foundations that are approximately 30 inches in diameter with a 400 foot span between each structure.[5]

7. The applicant proposes to co-locate or underbuild existing Rural Electric Administration (REA) distribution lines along 558th and 560th Avenues onto the newly proposed transmission line structures or work with the REA to bury the lines, thereby consolidating electrical utilities within one right-of-way.[6,7]

8. Selection of interconnection Option #1 would require galvanized steel pole double-circuit structures with davit arms supported by a concrete foundation from pole #114 to the Jackson substation (approximately 1 mile). The structures would be approximately 110 feet to 150 feet in height and 36 inches in diameter with an average span of 565 feet between poles.[8]

9. The 161 kV transmission line will be a single-circuit, three-phase, 60 hertz, alternating current line. The three phases of the transmission line will each consist of single 795 (Drake) aluminum conductor steel reinforced (ACSR). The ACSR conductors are 795,000 circular mils or approximately 1.108 inches in diameter and are comprised of seven steel wires in the center surrounded by 26 aluminum strands.[9]

10. Selection of interconnection Option #1 between pole #114 and the Jackson substation would consist of a double-circuit 161/161 kV, co-located on new double-circuit structures with Xcel's existing 161 kV line.[10]

11. There would also be shield wires strung above the phases to prevent damage from potential lightning strikes. The shield wire may include a fiber optic cable that allows for substation protection equipment to communicate with other terminals on the line.[11]

12. The applicant's proposed transmission line route would originate at a newly constructed substation (Tatman substation) located approximately one-half mile north of the Minnesota-Iowa border in Petersburg Township. The transmission line route would head north out of the Tatman substation along County State Aid Highway (CSAH) 25/560th Avenue for approximately five and one half miles to 558th Avenue and continue north two miles to CSAH 14, then traveling one-quarter mile east. At this point the transmission line route veers slightly north-northwest where it travels along property and section lines across private agricultural land to one of two points of interconnection identified in Finding 3.[12]

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[5] Exhibit 2 at 12.
[6] Exhibit 2 at 9.
[7] Exhibit 21.
[8] Exhibit 2 at 4.
[9] Exhibit 2 at 12-15.
[10] Exhibit 2 at 12-15.
[11] Exhibit 14 at 7.
[12] Exhibit 14 at 4.

13. The applicant plans to locate the transmission line within the road rights-of-way for the route segment along CSAH 25/560th Avenue and 558th Avenue from the Tatman substation to CSAH 14. Construction of the transmission line within road rights-of-way will be at a distance acceptable to the county and townships, in this case as close to the edge of road right-of-way as possible.[13]

14. The applicant is proposing to construct the new Tatman substation on approximately 2.5 acres of a 9 acre parcel located just north of the Minnesota-Iowa border on the east side of CSAH 25 in the southwest quarter of Section 32, Township 101N, Range 34W. The substation would be designed to accommodate the 161 kV line along with a 34.5 kV collector line that would be constructed underground from the Northstar Wind Farm collector system in Iowa to the proposed Tatman substation.[14]

15. Selection of interconnection Option #2 would require a new switching station that would be constructed on 2.5 acres near 790th Street just east of the city of Jackson, as proposed by the applicant.[15]

16. The applicant has requested a route of varying widths. The route widths vary by route segment and range from 300 feet to one mile in width, as identified in the route permit application. A 300 foot route width centered on CSAH 25 and then 558th Avenue is requested from the proposed Tatman substation to CSAH 14. The route width for the segment from CSAH 14 north is one mile and was requested to accommodate potential routing issues when traversing private agricultural land. The requested route width for the additional one mile to the Jackson substation (Option #1) is 200 feet, utilizing the existing Xcel 161 kV 80 foot wide easement and extending the easement 120 feet to the north.[16]

17. The applicant indicated a 100 foot wide right-of-way would be required for the segment of the route originating at the Tatman substation to the existing pole #114. A 200 foot wide right-of way consisting of Xcel Energy's existing 80 foot right-of-way and a new additional 120 foot wide right-way adjacent to and north of Xcel's existing would be required from pole #114 to the Jackson substation (Option #1).[17]

18. Additional information from the applicant was requested by OES on the route widths requested in the route permit application. In a letter dated June 22, 2009, the applicant refined the route widths provided in Finding 16 as follows.[18]

    a. A 200 foot wide route width centered on CSAH 25 from the Tatman substation to CSAH 4.

    b. A 166 foot wide route width centered on 560th Avenue and to 558th Avenue from CSAH 4 to CSAH 14.

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[13] Exhibit 21.
[14] Exhibit 14 at 8.
[15] Exhibit 14 at 9.
[16] Exhibit 2 at 9.
[17] Exhibit 2 at 9.
[18] Exhibit 21.

c. A 1,520 foot wide route width that includes the W. Ascheman property (the southeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West) and 100 feet of adjacent land to the south of CSAH 14, 200 feet of adjacent land to the east of the W. Ascheman property, and 200 feet of adjacent land to the north of the W. Ascheman property.

d. A 200 foot wide route width (100 feet on either side of the proposed route centerline) commencing at a point 100 feet east of the center of the southeast quarter of Section 19 and extending north for a quarter mile, then extending west for a quarter mile, then extending north for a half-mile to the proposed switching station south of Pole 114.

e. A 200 foot wide route width (encompassing Xcel Energy's existing 80 foot right-of-way and extending an additional 120 feet north) from Pole 114 one mile west to the Jackson substation.

19. In the same June 22, 2009, letter identified in Finding 18, the applicant also refined the rights-of-way required for the project as follows.[19]

a. A 100-foot right-of-way from the Tatman substation to CSAH 4.

b. An 83-foot right-of-way from CSAH 4 to CSAH 14.

c. A 100-foot right-of-way from CSAH 14 to pole #114.

d. A 200-foot right-of-way from pole #114 to the Jackson substation.

Procedural History

20. On September 22, 2008, the applicant filed a letter with the Commission noticing their intent to submit a route permit application under the alternative permitting process set forth in Minnesota Statutes 216E.04 and Minnesota Rules 7849.5500 to 7849.5720.[20]

21. On October 28, 2008, the applicant filed a route permit application with the Commission for a 161 kV transmission line to be constructed in the townships of Des Moines, Petersburg, and Wisconsin in Jackson County, Minnesota.[21]

22. The applicant mailed a Notice of a Submittal of an Application for a Route Permit on November 6, 2008, to those persons whose names are on the general list maintained by the Commission for this purpose, local and regional officials, and property owners in compliance with Minnesota Rules 7849.5550 and 7849.5240, subp. 2.[22]

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[19] Exhibit 21.
[20] Exhibit 1.
[21] Exhibit 2.
[22] Exhibit 20.

23. The applicant published Notice of a Submittal of an Application for a Route Permit in the *Lakefield Standard* (November 6, 2008), *Jackson County Pilot* (November 6, 2008), and *Tri County News* (November 5, 2008) in compliance with Minnesota Rules 7849.5550 and 7849.5240, subp. 4.[23]

24. The OES staff recommended that the Commission accept the route permit application as complete, appoint a public advisor, and take no action on an advisory task force in comments and recommendations dated November 25, 2008.[24]

25. The Commission determined that the project is eligible for the alternative permitting process of the Power Plant Siting Act, Minnesota Statute 216E.04 and Minnesota Rule 7849.5500, and accepted the application as complete on December 1, 2008.[25]

26. On January 8 and 15, 2009, the Office of Energy Security (OES) issued and mailed a Notice of Public Information Meeting for the route permit application docket (IP-6686/TL-08-1120) and the related certificate of need docket (IP-6686/CN-08-944) to those persons whose names are on the project contact list maintained by the Commission for this purpose, in compliance with Minnesota Rules 7849.5570 and 7849.5260, subp. 1. Notices were also sent to persons on the official service list maintained by the Commission as well as designated State Agency Technical Representatives.[26]

27. The applicant on behalf of the OES published Notice of Public Information Meeting in the *Jackson County Pilot* (January 15, 2009) in compliance with Minnesota Rules 7849.5570 and 7849.5260, subp. 1.[27]

28. In accordance with Minnesota Rules 7849.5570 and 7849.5260, OES staff held a joint public information and environmental assessment scoping meeting on January 29, 2009, at the AmericInn in Jackson, Minnesota, to discuss the project with the public and gather public input for the scope of the environmental assessment to be prepared. Approximately 16 people attended the meeting.

29. The public comment period on the scope of environmental assessment closed on February 12, 2009. The OES received four comment letters during the scoping comment period.[28]

    a. Two letters from citizens located along the proposed route (Joe Ascheman and The Withers) voiced preference for an alternative to the segment of the applicant's proposed route that would run along 560th Avenue from CSAH 23 to 558th Street where it heads north. The alternative route segment seeks to avoid approximately four homes located on the applicant's proposed route along 560th Avenue.

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[23] Exhibits 3, 4, and 5.
[24] Exhibit 7.
[25] Exhibit 8.
[26] Exhibit 9.
[27] Exhibit 10.
[28] Exhibit 11.

b. A letter submitted by William and Judy Ascheman suggested three variations of alignment specific alternatives for the area of the proposed route where the applicant had requested a 1 mile wide route width (Sections 10 and 20 north and adjacent to County Highway 14). All three suggested alignment alternatives are variations to the cross-country alignment proposed by the applicant and share at least one common segment.

c. The Minnesota Department of Natural Resources (DNR) submitted a comment letter recommending that construction of the proposed switching station should avoid any disturbance within the existing railroad right-of-way and if avoidance of the railroad right-of-way is not feasible, a botanical survey within the railroad right-of-way may be required; the identification and implementation of best management practices to reduce or avoid negative impacts to loggerhead shrike (a State Threatened Species); the transmission line segment that would cross the Des Moines River should be equipped with bird flight diverters; and that construction and operation practices that avoid the spread of invasive species and herbicide application in the proposed transmission line right-of-way should be evaluated.

30. In the January 22, 2009, Order Granting Exemptions and Variance, Finding Application Complete and Directing Informal Review Process, the Commission encouraged the OES to combine the environmental review of the related certificate of need process (IP-6686/CN-08-944) with the environmental assessment of the routing proposal to the extent practicable.[29] Pursuant to Minnesota Rule 7849.7100 and as detailed in the joint scoping decision signed by the Director of OES, the certificate of need and route permit applications for this project were reviewed jointly. The public meeting and public hearing were also combined and conducted jointly.

