

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendrayer  
David C. Boyd  
J. Dennis O'Brien  
Thomas Pugh  
Phyllis A. Reha

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

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

ISSUE DATE: February 20, 2008

DOCKET NO. E-002/CN-04-1176

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

DOCKET NO. E-002/TL-06-1677

ORDER GRANTING CERTIFICATE OF NEED, GRANTING ROUTE PERMIT, AND DEFERRING ACTION ON PORTION OF ROUTE PERMIT APPLICATION PENDING NEGOTIATIONS AND FURTHER FILINGS

**PROCEDURAL HISTORY**

**I. Initial Proceedings Before the Commission**

On November 16, 2006, Northern States Power Company d/b/a Xcel Energy and Dairyland Power Cooperative (the Applicants) filed an application under Minn. Stat. § 216B.243 for a certificate of need to construct the Minnesota portion of a high-voltage transmission line between North Branch, Minnesota and Amery, Wisconsin. The Minnesota portion of the proposed line would begin at Xcel's Chisago County Substation, run through a new Xcel substation to be built near Taylors Falls, and cross the St. Croix River into Wisconsin.

The proposed line would be some 42 miles long, with approximately 21 miles of the line in each state. The proposed route would track existing high-voltage transmission-line routes for all but 1.2 miles. Total construction costs, for both the line and associated transmission facilities, are estimated at \$64,200,000, with some \$47,472,000 attributable to the Minnesota portion of the line.

On January 5, 2007, the Applicants filed an application under Minn. Stat. § 216E.04 for a route permit for the proposed transmission line.

On February 12, 2007, the Commission issued Orders that accepted both the certificate of need application and the route permit application as substantially complete, combined the two cases for purposes of environmental review and public hearings, and referred the cases to the Office of Administrative Hearings. The Office of Administrative Hearings assigned Administrative Law Judge Eric L. Lipman to the cases.

On May 1, 2007, the Commission issued an Order in the route permit case denying a motion certified to the Commission by Judge Lipman. Among other things, that Order directed the parties to work together to develop workable procedures to help the public and local governments participate in the case and “to bring any agreed upon procedures to the Administrative Law Judge for his consideration and utilization in this docket.”

## **II. Proceedings Before the Administrative Law Judge**

### **A. Parties and Participants**

The following persons appeared as parties or participants in these proceedings:

- Northern States Power Company d/b/a Xcel Energy appeared in both cases, represented by James P. Johnson, Assistant General Counsel, Xcel Energy Services Inc., 414 Nicollet Mall, Suite 2900, Minneapolis, Minnesota 55401; and by Michael Krikava and Catherine A. Biestek, Briggs and Morgan, P.A., 2200 IDS Center, 80 South 8<sup>th</sup> Street, Minneapolis, Minnesota 55402.
- Dairyland Power Cooperative appeared in both cases, represented by Jeffrey L. Landsman, Wheeler, Van Sickle & Anderson, S.C., 25 West Main Street, Suite 801, Madison, Wisconsin 53703.
- The Minnesota Department of Commerce appeared in the certificate of need case, represented by Valerie M. Means, Assistant Attorney General, 445 Minnesota Street, Suite 1400, St. Paul, Minnesota 55101.
- The Minnesota Department of Commerce Energy Facility Permitting Staff appeared in the route permit case, represented by Karen Finstad Hammel, Assistant Attorney General, 445 Minnesota Street, Suite 1400, St. Paul, Minnesota 55101.
- The City of Lindstrom appeared in both cases, represented by Carol A. Overland, Overland Law Firm, Post Office Box 176, Red Wing, Minnesota 55074.
- Concerned River Valley Citizens appeared in both cases, represented by Bill Neuman, Board Member, 18837 Osceola Road, Shafer, Minnesota 55074.

## **B. Record Development and ALJ's Report**

The Administrative Law Judge conducted evidentiary hearings on the certificate of need application on September 4, 5, and 10, 2007 and on the route permit application on September 6 and 7, 2007. He conducted joint public hearings on the two applications on September 4 and 5, 2007, at the Chisago Lakes Area Library in Chisago City.