31. The joint scoping decision for the environmental assessment was signed by the Director of the OES on February 24, 2009, filed with the Commission and made available to the public as provided in Minnesota Rule 7849.5700, subp. 3.[30]

32. On February 27, 2009, the OES mailed the joint scoping decision to persons on the project contact list in accordance with Minnesota Rule 7849.5700, subp. 3, as well as the designated State Agency Technical Representatives.[31]

Environmental Assessment

33. The environmental assessment was filed with the Commission and made available on May 29, 2009.[32]

34. The environmental assessment was prepared in accordance with Minnesota Rule 7849.5700, subp. 4, and contained all the information required.

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[29] Minnesota Public Utilities Commission. Order Granting Exemptions and Variance, Finding Application Complete and Directing Informal Review Process. Docket No. IP-6686/CN-08-944. January 22, 2009.
[30] Exhibit 12.
[31] Exhibit 12.
[32] Exhibit 14.

35. On June 1, 2009, the OES mailed a Notice of Environmental Assessment Availability to those persons whose names are on the project contact list maintained by the Commission for this purpose in compliance with Minnesota Rule 7849.5700, subp. 6.[33]

36. Pursuant to Minnesota Rule 7849.5700, subp. 6, the OES published a Notice of Environmental Assessment Availability in the *EQB Monitor* (June 15, 2009).[34]

37. A copy of the Environmental Assessment was provided to the public agencies with authority to permit or approve the proposed project and was also posted to the Commission's Energy Facilities Permitting website in accordance with Minnesota Rule 7849.5700, subp. 6.

38. The environmental assessment evaluated the applicant's proposed route along with one alternative route (Withers/Ascheman Alternative) and three alignment specific alternatives (W. Ascheman Alignment Alternatives).

    a. The Withers/Ascheman route alternative would veer northwest and follow along Petersburg Road/CSAH 23 instead of continuing north along 560th Avenue. At the north-south property line dividing the northeast quarter of Section 7, the proposed alternative would head north following an existing fence line/property boundary and join the proposed route at the point where 560th Street runs direct north.

    b. The W. Ascheman Alignment Alternatives (I, II, and II) are located in the area of the proposed route where the applicant had requested a 1 mile wide route width (Sections 10 and 20 north and adjacent to CSAH 14). The alternatives specify three separate alignment alternatives from CSAH 14 to the proposed switching station or pole #114 end point. All three suggested alignment alternatives are variations to the cross-country alignment proposed by the applicant and share at least one common segment.

Public Hearing

39. On June 1, 2009, the OES mailed a Notice of Public Hearing to the relevant regional development commissions, counties, towns, townships, municipalities, and those persons whose names are on the project contact list in compliance with Minnesota Statute 216E.03, subd. 6.[35]

40. On June 3, 2009, the OES mailed a Revised Notice of Public Hearing to the relevant regional development commissions, counties, towns, townships, municipalities, and those persons whose names are on the project contact list in compliance with Minnesota Statute 216E.03, subd. 6.[36]

41. Pursuant to Minnesota Statutes 216E.03, subd. 6, the applicants, on behalf of the OES, published a Notice of Public Hearing in the *Jackson County Pilot* (June 11, 2009).[37]

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[33] Exhibit 15.
[34] Exhibit 16.
[35] Exhibit 17.
[36] Exhibit 18.
[37] Exhibit 19.

42. Administrative Law Judge (ALJ) Bruce Johnson presided over the public hearing conducted on June 23, 2009. The public hearing was held at the AmericInn in Jackson, Minnesota. The ALJ provided an opportunity for members of the public to ask questions or comment on the proposed project verbally and/or to submit question and comments in writing. A total of six members of the public attended the public hearing. All persons who desired to speak were afforded a full opportunity to make a statement on the record.[38]

43. Pursuant to Minnesota Rule 7849.5710, subp. 3, OES Energy Facility Permitting project manager Scott Ek appeared at the public hearing and described the alternative route permitting process, the proposed project, and introduced the environmental assessment and other pertinent documents for the record.

44. Tricia DeBleeckere appeared at the public hearing on behalf of Minnesota Public Utilities Commission.

45. Alan Blum the Chairman of Northstar Transmission, LLC, appeared at the public hearing on behalf of Northstar in this matter. Also representing the applicant at the hearing were Christina Brusven, Attorney at Law with Fredrikson and Byron, P.A., Ben Kerl with National Wind, and Sean Flannery with Tetra Tech EM, Inc.

46. A comment period was open until July 6, 2009, for receipt of comments.[39]

47. The public hearing transcript was filed by the Office of Administrative Hearings designated court reporter on July 9, 2009.[40]

48. Mr. Blum indicated during testimony at the public hearing that Tim Stall, an engineer with Jackson County informed them that the county has plans to reconstruct the intersection at CSAH 25 and CSAH 23 and would like to be involved in the transmission line design and construction process in that area. Mr. Blum stated they would be willing to cooperate with the county.[41]

49. Scott Ek with OES asked the applicant if a formal decision had been made on which of the two points of interconnection (Option #1 or Option #2) the applicant preferred. A representative for the applicant, Mr. Kerl confirmed that the applicant preferred point of interconnection for the project is the Jackson substation or Option #1. It was also confirmed by Mr. Kerl and Mr. Blum that in selecting Option #1 there would be no need for the proposed switching station as described in the route permit application.[42]

50. Scott Ek with OES asked the applicant if the mitigation of a diagonal crossing of the Des Moines River to avoid a grove of trees as described in the Environmental Assessment would be feasible taking into account the counties plan to reconfigure that intersection. Mr. Blum indicated that it was feasible and also agreed that it could be accomplished within the requested route width, per the route permit application.[43]

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[38] Exhibit 25.
[39] Exhibit 25.
[40] Exhibit 23.
[41] Exhibit 25 at 4.
[42] Exhibit 25 at 4.
[43] Exhibit 25 at 4.

51. Ms. Sarah Withers, a public citizen attending the public hearing asked about the alternative route discussed at the public meeting and in the Environmental Assessment and whether the alternative is still a consideration.[44]

52. Ms. Wanda Jerousek, a public citizen attending the public hearing indicated her concern over the route of the proposed transmission line and the proximity to her home. She stated a preference for the alternative route.[45]

53. Mr. Van Johnson, a public citizen attending the public hearing indicated concern over potential damages to 560th Avenue during the construction phase of the project and who is liable for the damages as well as who would pay to move the poles should the county decide to expand the township road.[46]

54. Mr. Blum with Northstar indicated that should Jackson County decide to upgrade and expand the last eight miles of the township road that Northstar would be responsible for relocating the poles and that it would be a condition in the county permit.[47]

55. The ALJ filed the Summary of Public Comment with the Commission on July 22, 2009. A total of three written comment letters were submitted to the ALJ during the comment period.[48] The ALJ report contains a summary of all oral comments heard at the public hearing and written comments sent via mail and email.[49]

    a. A letter submitted by Rob and Sarah Withers (landowners on the route along 560th Avenue) expressed concern over the proximity of the proposed transmission line to their existing home (approximately 173 feet) and the potential of long term health impacts. They also voiced preference for the Withers/Ascheman Route Alternative as described in the environmental assessment and previous comment letters.[50]

    b. A letter submitted by Richard and Jody Whithers raised concern over the proximity of the line to their residence and retail store as it related to the potential for health effects, impact on essential communication devices (cell phone reception, television, and internet), and the potential for the transmission to span their driveway creating a hazard when using farm equipment. They also voiced preference for the Withers/Ascheman Route Alternative as described in the environmental assessment and previous comment letters.[51]

    c. A letter submitted by Joe Ascheman expressed concern over the proximity of the line to his residence and his livestock. He also indicated preference for the Withers/Ascheman Route Alternative as described in the environmental assessment and previous comment letters.[52]

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[44] Exhibit 25 at 5.
[45] Exhibit 25 at 5.
[46] Exhibit 25 at 5.
[47] Exhibit 23 at 32.
[48] Exhibit 24.
[49] Exhibit 25.
[50] Exhibit 24.
[51] Exhibit 24.
[52] Exhibit 24.

Potential Impacts and Mitigation

56. The proposed transmission line route is located in the city of Jackson, Des Moines Township, Petersburg Township, and Wisconsin Township in Jackson County, Minnesota.[53]

57. The main thoroughfares in the area of the project are U.S. Interstate 90, CSAH 4, CSAH 14, CSAH 23/Petersburg Road, CSAH 25/560th Avenue, and 558th Avenue.

58. The project area is largely characterized by row-crop agriculture and pasture land with sporadic wetlands and flood plain forests along the Des Moines River. The majority of the proposed project would be located within existing road rights-of-way in primarily agricultural areas.[54]

59. As identified in Finding 49, the applicant has confirmed preference for interconnection Option #1 as the termination point (Jackson substation) for the transmission line project. Therefore the Findings from this point forward will center on Option #1, a 10-mile long 161 kV transmission line route originating at a new Tatman substation and terminating at the Jackson substation with no need for the proposed switching station as identified in Option #2 and the route permit application.

60. As indicated by the applicant, the closest residential structure to the proposed transmission centerline (located within the existing road rights-of-way) along the north-south segment of the route would be approximately 175 feet, four residences would be located approximately 200 to 500 feet from the proposed transmission centerline with the remainder of residences over 500 feet away. Along the east-west segment of the proposed route from pole #114 to the Jackson substation there are two residences that are currently located approximately 100 feet from the existing Xcel 161 kV transmission line with another nine located approximately 500 to 1,200 feet away.[55]

61. The applicant's proposed route would parallel and share existing road rights-of-way for approximately 85 percent of the route, the other 15 percent would traverse and follow section lines through private agricultural land.[56]

62. The Withers/Ascheman Alternative route would not add any length to the applicant's proposed route, but would parallel and share less existing road rights-of-way (58 percent) and traverse cross-country following section lines through more private agricultural land (42 percent). This alternative would create new cross-country transmission line right-of-way easements near approximately four residences/farms.[57]

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[53] Exhibit 2 at 8.
[54] Exhibit 13 at 36.
[55] Exhibit 13.
[56] Exhibit 14 at 16.
[57] Exhibit 14 at 39.

63. The W. Ascheman Alignment Alternatives are located within the area of the proposed route where the applicant had requested a 1 mile wide route width (Sections 10 and 20 north and adjacent to CSAH 14). All three suggested alignment alternatives are variations to the cross-country alignment proposed by the applicant and share at least one common segment. The approximate length of the proposed alignment and the alternative alignments are as follows: Proposed Alignment (~8,529 feet), Alignment Alternative I (~5,882 feet), Alignment Alternative II (~8,235 feet), and Alignment Alternative III (~8,529 feet). The most direct and shortest route alignment is Alignment Alternative I and would reduce the applicant's proposed route by approximately one-half mile, reducing the overall line length, number of poles, and corner structures.[58]

64. The proposed transmission line and associated facilities will be designed to meet or exceed all requirements of the National Electric Safety Code (NESC), which is the utility safety standard that applies to all transmission line facilities.[59] The proposed transmission line facility will also meet the North American Electric Reliability Corporation's (NERC) reliability standards.[60] In addition, the substation station facilities will be fenced, kept free of vegetation, maintained for adequate drainage, and access will be limited to authorized personnel in accordance with the above requirements and standards.[61]

65. Standard construction and mitigation practices will be followed. These practices address staging, erecting transmission line structures and stringing transmission lines. Construction will be developed based on the proposed schedule for activities, permit requirements, prohibitions, maintenance guidelines, inspection procedures, terrain, and other practices and conditions.[62]

66. Practices to mitigate potential construction impacts will follow permit requirements and be based on construction schedules, geology and topography, maintenance guidelines, inspection procedures, and presence of sensitive environments or species.[63]

67. Construction will not impact the county or city water, sewer, and electric services, emergency services, or private wells and septic systems.[64]

68. Short-term exceedance of daytime noise standards associated with initial construction is expected to occur during daytime hours as the result of heavy equipment operation and increased vehicle traffic associated with the transport of construction materials and personnel to and from the work area. The short-term exceedance of daytime noise standards would be intermittent and temporary in nature. Minnesota nighttime noise level standards will not be exceeded.[65]

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[58] Exhibit 14 at 40.
[59] http://standards.ieee.org/nesc/
[60] http://www.nerc.com/
[61] Exhibit 2 at 25.
[62] Exhibit 2 at 23.
[63] Exhibit 14 at 12.
[64] Exhibit 14 at 29.
[65] Exhibit 14 at 18.

69. Substation components will be stored onsite or on a temporary construction easement negotiated with private landowners adjacent to the site. The primary construction staging area would include a 3-acre parcel in the vicinity of the proposed Tatman substation site and will not be included as part of the route permit.[66]

70. The project components will be delivered to the site on a flat-bed transport truck. Oversize and overweight truck permits will be coordinated with the Minnesota Department of Transportation (MnDOT) and the Jackson County Department of Transportation.[67]

71. Impacts to transportation would be localized and short term during the construction phase of the project. All necessary provisions will be made to conform to safety requirements for maintaining the flow of public traffic. Traffic control barriers and warning devices will be used when appropriate. Construction operations will be conducted to offer the least possible obstruction and inconvenience to public traffic. The construction contractor will be required to plan and execute delivery of heavy equipment in such a manner that would avoid traffic congestion and reduce the likelihood of dangerous situations along local roadways. The applicant will work closely with Jackson County Department of Transportation and the city of Jackson to ensure minimal disruption to area traffic and will obtain licenses for county and township road right-of-way sharing.[68]

72. The shortest and most direct route that minimizes impacts will be considered should temporary access driveways be required between the roadway and transmission structures. Construction mats may also be used to minimize impacts on access paths and construction areas. In all cases, permission from the property owner will be obtained prior to accessing the transmission line route and constructing, upgrading, or reconfiguring roads.[69]

73. Every attempt will be made to limit ground disturbance wherever possible. Modifications will be made throughout the construction process to ensure that potential impacts are minimized to the greatest extent.[70] The applicant will implement best management practices during construction in an effort to reduce dust, erosion, and minimize compaction. Soil erosion control best management practices will be employed to minimize loss of topsoil. Transmission line route permits generally require use of soil erosion controls and require soils compacted by construction activities to be restored to pre-construction condition upon project completion.

74. The applicant, in coordination with the DNR, will employ best management practices to avoid the potential spread of invasive species within and adjacent to the right-of-way during construction and maintenance of the transmission line.[71]

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[66] Exhibit 14 at 12.
[67] Exhibit 13.
[68] Exhibit 13.
[69] Exhibit 14 at 11.
[70] Exhibit 14 at 12.
[71] Exhibit 11 and 14.

75. The applicant will work with landowners to minimize impacts to farming operations along the proposed route, such as initiating construction before crops are planted or following harvest and working with the property owners pre- and post construction to minimize any potential impacts.

76. Upon completion of construction, disturbed areas will be restored to their original condition to the maximum extent practicable. The applicant will be required to fairly reimburse landowners for any damage including, but not limited to, yard/landscape damages, structure/fence damage, crop damage, soil compaction, or drain tile damage sustained during construction, as a condition of the route permit.[72]

77. Landowners will be contacted at the close of construction activities to determine whether damages due to transmission line construction have occurred. Upon completion of construction cleanup and restoration of damaged areas, landowners will again be sent a final letter requesting notification of any outstanding construction damage that has not been remedied.[73]

78. Construction and post-construction reclamation activities will include but are not limited to removing and disposing of debris; dismantling staging areas and temporary workspace; employing erosion control blankets with embedded seeds, silt fences, hay bales, or hydro seeding; and hand-planting disturbed areas with native vegetation.

79. Maintenance of the line will be performed by an experienced contractor under a long-term service agreement including line inspection, equipment maintenance, and repairs. Vegetation growth will be monitored approximately every 5 years. If undesirable vegetation has become established and would affect the safe operation or maintenance of the line, the vegetation would be removed.[74] Should removal of vegetation require herbicide application, the applicant will coordinate with the DNR to avoid the potential of directly or indirectly affecting native prairie and rare plant species.[75]

80. The issue of electric and magnetic fields was discussed in the environmental assessment. A number of national and international health agencies (The Minnesota Department of Health, The World Health Organization, The National Institute of Environmental Health Sciences) have concluded in their research that there is insufficient evidence to prove a connection between electric and magnetic fields exposure and health effects. Research has not been able to establish a cause and effect relationship between exposure to magnetic fields and human disease, nor a plausible biological mechanism by which exposure to electric and magnetic fields could cause disease. The Environmental Quality Board (EQB) and the Commission have historically recommended an 8 kV/m maximum electric field for transmission lines of 345 kV or greater to prevent potential shock hazards.[76] The maximum electric field for this project, as calculated by the applicant, would be 3.9 kV/m.[77] No Minnesota regulations have been established pertaining to magnetic fields from high voltage transmission lines.

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[72] Exhibit 14 at 13.
[73] Exhibit 14 at 13.
[74] Exhibit 14 at 13.
[75] Exhibit 11.
[76] Exhibit 14 at 21 to 28.
[77] Exhibit 14 at 23.

81. Appropriate measures will be taken by the applicant during transmission line design, construction, and operation to prevent the potential for any stray voltage problems from this project. As a condition of the permit, all fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, will be grounded to the extent necessary to limit the induced short circuit current between ground and the object and to comply with the ground fault conditions specified in the NESC. Northstar will be required to address and rectify any stray voltage problems that arise during transmission line operation, as a condition of the route permit.

82. The applicant indicates that noise levels directly adjacent to the 161 kV transmission line and substation would be below the 20 to 30 dB(A) level, less than the Minnesota residential nighttime standard of 50 dB(A) L_{10}. Long-term noise impacts from the project are not anticipated and mitigation measures are not necessary.[78]

83. Input pertaining to visual impacts from landowners or land management agencies will be considered prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. Care will be used to preserve the natural landscape and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project during construction and maintenance.[79]

84. Landowners will be compensated for the removal of mature yard trees through easement negotiations, if necessary. The Commission will require, as a permit condition, that the applicant works with landowners to identify issues related to the transmission line such as distance from existing structures, tree clearing, and other aesthetic concerns.[80]

85. Transmission structures will be placed at the maximum feasible distance from intersecting roads, highway, or trail crossings and could cross roads multiple times to minimize or avoid impacts.[81]

86. Jackson County Zoning Maps indicate the northern most portion of the proposed project located in Wisconsin and Des Moines townships runs through an area zoned urban and rural with the remainder of the project area zoned as agricultural.[82]

87. Impacts to agricultural land will occur in the northern most 1.5 miles of the route that follows Section and property lines and will be limited to the footprint of the transmission poles. In addition, the construction and Tatman substation will permanently impact 2.5 acres of agricultural land.[83]

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[78] *Exhibit* 2 at 30.
[79] Exhibit 14 at 19.
[80] Exhibit 14 at 20.
[81] Exhibit 14 at 19.
[82] Exhibit 14 at 30.
[83] Exhibit 14 at 30.

88. Disturbed areas of one acre or more (proposed substation) will be regulated by a National Pollutant Discharge Elimination System (NPDES) permit and Stormwater Pollution Prevention Plan (SWPPP) prepared for the project. Mitigation under the NPDES permit includes implementation of the SWPPP with the appropriate erosion control methods developed specifically for the site. The Minnesota Pollution Control Agency (MPCA) issues combined NPDES/State Disposal System permits for construction sites, industrial facilities and municipal storm sewer systems. Compliance with the MPCA stormwater program will be a condition of the route permit.[84]

89. The Jackson Municipal Airport is located within the vicinity of the project. MnDOT indicated to the applicant that the project is located within the airports area of influence. The applicant will need to submit a Notice of Proposed Construction or Alteration Application for each transmission structure within the flight area of influence to ensure that structures comply with airport safety zones and ordinances.[85]

90. There are no state forests, federal forests, or commercial forest resources located along the proposed transmission line route or at the proposed substation site.[86]

91. There are no mined areas or identified potential mineral resources in the immediate area of the proposed transmission line route or at the proposed substation site.[87]

92. A cultural resource assessment and records review at the Minnesota State Historic Preservation Office (SHPO) and the Office of the State Archaeologist identified 71 architectural properties (36 on the National Register of Historic Places) located within the city of Jackson; one reported archaeological site; and two previous cultural resource investigations. Information suggests the project area has the potential to contain previously undocumented historic and archaeological sites. The project area has not been formally surveyed for historic and archaeological sites.[88]

93. A Phase IA archaeological survey of the proposed project area will be conducted by the applicant to identify archaeological resources in areas with surface visibility greater than 25 percent and to determine the need for additional subsurface testing along the project route. The results of the cultural resource assessment and the Phase IA survey will be provided to SHPO for their review and response and will be a condition of the route permit.[89]

94. SHPO will be consulted by the applicant regarding the potential for visual impacts to the 36 National Register of Historic Places properties and one eligible architectural history property within the city of Jackson, one mile from the project area. An appropriate management plan or standing structures survey will be completed with assistance from the SHPO to address potential impacts on architectural resources and will be a condition of the permit.[90]

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[84] Exhibit 14 at 31.
[85] Exhibit 14 at 29.
[86] Exhibit 14 at 31.
[87] Exhibit 14 at 32.
[88] Exhibit 14 at 32.
[89] Exhibit 2 at 41.
[90] Exhibit 2 at 41.