On November 19, 2007, the Administrative Law Judge filed his Summary of Testimony at the Public Hearings, Findings of Fact, Conclusions and Recommendations (ALJ's Report). The ALJ's Report addressed both applications. It included 120 findings of fact and applied these findings of fact to the statutory and rule requirements applicable to each application.

The Administrative Law Judge recommended granting the requested certificate of need. He also recommended granting the requested route permit, subject to a modification rerouting the line overhead around North Lindstrom Lake and North Center Lake, instead of overhead through downtown Lindstrom.

## **III. Subsequent Proceedings Before the Commission**

Between December 3 and 5, 2007, the City of Lindstrom, Concerned River Valley Citizens, and Xcel Energy filed exceptions to specific findings and conclusions in the ALJ's Report. On January 11, 2008, the Department of Commerce Energy Facility and Permitting Staff filed their comments and recommendations in the route permit application case.

On January 24, 2008, the Commission heard oral argument from all parties and participants, and the record closed under Minn. Stat. § 14.61, subd. 2.

Having reviewed the entire record herein, and having heard the arguments of the parties, the Commission makes the following findings, conclusions, and Order.

## **FINDINGS AND CONCLUSIONS**

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

The Administrative Law Judge conducted five days of evidentiary hearings and two evenings of public hearings. He reviewed the parties' prefiled direct and rebuttal testimony, their post-hearing briefs, and their reply briefs. His report is thoughtful, comprehensive, and thorough.

He made 96 findings of fact, reached 120 conclusions, and made two recommendations: (1) to grant the certificate of need; and (2) to grant the route permit, modified to reroute the proposed transmission line overhead around North Lindstrom Lake and North Center Lake (the "Around-the-Lakes Alternative"), instead of overhead through downtown Lindstrom.

The ALJ's examination of the issues raised in these cases is carefully considered, closely reasoned, and based on an exhaustive evidentiary record. Having examined the record itself and having carefully considered the exceptions and arguments of the parties, the Commission concurs in – and will accept, adopt, and incorporate herein – nearly all the ALJ's findings of fact, conclusions, and recommendations.

The Commission respectfully declines to accept those findings, conclusions, and recommendations in the route permit case relating to the Around the Lakes alternative to the proposed route through downtown Lindstrom, however, as will be explained below.

## **II. The Certificate of Need Application**

In the certificate of need case, the Commission concurs with the Administrative Law Judge that the Applicants have met their burden of proof under Minn. Stat. § 216B.243 and its implementing rules and should be granted the requested certificate of need. The Commission will so order.

## **III. The Route Permit Application**

In the route permit case, the Commission concurs with the Administrative Law Judge that the Applicants have met their burden of proof as to all route segments except Segment 2, the overhead segment proposed to run through downtown Lindstrom.<sup>1</sup>

That segment would clearly benefit from additional scrutiny, including consideration of potential alternatives. Not only do the concerns raised by the Administrative Law Judge merit careful consideration, but at hearing the City and Concerned River Valley Citizens expressed concern that the width of the transmission towers required for the downtown route could impede pedestrian traffic.

While these concerns merit careful consideration – and the pedestrian traffic issue requires clarification – the Commission cannot concur in the ALJ's conclusion that an overhead route around North Lindstrom Lake and North Center Lake is a superior alternative with adequate record support. That route was eliminated from consideration as a feasible or viable alternative by the Commissioner of Commerce in his Scoping Decision,<sup>2</sup> which concurred with the Applicants that it posed too many major environmental and engineering challenges to be seriously considered.

The Around-the-Lakes route therefore did not receive full environmental, engineering, or cost work-up in the course of the hearing. Further, since the Around-the-Lakes route was not considered a viable alternative, the approximately 45 homeowners who would be directly affected by that route did not receive notice of this proceeding. Serious consideration of the route would

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<sup>1</sup> The Commission is using the numerical designations used for the route segments by the Department of Commerce Energy Facility Permitting Staff in their Proposed Route Permit.

<sup>2</sup> See § 7.2, pp. 74-75 and Appendix B of the Environmental Assessment.

therefore require notice to affected landowners and further evidentiary proceedings, in addition to a threshold determination that the route was, in fact, feasible and viable.

Perhaps a more promising alternative is one advanced by the City of Lindstrom and Concerned River Valley Citizens, an underground route along Newell Avenue. Since this alternative was not treated in any detail in the ALJ's Report, however, the Commission will defer action on Segment 2 pending further factual clarification, cost analysis, and discussion between the parties.