95. There are no state or national forests, parks, or wilderness areas; national wildlife refuges; federal waterfowl production areas; state trails, scientific and natural areas, wildlife management areas, water access points, lakes; or county parks present within the proposed or alternative routes.[91]

96. The proposed transmission line route would cross the Des Moines River at approximately river mile 6.8 near the confluence of Stony Brook. There would be minor aesthetic impacts due to the installation of new overhead transmission line poles and conductors. There would be little if any impact to river users as a result of the proposed transmission line except that recreationalists utilizing the river for canoeing and fishing could view the transmission line structures.[92]

97. A snowmobile trail managed by the Jackson County Snowdrifters runs east-west along CSAH 4. The proposed transmission line would cross over the snowmobile trail near the intersection of CSAH 4 and CSAH 25. There would be little if any impact to snowmobile trail users as a result of the proposed transmission line except for minor aesthetic impacts due to the overhead transmission line.[93]

98. The Jackson Golf Club is a semi-private golf course located approximately 2 miles west of the proposed switching station location. The golf course would not experience any recreational or aesthetic impacts associated with the proposed transmission line.[94]

99. The Jackson KOA campground is located approximately 2.2 miles northwest of the proposed switching station location. The campground would not experience any recreational or aesthetic impacts associated with the proposed transmission line.[95]

100. There will be no significant impacts to air quality; therefore, no mitigation is necessary. Temporary impacts due to construction would be minimized by using best management practices to reduce dust emissions.[96]

101. The route will cross three public waters as identified on DNR Public Waters Inventory (PWI) maps. These include three watercourses, the Des Moines River, and two unnamed tributaries to the Des Moines River. There are also a number of drainage ditches that have been modified by agricultural use that drain to the Des Moines River that would be crossed. The applicant will apply for a license to cross public lands and waters and must abide by the conditions established by the DNR.[97]

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[91] Exhibit 14 at 28.
[92] Exhibit 14 at 28.
[93] Exhibit 14 at 29.
[94] Exhibit 14 at 29.
[95] Exhibit 14 at 29.
[96] Exhibit 14 at 34.
[97] Exhibit 14 at 34.

102. There are approximately five wetlands identified in the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) within or adjacent to the proposed project area. The wetland areas directly adjacent to where the proposed line would cross the Des Moines River fall within the jurisdiction of the Corps. The applicant has indicated that permanent impacts to the wetland in this area may be unavoidable. It may be necessary to install two poles within this area and the pole installations would result in approximately 6 square feet of permanent impacts limited to ground disturbance related to construction traffic and placement of transmission line structures. There will be no poles or clearing impacts associated with the remaining wetlands and public water features.[98]

103. The applicant indicates that the clearing of trees in the vicinity of the Des Moines River at CSAH 25 and CSAH 23 may be necessary for maintaining the reliability of the transmission line and would result in approximately 36,720 ft^2 of impacts to the wooded area.[99] The applicant, however, indicated at the public hearing that it may be feasible minimize the tree clearing by configuring the line in a diagonal fashion crossing the river as described in the environmental assessment.[100] See also Finding 50.

104. Potential impacts to wetlands and water resources will be limited to ground disturbance related to construction traffic and placement of transmission line structures. The applicant has indicated that the most effective way to minimize potential impacts to wetland areas is by locating structures outside of wetlands and adjacent to these resource areas when possible and spanning all surface flows. The applicant will use construction mats or perform construction during frozen conditions to minimize disturbance and compaction of wetlands and riparian areas during construction. Soil excavated from the wetlands and riparian areas will be contained and not placed back into the wetland or riparian area. Silt fencing or other erosion control measures will be used to prevent sedimentation when working near wetlands and watercourses. Areas disturbed by construction activities will be restored to pre-construction conditions (soil horizons, contours, vegetation, etc.). Where waterways must be crossed to pull in the new conductors and shield wires, workers may walk across, use boats, or drive equipment across ice in the winter.[101]

105. Construction crews will maintain sound water and soil conservation practices during construction and operation of the facilities in order to protect topsoil and adjacent water resources, to minimize soil erosion, and avoid major disturbance of individual wetlands and drainage systems during construction.

106. Prior to construction activities, the District Engineer for the Corps will be notified with a preconstruction notification authorized under the Corps St. Paul District Regional General Permit for structural discharges. An application will be filed with the Jackson County Soil and Water Conservation District (SWCD) to determine if the proposed project would impact any wetlands or public waters under local jurisdiction of the SWCD. Conditions provided in the MPCA NPDES permit, and the DNR license to cross public lands and waters will also be followed.[102]

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[98] Exhibit 14 at 35.
[99] Exhibit 2 at 46.
[100] Exhibit 14 at 37.
[101] Exhibit 14 at 11.
[102] Exhibit 14 at 36.

107. According to the Federal Emergency Management Agency, Flood Insurance Rate Maps, the proposed route crosses through the 100-year and 500-year floodplain (Zone B) in the area of the Des Moines River. The determined base flood elevation (one foot) in that area of the proposed route would be well below the 75 foot tall transmission structures and electrical components. In addition, due to the transmission structures small footprint area, water drainage or floodplain elevations will not be altered by the transmission line structures. Floodplain development permits are not anticipated for this project.[103]

108. The location of the proposed substation would not impact any wetlands or surface waters and is not located in a floodplain area.[104]

109. There is a potential for temporary displacement of native wildlife during construction of the proposed project. Generally, wildlife species that may be displaced are considered "common" in Minnesota, and their displacement would not be detrimental to their populations. Displaced wildlife would likely re-establish itself in closely located and comparable habitats within the project area. The majority of habitat that would be affected is limited to trees that require removal and fringe areas of agriculture plots. Displacement of fauna will be minor and temporary in nature. No long-term effects related to displacement are anticipated except for conversion of agriculture crops for construction of the substation.[105]

110. Tree clearing will be limited to the transmission right-of-way and areas that impact safe operation of the transmission facilities, and will be a condition of the route permit.

111. The principal impact posed to wildlife by the transmission line project is avian collision, once the transmission lines have been constructed and are operational. The applicant has indicated that it's standard transmission design will incorporate adequate spacing of conductor(s) and grounding devices intended to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.[106]

112. In cooperation with the DNR and USFWS, bird flight diverters will be incorporated into the transmission line design for the portion of line that would span the Des Moines River and other areas identified during transmission design and construction, and will be a condition of the permit.[107]

113. A search of the DNR's Natural Heritage Database identified nine known occurrences of rare species and natural plant communities within one mile of the project area, with eight of the nine located within the projects boundaries. Five of these rare species are threatened or of special concern mussels that are located in the Des Moines River. The Loggerhead Shrike, a state threatened bird specie, is known to occur in and around the proposed project area. There are also known occurrences of the state threatened Sullivant's Milkweed and special concern specie Snow Trillium as well as three records of mesic prairie remnants located within or near the proposed project area.[108]

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[103] Exhibit 14 at 35.
[104] Exhibit 14 at 35.
[105] Exhibit 14 at 37.
[106] Exhibit 14 at 37.
[107] Exhibit 14 at 37.
[108] Exhibit 14 at 37.

114. Due to the proximity of the project to the existing railroad and riparian areas along the Des Moines River and its tributaries combined with the known occurrence of rare and unique resources in the area, the applicant, in consultation with the DNR, will perform a botanical survey of the project area as a condition of the route permit.[109]

115. Minnesota's endangered species law prohibits taking of threatened or endangered species without a permit. Ground disturbance within the prairie remnant area should be completely avoided, there should be no vehicle use or stockpiling of equipment within the prairie, construction runoff should be diverted from the prairie, and areas adjacent to the prairie should be immediately be replanted with prairie species native to Minnesota in consultation with DNR. In addition, best management practices should be identified and implemented in cooperation with the DNR when working near the remnant prairies to reduce potentially negative impacts to the Loggerhead Shrike. Construction and maintenance personnel would be made aware of the rare resources and plant communities during pre-construction meetings in effort to minimize possible disturbance.[110]

116. The applicant will use silt fencing or other erosion control measures when working near waterways and wetlands (i.e. the Des Moines River) to prevent sedimentation and disturbance of these areas and their inhabitants.

117. The USFWS indicated that the project may potentially pass through areas of prairie bush clover habitat, a federally threatened specie. The USFWS indicated in correspondence that no known populations of prairie bush clover have been identified in the Natural Heritage Database, but left the final responsibility of determining if suitable habitat exists and whether it would be affected and can be avoided to the applicant.[111]

118. Radio, television, cellular phone, and communication system interference is not anticipated.[112]

119. The project will create short-term construction expenditures in the area and increased electric service reliability in the project area and the surrounding region.

120. The applicants estimate that the proposed project including mitigation will cost approximately $10.1 million with typical annual operating and maintenance costs on the order of $5,000 to $10,000 per year.[113]

Summary of Human and Environmental Impacts and Commitment of Resources

121. All routes analyzed in the environmental assessment have human and environmental impacts, some of which are unavoidable if the project is permitted and built. None of the routes evaluated are expected to cause an irreversible or irretrievable commitment of resources.

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[109] Exhibit 14 at 38.
[110] Exhibit 14 at 38.
[111] Exhibit 2 at Appendix E.
[112] Exhibit 14 at 38.
[113] Exhibit 2 at 25.

122. The applicant will pursue Option #1, the Jackson substation as a termination point for the transmission line. In choosing Option #1 a switching station will not be required as part of the project (Finding 49). The total length of the transmission line would be approximately 10 miles.

123. The applicant's proposed route (Option #1) would parallel and share existing road rights-of-way for approximately 85 percent of the route, the other 15 percent would traverse and follow section lines through private agricultural land (Finding 61).

124. The Withers/Ascheman Alternative route would not add any length, and would only parallel and share road rights-of-way for approximately 58 percent of the route and traverse cross-country following section and fence lines through private agricultural land for 42 percent of the route when compared with the applicant's proposed route (Finding 62).

125. The closest residential structure to the applicant's proposed transmission centerline (located within the existing road rights-of-way) along the north-south segment of the route would be approximately 175 feet (Finding 60).

126. The Withers/Ascheman Alternative would create new cross-country transmission line right-of-way easements near approximately four residences/farms, the closest of which would be approximately 100 feet.[114]

127. The east-west portion of the proposed route from pole #114 to the Jackson substation is common to all route alternatives. There are currently two residences that are located approximately 100 feet from the existing Xcel 161 kV transmission line with another nine located approximately 500 to 1,200 feet away (Finding 60).

128. All route alternatives would require the crossing of the Des Moines River. The applicant will span the river, possibly in a diagonal fashion to avoid the clearing of approximately 36,720 ft^2 of wooded area, if feasible (Findings 50 and 103).

129. As indicated in Finding 102, it may be necessary to construct two poles in the wetland areas directly adjacent to where the proposed line would cross the Des Moines River and permanent impacts to the wetlands may be unavoidable and will result in approximately six square feet of permanent impacts and is common to all route alternatives.

130. Construction of the Tatman substation will permanently impact a total of 2.5 acres of agricultural land (Finding 87).

131. The W. Ascheman Alignment Alternatives I is the shortest most direct route through private agricultural land and would reduce the applicant's proposed route by approximately one-half mile while reducing the number of poles and corner structures when compared to the proposed and the two other alignment alternatives (Finding 63).

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[114] Office of Energy Security. Comments and Recommendations In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota. Docket No. IP-6686/TL-08-1120. August 13, 2009.

132. The greatest concern identified in public comment regarding the project has been the distance at which the line would be located from existing residences along the portion of the applicant's proposed route that would run along 560th Avenue from CSAH 23 to just north of 750th Street. The closest home along this segment of the route is approximately 175 feet from the proposed transmission centerline (Finding 60). The residences/farms on this segment are all located on the east side of 560th Street. Constructing the transmission centerline on the west side of 560th Avenue from CSAH 23 to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W would increase the distance between the transmission line and residences along this segment.[115]

Applicable Statutory Conditions

133. Minnesota Statute 216B.243, subd. 2, states that no large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the Commission. Minnesota Statute 216B.2421, subd. 2(3) defines a "large energy facility" as any high voltage transmission line with a capacity of 100 kV or more with more than ten miles of length or that crosses a state line.

134. Minnesota Statute 216E.03, subd. 7, and Minnesota Rules 7849.5910 provide considerations in designating sites and routes and determining whether to issue a permit for a large electric power generating plant or a high voltage transmission line.

Based on the Findings of Fact the Commission makes the following:

CONCLUSIONS OF LAW

1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.

2. The Public Utilities Commission has jurisdiction over the subject matter of this proceeding pursuant to Minnesota Statute 216E.03, subd. 2.

3. The project qualifies for review under the alternative permitting process of Minnesota Statute 216E.04 and Minnesota Rule 7849.5500.

4. The applicants, the Office of Energy Security, and the Public Utilities Commission have complied with all procedural requirements required by law.

5. The Office of Energy Security has completed an environmental assessment of this project as required by Minnesota Statute 216E.04, subd. 5, and Minnesota Rule 7849.5700.

6. The Public Utilities Commission has considered all the pertinent factors relative to its determination of whether a route permit should be approved as required by Minnesota Statute 216E.03, subd. 7, and Minnesota Rule 7849.5910.

7. The conditions included in the route permit are reasonable and appropriate.

[115] Office of Energy Security. Comments and Recommendations In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota. Docket No. IP-6686/TL-08-1120. August 13, 2009.

Based on the Findings of Fact, Conclusions of Law contained herein and the entire record of this proceeding, the Commission hereby makes the following:

ORDER

1. A route permit is hereby issued to Northstar Transmission, LLC to construct approximately 10 miles of 161 kV transmission line between a newly proposed substation (Tatman substation) in Petersburg Township to Xcel Energy's existing Jackson substation in Jackson County, Minnesota.

    a. A 200 foot wide route width centered on CSAH 25 from the Tatman substation to CSAH 4;

    b. A 166 foot wide route width centered on 560th Avenue and 558th Avenue from CSAH 4 to CSAH 14;

    c. A 200 foot wide route width centered on the west Section line of the southeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West to the northwest corner of northeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West;

    d. A 200 foot wide route width starting at the northwest corner of the northeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West and centered on the north Section line of the northwest quarter of the southeast quarter to the center of Section 19;

    e. A 200 foot wide root width centered on the boundary between northwest and northeast quarters of Section 19, Township 102 North, Range 34 West from the center of Section 19 and extending north for one-mile to pole #114; and

    f. A 200 foot wide route width (encompassing and following Xcel Energy's existing 80 foot right-of-way and extending an additional 120 feet north) from pole #114 one mile west to the Jackson substation, is approved.

2. The route permit shall be issued in the form attached hereto, with a map showing the approved route.

Approved and adopted this 24th day of August 2009.

BY ORDER OF THE COMMISSION

Burl W. Haar,
Executive Secretary

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT FOR CONSTRUCTION OF A HIGH VOLTAGE TRANSMISSION LINE IN

JACKSON COUNTY, MINNESOTA

ISSUED TO NORTHSTAR TRANSMISSION, LLC

PUC DOCKET NO. IP-6686/TL-08-1120

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7849, this route permit is hereby issued to:

Northstar Transmission, LLC

Northstar Transmission, LLC, is authorized by this route permit to construct a ten-mile 161 kilovolt (kV) transmission line between a new Tatman substation and the existing Jackson substation in Jackson County, Minnesota.

The transmission line shall be built within the route identified in this permit and as portrayed on the attached official route map, and in compliance with the conditions specified in this permit.

Approved and adopted this 24th day of August 2009

BY ORDER OF THE COMMISSION

Burl W. Haar,
Executive Secretary

This document can be made available in alternative formats (i.e. large print or audio tape) by calling (651) 201-2202 (voice). Persons with hearing or speech disabilities may call us through Minnesota Relay at (800) 627-3529 or by dialing 711.

I. ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Northstar Transmission, LLC (permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7849. This permit authorizes the permittee to construct approximately ten miles of 161 kV transmission line and associated facilities between a new Tatman substation to be located in Petersburg Township and the existing Jackson substation near the city of Jackson, in Jackson County, Minnesota.

II. PROJECT DESCRIPTION

The 161 kV transmission line will be supported by direct-embedded galvanized steel poles with braced posts for the majority of the route. These tangent structures would average 75 feet in height with foundations that are approximately 30 to 36 inches in diameter with a 400 foot span between each structure.

In cooperation with the Rural Electric Administration (REA), the permittee will co-locate or underbuild the existing Rural Electric Administration (REA) distribution lines along 558th and 560th Avenues onto the newly proposed transmission line structures or work with the REA to bury the lines, thereby consolidating electrical utilities within one right-of-way.

The approximate one-mile route segment that would run between pole #114 to the Jackson substation will require galvanized steel pole double-circuit structures with davit arms supported by a concrete foundation. The structures will be approximately 110 feet to 150 feet in height and 36 inches in diameter with an average span of 565 feet between poles.

The three phases for this project will each consist of single 795 (Drake) aluminum conductor steel reinforced (ACSR). The ACSR conductors are 795,000 circular mils or approximately 1.108 inches in diameter and are comprised of seven steel wires in the center surrounded by 26 aluminum strands. Ultimately, the proposed 161 kV transmission line would be a single-circuit, three-phase, 60 Hz (hertz), alternating current line with the exception of the segment between pole #114 and the Jackson substation which will be a double-circuit 161/161 kV, co-located on new double-circuit structures with Xcel's existing 161 kV line. There will also be shield wires strung above the phases to prevent damage from potential lightning strikes. The shield wire may include a fiber optic cable that allows for substation protection equipment to communicate with other terminals on the line.

The new Tatman substation will be constructed on approximately 2.5 acres of a 9-acre parcel located just north of the Minnesota-Iowa border on the east side of County State Aid Highway (CSAH) 25 in the southwest quarter of Section 32, Township 101N, Range 34W. The substation will be designed to accommodate the 161 kV line along with a 34.5 kV collector line that would be constructed underground from the Northstar Wind Farm collector system in Iowa to the substation. The substation design has not been completed but would generally include circuit breakers, high voltage switches, steel structures to support the high voltage bust, switches and other miscellaneous equipment, surge arresters, ground grid, power and control cable, control building and control panels, DC battery system, AC station power, AC and DC station service panels, communication panel, crushed rock used as surfacing of the substation, and fencing around the facility to restrict public access.

III. DESIGNATED ROUTE/SITE

The route designated by the Commission in this permit comprises the 10-mile segment located in Jackson County, Minnesota, as described in detail below, and shown on the official route map attached to this permit.

The transmission line will originate at a newly constructed Tatman substation located approximately one-half mile north of the Minnesota-Iowa border in Petersburg Township. The transmission line route will head north out of the Tatman substation along CSAH 25/560th Avenue for approximately five and one-half miles to 558th Avenue and continue north two miles to CSAH 14. At this point the transmission line route continues north crossing CSAH 14 and travels along property and section lines across private agricultural land to existing pole #114 and then one mile west co-located on new double-circuit structures with Xcel's 161 kV line to the Jackson substation.

The route width approved by this permit is as follows:

- A 200 foot wide route width centered on CSAH 25 from the Tatman substation to CSAH 4;

- A 166 foot wide route width centered on 560th Avenue and 558th Avenue from CSAH 4 to CSAH 14;

- A 200 foot wide route width centered on the west Section line of the southeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West to the northwest corner of northeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West;

- A 200 foot wide route width starting at the northwest corner of the northeast quarter of the southeast quarter of Section 19, Township 102 North, Range 34 West and centered on the north Section line of the northwest quarter of the southeast quarter to the center of Section 19;

- A 200 foot wide root width centered on the boundary between northwest and northeast quarters of Section 19, Township 102 North, Range 34 West from the center of Section 19 and extending north for one-mile to pole #114; and

- A 200 foot wide route width (encompassing and following Xcel Energy's existing 80 foot right-of-way and extending an additional 120 feet north) from pole #114 one mile west to the Jackson substation.

The permittee will locate the transmission line within the road rights-of-way for the route segment along CSAH 25/560th Avenue and 558th Avenue from the Tatman substation to CSAH 14. The transmission centerline will be constructed on the west side of the road, sharing road right-of-way, for the route segment that would follow along 560th Avenue from CSAH 23/Petersburg Road to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W. Construction of the transmission line within road rights-of-way will be at a distance acceptable to the county and townships, in this case as close to the edge of road right-of-way as possible. The required rights-of-way for the approved route are as follows:

- A 100-foot right-of-way from the Tatman substation to CSAH 4.

- An 83-foot right-of-way from CSAH 4 to CSAH 14.

- A 100-foot right-of-way from CSAH 14 to pole #114.

- A 200-foot right-of-way from pole #114 to the Jackson substation.