The Commission will therefore require the parties to meet for three purposes: (a) to clarify the facts surrounding the Newell Avenue alternative and the downtown overhead alternative, including the pedestrian traffic issue; (b) to explore potential funding mechanisms and cost recovery alternatives in connection with the Newell Avenue underground alternative; and (c) to explore the potential for agreement on the appropriate route. The Commission will require a report on these discussions within 90 days and will ask its Executive Secretary to manage procedural and scheduling issues arising in the context of these discussions.

In the meantime, the Commission will grant a route permit for the other segments of the proposed transmission line, to avoid delaying construction of this needed project.

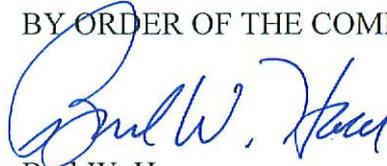
The Commission will so order.

### **ORDER**

1. Except as set forth herein, the Commission accepts, adopts, and incorporates herein the findings, conclusions, and recommendations of the Administrative Law Judge in his November 19, 2007 Report. Specifically, the Commission declines to accept or adopt Conclusions 98 and 105 from the November 19, 2007 Report and defers action on Conclusions 79, 91, and 92.
2. The Commission hereby grants the Applicants a certificate of need to construct the high-voltage transmission line requested between the Chisago County Substation near North Branch, Minnesota and the Apple River Substation near Amery, Wisconsin.
3. The Commission hereby grants the Applicants a route permit, in the form attached, which addresses all proposed route segments except Segment 2.
4. The Applicants, the City of Lindstrom, and other interested parties shall meet and (a) clarify the facts surrounding the Newell Avenue alternative and the pedestrian traffic issue in greater detail; and (b) explore potential funding mechanisms and cost recovery alternatives in connection with the Newell Avenue underground alternative. They shall file a report on these discussions, and any agreement they reach, within 90 days of the date of this Order.

5. The Commission hereby delegates to the Executive Secretary the authority to require additional filings, set and alter deadlines, including the 90-day deadline set in paragraph 4, and otherwise manage the procedural aspects of this case.
6. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary



(SEAL)

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**ROUTE PERMIT**  
**FOR CONSTRUCTION OF**  
**THE CHISAGO TRANSMISSION PROJECT 115/161 kV**  
**TRANSMISSION LINES, SUBSTATION UPGRADES AND THE**  
**NEW LAWRENCE CREEK SUBSTATION**  
**IN**  
**CHISAGO COUNTY**  
**ISSUED TO**  
**NORTHERN STATES POWER COMPANY dba XCEL ENERGY**  
**AND DAIRYLAND POWER COOPERATIVE**  
**PUC DOCKET No. E002/TL-06-1677**

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

**NORTHERN STATES POWER COMPANY dba XCEL ENERGY**  
**AND DAIRYLAND POWER COOPERATIVE**

Northern States Power Company dba Xcel Energy and Dairyland Power Cooperative (herein after the "Permittees") are authorized to 1) replace the existing 69 kV transmission line located between the Chisago County substation and the proposed Lawrence Creek Substation near Taylors Falls, Minnesota with a new 115 kV transmission line; 2) replace the 69 kV transmission line with a new 161 kV transmission line between the new Lawrence Creek Substation and the St. Croix River crossing in Taylors Falls; and 3) modify the existing Chisago County, Lindstrom, and Shafer substations and construct a new Lawrence Creek Substation. The project shall be built along the route identified in this Permit and portrayed in the attached maps and in compliance with the conditions specified in this Permit.

Approved and adopted this 20<sup>th</sup> day of February 2008

BY ORDER OF THE COMMISSION



Burl W. Haar,  
Executive Secretary

## **I. ROUTE PERMIT**

The Minnesota Public Utilities Commission (PUC) hereby issues this Route Permit to Permittees pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules 7849.5500-5720. The Permit authorizes the Permittees to 1) replace the existing 69 kV transmission line located between the Chisago County substation and the proposed Lawrence Creek Substation near Taylors Falls, Minnesota with a new 115 kV transmission line; 2) replace the 69 kV transmission line with a new 161 kV transmission line between the new Lawrence Creek Substation and the St. Croix River crossing in Taylors Falls; and 3) modify the existing Chisago County, Lindstrom, and Shafer substations and construct a new Lawrence Creek Substation.