The transmission line and associated facilities will be designed to meet or exceed all relevant state and local codes and requirements of the National Electric Safety Code (NESC), which is the utility safety standard that applies to all transmission line facilities. The transmission line facility will also meet the North American Electric Reliability Corporation's (NERC) reliability standards. In addition, the substation station facilities will be fenced, kept free of vegetation, maintained for adequate drainage, and access will be limited to authorized personnel in accordance with the above requirements and standards.

IV. PERMIT CONDITIONS

The permittee shall comply with the following conditions during construction of the transmission line and associated facilities and the life of this permit.

A. Plan and Profile. At least 14 calendar days before right-of-way preparation for construction begins, the permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the transmission line. The permittee may not commence construction until the 14 days has expired or until the Commission has

advised the permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit.

If the permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the permittee shall notify the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

B. Construction Practices.

1. **Application.** The permittee shall follow those specific construction practices and material specifications described in the Northstar Transmission, LLC, Application to the Public Utilities Commission for a Route Permit, dated October 2008, and as described in the environmental assessment and findings of fact, unless this permit establishes a different requirement, in which case this permit shall prevail.

2. **Field Representative.** At least 10 days prior to commencing construction, the permittee shall advise the Commission in writing of the person or persons designated to be the field representative for the permittee with the responsibility to oversee compliance with the conditions of this permit during construction. The field representative's address, phone number, emergency phone number, and email address shall be provided to the Commission and shall be made available to affected landowners, residents, public officials and other interested persons. The permittee may change its field representative at any time upon written notice to the Commission.

3. **Local Governments.** The permittee will work closely with Jackson County Department of Transportation and the city of Jackson to ensure minimal disruption to area traffic and will obtain licenses required for county and township road right-of-way sharing. Oversize and overweight truck permits will be coordinated with the Minnesota Department of Transportation (MnDOT) and the Jackson County Department of Transportation

4. **Cleanup.** All waste and scrap that is the product of construction shall be removed from the area and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

5. **Vegetation Removal in the Right-of-Way.** The permittee shall minimize the number of trees to be removed in selecting the right-of-way. As part of construction, low growing brush or tree species are allowable within and at the outer limits of the easement area. Taller tree species that endanger the safe and reliable operation of the transmission facility need to be removed. To the extent practical, low growing vegetation that will not pose a threat to the transmission facility or impede construction should remain in the easement area. Should removal of vegetation require herbicide application, the permittee will coordinate with the Minnesota Department of Natural Resources (DNR) to avoid the potential of directly or indirectly affecting native prairie and rare plant species.

6. **Erosion Control.** The permittee shall implement reasonable measures to minimize runoff during construction and shall promptly plant or seed, erect silt fences, and/or use erosion control blankets in non-agricultural areas that were disturbed where structures are installed. All areas disturbed during construction of the facilities will be returned to their pre-construction condition.

7. **Temporary Work Space.** The permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way.

8. **Restoration.** The permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the permittee shall advise the Commission in writing of the completion of such activities. The permittee shall fairly reimburse landowners for any damage including, but not limited to, yard/landscape damages, structure/fence damage, crop damage, soil compaction, or drain tile damage sustained during construction or maintenance activities.

9. **Notice of Permit.** The permittee shall inform all employees, contractors, and other persons involved in the transmission line construction of the terms and conditions of this permit.

C. Periodic Status Reports. Upon request, the permittee shall report to the Commission on progress regarding finalization of the route, design of structures, and construction of the transmission line. The permittee need not report more frequently than quarterly.

D. Complaint Procedure. Prior to the start of construction, the permittee shall submit to the Commission, the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements set forth in the complaint procedures attached to this permit.

E. Notification to Landowners. The permittee shall provide all affected landowners with a copy of this permit at the time of the first contact with the landowners after issuance of this permit. The permittee shall contact landowners prior to entering the property or conducting maintenance along the route and avoid maintenance practices, particularly the use of fertilizer, herbicides, or pesticides, inconsistent with the landowner's or tenant's use of the land. The permittee shall work with landowners to locate the high voltage transmission lines to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads, tree clearing, and other aesthetic concerns.

F. Completion of Construction.

1. **Notification to Commission.** At least three days before the line is to be placed into service, the permittee shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.

2. **As-Builts.** Upon request of the Commission, the permittee shall submit copies of all the final as-built plans and specifications developed during the project.

3. **GPS Data.** Within 60 days after completion of construction, the permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the transmission lines, each switch, and each substation connected.

G. Electrical Performance Standards.

1. **Grounding.** The permittee shall design, construct, and operate the transmission line in a manner that the maximum induced steady-state short-circuit current shall be limited to five milliamperes, root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short circuit current between ground and the object so as not to exceed one milliampere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the NESC.

2. **Electric Field.** The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m.

3. **Interference with Communication Devices.** If interference with radio or television, satellite or other communication devices is caused by the presence or operation of the transmission line, the permittee shall take whatever action is prudently feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

H. Special Conditions

1. **Archaeological and Historic Resources.** The permittee shall make every effort to avoid impacts to identified archaeological and historic resources when installing the high voltage transmission line on the approved route. Prior to construction a Phase IA archaeological survey of the proposed project area will be conducted by the permittee to identify archaeological resources in areas with surface visibility greater than 25 percent and to determine the need for additional subsurface testing along the project route.

The results of the cultural resource assessment and the Phase IA survey will be provided to the Commission and State Historic Preservation Office (SHPO) for their review and response.

SHPO will be consulted by the permittee regarding the potential for visual impacts to the 36 National Register of Historic Places properties and one eligible architectural history property within the city of Jackson, one mile from the project area. An appropriate management plan or standing structures survey will be completed with assistance from the SHPO to address potential impacts on the architectural resources.

2. **Wetlands/Water Resources.** The permittee will minimize potential impacts to wetland areas by locating structures outside of wetlands and adjacent to these resource areas when feasible and spanning all surface flows. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. The permittee will use construction mats or perform construction during frozen conditions to minimize disturbance and compaction of wetlands and riparian areas during construction. Soil excavated from the wetlands and riparian areas will be contained and not placed back into the wetland or riparian area. Silt fencing or other erosion control measures will be used to prevent sedimentation when working near wetlands and watercourses. Areas disturbed by construction activities will be restored to pre-construction conditions (soil horizons, contours, vegetation, etc.). Where waterways must be crossed to pull in the new conductors and shield wires, workers may walk across, use boats, or drive equipment across ice in the winter.

Prior to construction activities, the District Engineer for the U.S. Army Corps of Engineers (Corps) will be notified with a preconstruction notification authorized under the Corps St. Paul District Regional General Permit for structural discharges. An application will be filed with the Jackson County Soil and Water Conservation District (SWCD) to determine if the proposed project would impact any wetlands or public waters under local jurisdiction of the SWCD. Conditions provided in the MPCA NPDES permit, and the DNR license to cross public lands and waters will also be followed.

If construction activities will result in the disturbance of one acre or more of soils, a National Pollutant Discharge Elimination System stormwater permit from the Minnesota Pollution Control Agency will be required. Standard erosion control measures outlined in Minnesota Pollution Control Agency guidance and best management practices regarding sediment control practice during construction. These practices include, but are not limited to, protecting storm drain inlets, use of silt fences, protecting exposed soil, immediately stabilizing restored soil, controlling temporary soil stockpiles, and controlling vehicle tracking.

3. **Avian Collision.** The permittee will evaluate mitigative measures in areas of the project where the chance of avian collision or electrocution is higher, specifically where the route will span the Des Moines River. The permittee, in cooperation with the DNR and the U.S. Fish and Wildlife Service, will identify locations (Des Moines River and other tributaries) where bird flight diverters can be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues.

Standard transmission design will incorporate adequate spacing of conductor(s) and grounding devices. This is intended to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

4. **Rare and Unique Resources.** The DNR identified nine known occurrences of rare species and natural plant communities within one mile of the project area, with eight of the nine located within the projects boundaries. Five of these rare species are threatened or of special concern mussels that are located in the Des Moines River. The Loggerhead Shrike, a state threatened bird specie, is known to occur in and around the proposed project area. There are also known occurrences of the state threatened Sullivant's Milkweed and special concern specie Snow Trillium as well as three records of mesic prairie remnants located within or near the proposed project area.

Due to the proximity of the project to the existing railroad and riparian areas along the Des Moines River and its tributaries combined with the known occurrence of rare and unique resources in the area, the permittee, in consultation with the DNR, will perform a botanical survey of the project area. The results of the botanical survey will be provided to the Commission and DNR for their review and response.

Ground disturbance within the mesic prairie remnant areas will be completely avoided, there shall be no vehicle use or stockpiling of equipment within the prairie, construction runoff will be diverted from the prairie, and areas adjacent to the prairie will be immediately be replanted with prairie species native to Minnesota in consultation with DNR. In addition, best management practices will be identified and implemented in cooperation with the DNR when working near the remnant prairies to reduce potentially negative impacts to the Loggerhead Shrike. Construction and maintenance personnel will be made aware of the rare resources and plant communities during pre-construction meetings in effort to minimize possible disturbance.

The permittee, in coordination with the DNR, will employ best management practices to avoid the potential spread of invasive species within and adjacent to the right-of-way during construction and maintenance of the transmission line.

5. **Accommodation of Existing and Planned Infrastructure.** The permittee is required to work with the landowners, townships, cities, and counties along the route to accommodate their concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The project is located within the area of influence of the Jackson Municipal Airport. The permittee will need to submit a Notice of Proposed Construction or Alteration Application for each transmission structure within the flight area of influence to ensure that structures comply with airport safety zones and ordinances.

I. Other Requirements.

1. **Applicable Codes.** The permittee shall comply with applicable requirements of the NESC including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of-way widths, erecting power poles, and stringing of transmission line conductors.

2. **Other Permits.** The permittee shall comply with all applicable state rules and statutes. The permittee shall obtain all required local, state and federal permits for the project and comply with the conditions of these permits. A list of the required permits is included in the route permit application and the environmental assessment. The permittee shall submit a copy of such permits to the Commission upon request.

3. **Pre-emption.** Pursuant to Minnesota Statutes 216E.10, subdivisions 1 and 2, this route permit shall be the sole route approval required to be obtained by the permittee and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

J. Delay in Construction. If the permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit, the Commission shall consider suspension of the permit in accordance with Minnesota Rule 7849.5970.

V. PERMIT AMENDMENT

The permit conditions in Section IV may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the permittee. The Commission may amend the conditions after affording the permittee and interested persons such process as is required.

VI. TRANSFER OF PERMIT

The permittee may request at any time that the Commission transfer this permit to another person or entity. The permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the permittee, the new permittee, and interested persons such process as is required.

VII. REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minnesota Rules part 7849.6010 to revoke or suspend the permit.

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT REPORT PROCEDURES FOR
HIGH VOLTAGE TRANSMISSION LINES

1. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning the permit conditions for site preparation, construction, cleanup and restoration, special conditions, other requirements, and resolution of such complaints.

2. Scope

This reporting plan encompasses complaint report procedures and frequency.

3. Applicability

The procedures shall be used for all complaints received by the permittee.

4. Definitions

Complaint – A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of the high voltage transmission line and associated facilities. Complaints do not include requests, inquiries, questions or general comments.

Telephone Complaint – A person presenting a complaint by telephone shall indicate whether the complaint relates to (1) a substantive routing permit matter, (2) a high voltage transmission line location matter, or (3) a compensation matter. All callers must provide the following information when presenting a complaint by telephone: (1) name; (2) date and time of call; (3) phone number; (4) email address (if available); (5) home address; (6) parcel number.

Substantial Complaint – Written complaints alleging a violation of a specific route permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Person – An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

5. Responsibilities

Everyone involved with any phase of the high voltage transmission line is responsible to ensure expeditious and equitable resolution of all complaints. It is therefore necessary to establish a uniform method for documenting and handling complaints related to this high voltage transmission line project. The following procedures will satisfy this requirement:

A. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:

1. Name of the permittee and project.
2. Name of complainant, address and phone number.
3. Precise property description or tract numbers (where applicable).
4. Nature of complaint.
5. Response given.
6. Name of person receiving complaint and date of receipt.
7. Name of person reporting complaint to the Public Utilities Commission (Commission) and phone number.
8. Final disposition and date.

B. The permittee shall assign an individual to summarize complaints for transmittal to the Commission.

6. Requirements

The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports – All substantial complaints shall be reported to the Commission by phone or by e-mail the same day received or on the following working day for complaints received after working hours. Such reports are to be directed to high voltage transmission line permit compliance at the following: DOC.energypermitcompliance@state.mn.us or 1-800-657-3794. Voice messages are acceptable.

Monthly Reports – By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month shall be sent to Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, Metro Square Building, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147. A copy of each complaint shall be sent to Permit Compliance, Minnesota Department of Commerce, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

Unresolved Complaints – The permittee shall submit all unresolved complaints to the Commission for resolution by the Commission, where appropriate, no later than 45 days after the date of the submission.

7. Complaints Received by the Commission

Copies of complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

Initial Screening – Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantive routing permit issues shall be processed and resolved by the Commission. Staff shall notify permittee and the complaintant if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. Staff shall present briefing papers to the Commission, which shall resolve the complaint within 20 days of submission of the briefing papers.

Condemnation/Compensation Issues – If the Commission's staff initial screening determines that a complaint raises issues concerning the just compensation to be paid to landowners on account of permittee acquisition of high voltage transmission line easements, staff shall recommend to the Executive Secretary that the matter be resolved under the provisions of Minnesota Statutes, Chapter 117. If the Executive Secretary concurs, he shall so report to the Commission and the matter shall be dealt with in the high voltage transmission line condemnation proceedings as an issue of just compensation.

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE
FOR PERMITTED ENERGY FACILITIES

1. Purpose

To establish a uniform and timely method of submitting information required by Minnesota Public Utilities Commission (Commission) Energy Facility Permits.

2. Scope and Applicability

This procedure encompasses all compliance filings required by permit.

3. Definitions

Compliance Filing – A sending (filing) of information to the Commission, where the information is required by a Commission site or route permit.

4. Responsibilities

A) The permittee shall eFile all compliance filings with Dr. Burl Haar, Executive Secretary, Minnesota Public Utilities Commission, through the Department of Commerce (DOC) eDocket system. The system is located on the DOC website: https://www.edockets.state.mn.us/EFiling/home.jsp

General instructions are provided on the website. Permittee must register on the website to eFile documents.

B) All filings must have a cover sheet that includes:

1) Date
2) Name of submitter/permittee
3) Type of Permit (Site or Route)
4) Project Location
5) Project Docket Number
6) Permit Section Under Which the Filing is Made
7) Short Description of the Filing

C) Filings that are graphics intensive (e.g., maps or plan and profile) must, in addition to being eFiled, be submitted as paper copies and on CD. Copies and CDs should be sent to: 1) Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN, 55101-2147, and 2) Office of Energy Security, Energy Facility Permitting, 85 7th Place East, Suite 500, St. Paul, MN, 55101-2198. Additionally, the PUC may request a paper copy of any eFiled document.

PERMIT COMPLIANCE FILINGS[1]

PERMITTEES: Northstar Transmission, LLC
PERMIT TYPE: High Voltage Transmission Route Permit
PROJECT LOCATION: Jackson County
PUC DOCKET NUMBER: IP-6686/TL-08-1120

Filing Number	Permit Section	Description	Due Date
1	IV.A.	Submit **Plan and Profile** of the right-of way and design specifications.	At least 14 days prior to right-of-way clearing
2	IV.A.	Any significant changes made in **Plan and Profile** or **Specifications** after initial submission.	Notify Commission at least 5 days prior to implementing changes.
3	IV.B.2.	Name **Field Representative** to oversee compliance with permit conditions.	At least 10 days prior to commencing construction
4	IV.C.	Periodic **Status Reports** (finalization of route, design of structures, and construction progress/milestones)	Quarterly
5	IV.D	Submit **Complaint Procedure** to be used to receive and respond to complaints.	Prior to the start of construction
6	IV.F.1.	Provide **Notification to Commission** of construction completeness and in-service date.	At least 3 days before the line is placed into service
7	IV.F.3.	Submit **GPS Data** of structures, lines and substations.	Within 60 days after completion of construction
8	IV.H.1.	Submit **Phase 1A Archaeological Survey**[2]	Prior to the start of construction
9	IV.H.4.	Submit **Botanical Survey** of project area[3]	Prior to the start of construction

[1] This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. However, it is not a substitute for the permit; the language of the permit controls.
[2] Also to be submitted to the State Historical Preservation Office for review.
[3] Also to be submitted to the Minnesota Department of Natural Resources for review.

Base map source, Google Earth (accessed July 2009).

FIGURE 1A (Amended)
Route Map
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

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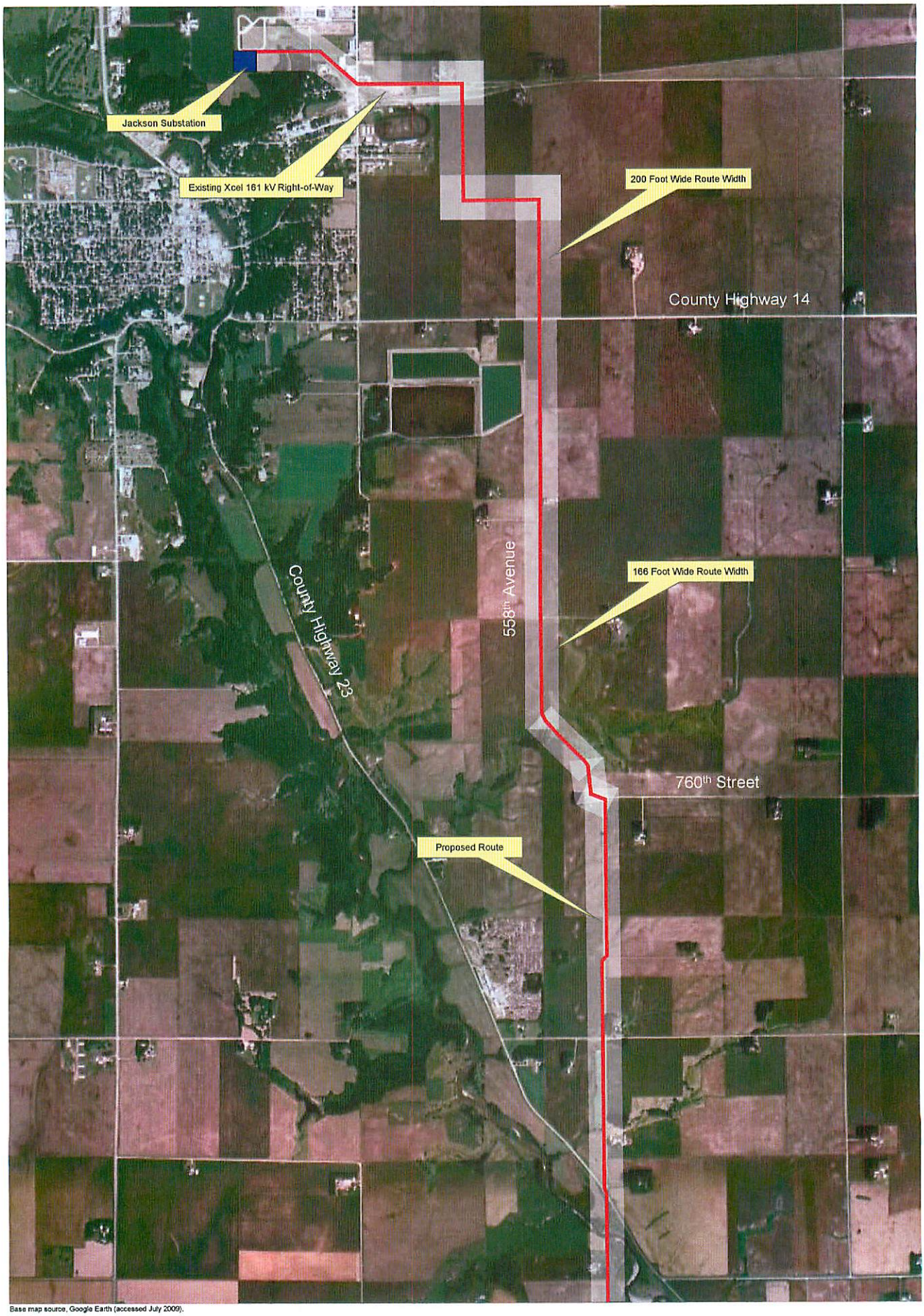

Base map source, Google Earth (accessed July 2009).

FIGURE 1B (Amended)
Route Map
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

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office of energy security
Minnesota Department of Commerce

In the Matter of the Route Permit Application for a 161 Kilovolt (kV) Transmission Line and Associated Facilities in Jackson County, Minnesota.

EXHIBIT LIST
PUC Docket No. IP-6686/TL-08-1120

Exhibit Number	Date	Description	eDockets
1.	September 22, 2008	Notification of Pending Route Permit Application Under Alternative Permitting Process	5518496
2.	October 28, 2008	Route Permit Application	5589113 5589114 5589115
3.	November 6, 2008	Confirmation of Publication for Notice of a Submittal of an Application for a Route Permit (Lakefield Standard)	5627906
4.	November 6, 2008	Confirmation of Publication for Notice of a Submittal of an Application for a Route Permit (Jackson County Pilot)	5627905
5.	November 5, 2008	Confirmation of Publication for Notice of a Submittal of an Application for a Route Permit (Tri County News)	5627907
6.	November 13, 2008	Notice of Commission Meeting for Route Permit Application Acceptance Decision	5619255
7.	November 25, 2008	Comments and Recommendations of the Minnesota Office of Energy Security Energy Facility Permitting Staff	5622399
8.	December 1, 2008	Public Utility Commission Order	5655083
9.	January 8, 2009	Notice of Public Information Meeting	5698113 5701341
10.	January 15, 2009	Published Notice of Public Information Meeting with Affidavit	5704826

Exhibit Number	Date	Description	eDockets
11.	---	Public Scoping Comments	20096-38442-01
12.	February 24, 2009	Environmental Assessment Scoping Decision	5789090 5791594
13.	May 7, 2009	TtEC Technical Information Memo	20096-38441-01
14.	May 29, 2009	Environmental Assessment	20095-38003-01
15.	June 1, 2009	Notice of Availability of Environmental Assessment and Affidavit	20096-38092-02
16.	June 15, 2009	Notice of Availability of Environmental Assessment as Published in Environmental Quality Board *Monitor*	20096-38526-01
17.	June 1, 2009	Notice of Public Hearing and Affidavit	20096-38093-02
18.	June 3, 2009	Revised Notice of Public Hearing and Affidavit	20096-38183-02
19.	June 11, 2009	Published Notice of Public Hearing with Affidavit	20096-38558-01
20.	November 21, 2008	Confirmation of Service for Notice of a Submittal of an Application for a Route Permit	20096-38710-01
21.	June 22, 2009	Northstar Letter Response to OES Questions.	20096-38802-01
22.	July 7, 2009	Hearing Exhibit A22a	20097-39358-02
23.	July 9, 2009	Public Hearing Transcripts	20097-39449-02

Exhibit Number	Date	Description	eDockets
24.	July 22, 2009	Public Hearing Comment Letters	20097-39992-01
25.	July 22, 2009	Office of Administrative Hearings Summary of Public Hearing	20097-39994-01

office of energy security

85 7th Place East, Suite 500, St. Paul, MN 55101-2198
main: 651.296.4026 tty: 651.296.2860 fax: 651.297.7891
www.commerce.state.mn.us

Amendments to the Office of Energy Security Staff Comments and Recommendations, Proposed Findings of Fact, and Proposed Route Permit

Public Utilities Commission Final Permit Decision
In the Matter of the Route Permit Application for a 161 Kilovolt Transmission Line and Associated Facilities in Jackson County, Minnesota.

Docket No. IP-6686/TL-08-1120
August 13, 2009

In a supplemental filing dated August 11, 2009, Northstar Transmission, LLC (Northstar) requested the Minnesota Public Utilities Commission (Commission) to consider a slight modification to the transmission line route proposed by the Office of Energy Security (OES) in its comments and recommendations, proposed findings of fact, and proposed route permit.

The modification would entail constructing the transmission centerline on the west side of 560th Avenue from County State Aid Highway (CSAH) 23/Petersburg Road to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W. The request is intended to honor previous easement agreements with landowners living on the west and east sides of 560th Avenue between 750th and 760th streets.

OES staff has reviewed Northstar's requested modification and concludes that the modification will not result in any significant changes in the human or environmental impacts, as the transmission centerline would remain within the route width evaluated in the environmental assessment and outlined in the OES comments and recommendations, proposed findings of fact, and proposed route permit. OES staff supports the modification.

Should the Commission choose to include this modification, the OES comments and recommendations, proposed findings of fact and proposed route permit should be amended as follows:

OES Comments and Recommendations, Conclusions, bullet item one, page 8:

The transmission centerline should be constructed on the west side of the road, sharing road right-of-way, for the route segment that would follow along 560th Avenue from CSAH 23/Petersburg Road to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W ~~760th Street~~.

Findings of Fact 132, page 22:

The greatest concern identified in public comment regarding the project has been the distance at which the line would be located from existing residences along the portion of the applicant's proposed route that would run along 560th Avenue from CSAH 23 to just north of 750th ~~760th~~ Street. The closest home along this segment of the route is approximately 175 feet from the proposed transmission centerline (Finding 60). The residences/farms on this segment are all located on the east side of 560th Street. Constructing the transmission centerline on the west side of 560th Avenue from CSAH 23 to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W ~~760th Street~~ would increase the distance between the transmission line and residences along this segment.

Route Permit, Section III, first paragraph, page 4:

The permittee will locate the transmission line within the road rights-of-way for the route segment along CSAH 25/560th Avenue and 558th Avenue from the Tatman substation to CSAH 14. The transmission centerline will be constructed on the west side of the road, sharing road right-of-way, for the route segment that would follow along 560th Avenue from CSAH 23/Petersburg Road to approximately one-quarter mile (1,320 feet) north of the southwest corner of Section 5, Township 101N, Range 34W ~~760th Street~~. Construction of the transmission line within road rights-of-way will be at a distance acceptable to the county and townships, in this case as close to the edge of road right-of-way as possible. The required rights-of-way for the approved route are as follows:

Amended Route Permit Figures 1A and 1B are attached and depict the requested modification.

Base map source, Google Earth (accessed July 2009).

FIGURE 1A (Amended)
Route Map
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

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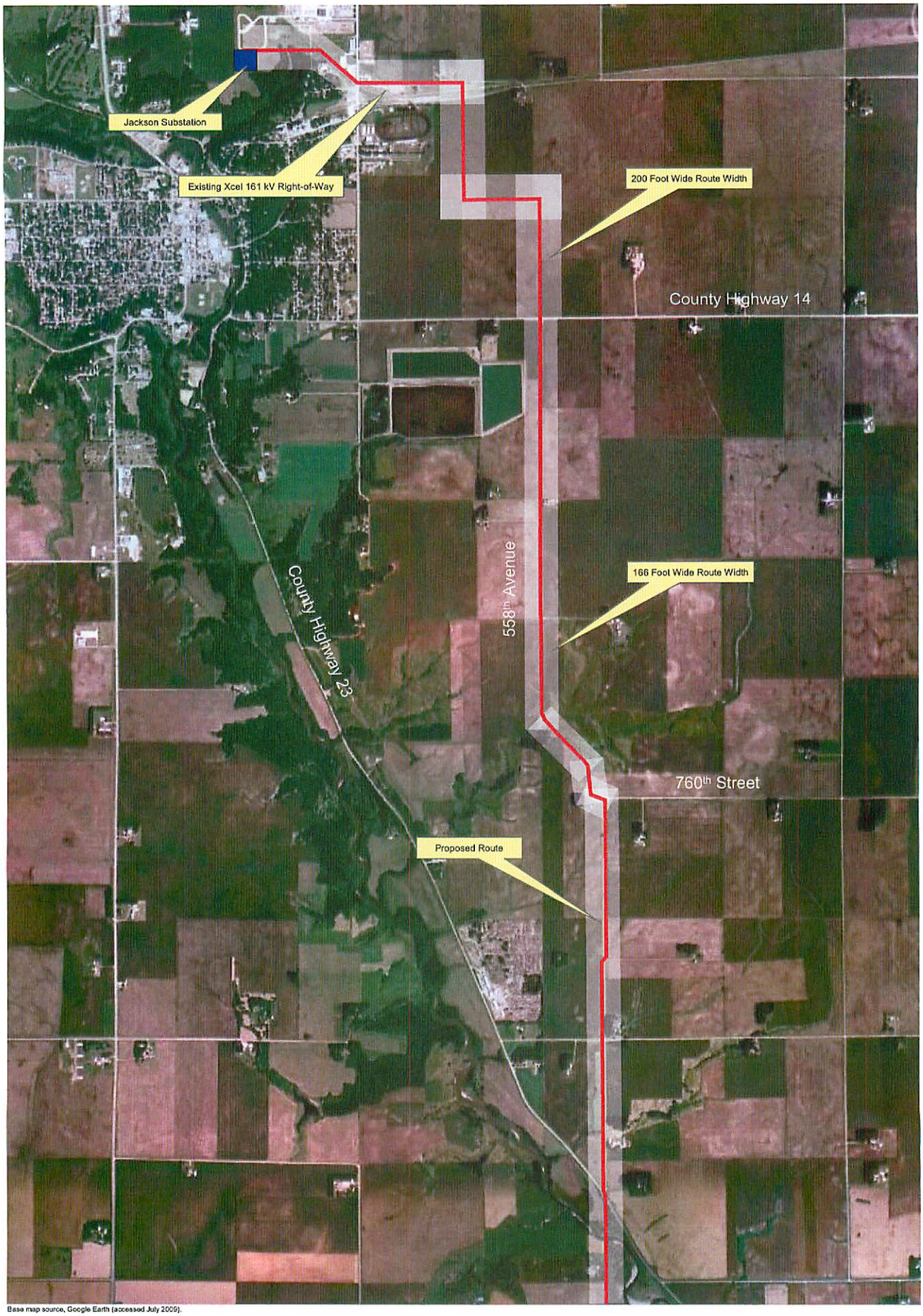

Base map source, Google Earth (accessed July 2009).

FIGURE 1B (Amended)
Route Map
Northstar Transmission, LLC (Docket No. IP-6686/TL-08-1120)

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STATE OF MINNESOTA)
)SS
COUNTY OF RAMSEY)

AFFIDAVIT OF SERVICE

I, Robin Benson, being first duly sworn, deposes and says:

That on the 24th day of August, 2009 she served the attached

ORDER.

MNPUC Docket Number: IP-6686/TL-08-1120

XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid

XX By personal service

XX By inter-office mail

to all persons at the addresses indicated below or on the attached list:

Tricia DeBleeckere
Docketing - OES
Julia Anderson - OAG
John Lindell- OAG

Robin Benson

Subscribed and sworn to before me,

a notary public, this 24th day of

August, 2009

Robin L. Rice
Notary Public

ROBIN L. RICE
Notary Public-Minnesota
My Commission Expires Jan 31, 2014

08-1120

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
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Sharon	Ferguson	sharon.ferguson@state.mn.us	MN Department Of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No
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NORTHSTAR TRANSMISSION IP-6686/TL-08-1120

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