## **II. PROJECT DESCRIPTION**

This Permit authorizes the Permittees to construct new high voltage transmission lines and a new substation and modify existing substations, specifically to:

- rebuild the existing 69 kV transmission line to 115 kV from CSAH 19 through the Lindstrom Substation to 1<sup>st</sup> Avenue,  
(the route through the city of Lindstrom will be determined at a later date as discussed in the Commission's Order)
- rebuild the existing 69 kV transmission line to overhead 115 kV from a point along Broadway Street to the Great River Energy Shafer Substation tap,
- rebuild the existing 69 kV line to 115 kV east of the Shafer Substation tap, with a new 0.2 mile alignment into the new Lawrence Creek Substation near Taylors Falls,
- realign 0.25 miles of the existing 69 kV Arden Hills line to enter the Lawrence Creek Substation.
- rebuild the existing 69 kV transmission line to 161 kV operation between the new Lawrence Creek Substation and CSAH 20 in Taylors Falls, with a new 0.4 mile alignment where the line enters the Lawrence Creek Substation,
- replace the existing 69 kV transmission line with underground 161 kV transmission line from CSAH 20 through TH 95 in Taylors Falls,
- rebuild the existing 69 kV transmission line to 161 kV between TH 95 and the St. Croix Falls Substation,
- modify equipment at the existing Chisago County and Shafer substations to change the line operation from 69 kV to 115 kV,
- modify equipment and expand the existing Lindstrom substation to change the voltage from 69 kV to 115 kV, and

- construct a new Lawrence Creek Substation.

All portions of the overhead transmission line will use a 795 kcmil 26/7 ACSS. For lightning protection, the Permittees will use 3/8-inch EHS steel shield wire. All portions of the underground transmission line will be buried within a concrete duct bank. Each of the three phases will consist of a 3000 kcmil copper XLPE cable. The underground transmission line will also include a ground continuity conductor. The ground continuity conductor is typically a 600-V insulated 4/0 cable.

The Permittees are granted a 200-foot wide corridor for the majority of the designated route, allowing reasonable flexibility in locating the transmission line along the rebuild portions of the route. In the vicinity of the new alignments going into and out of the proposed Lawrence Creek Substation, the permittees are granted a 0.5-mile route width for the new 115 kV transmission line alignment entering the Substation from the south. The Permittees are granted a 0.5-mile route width to realign the Arden Hills 69 kV line to terminate at the Lawrence Creek Substation. For the new 161 kV transmission line alignment exiting the substation to the east, the Permittees are granted a 500-foot route width in order to provide for flexibility in siting the substation and transmission line configurations. The location of the proposed substation will be determined following consultation with the city of Taylors Falls regarding the future expansion of the city's wastewater treatment ponds located north of the proposed substation site.

The ROW that will be acquired from landowners for the transmission line will be 50 feet wide (25 feet each side of the transmission line centerline).

### III. DESIGNATED ROUTE AND SUBSTATION SITES

#### A. 115/161 kV High Voltage Transmission Line Route

The route designated by the PUC is described below and shown by segments on the maps in Attachment B to this Permit:

**Segment 1** of the approved route begins with a line west of the intersection of Karmel Avenue and Stacy Trail/CSAH 19 and continues east to Lincoln Road, where it turns south along Lincoln Road to the Lindstrom Substation. From there it continues east along the existing route to a point north of 1<sup>st</sup> Avenue. The structures will be 75 foot (average) 115 kV single-circuit, single wood poles with distribution underbuild.

**Segment 3** runs from the Broadway Street end of segment 2 to the Shafer Tap. The structures will be 80 foot (average) 115 kV single-circuit, single wood poles with distribution underbuild (70 foot average wood H-frames will be used to span large wetland complexes).

**Segment 4** runs from the Shafer Tap along the existing route to the new Lawrence Creek Substation. The structures will be 70 foot (average) 115 kV single-circuit, single wood poles with distribution underbuild. The existing Arden Hills 69 kV will be realigned along this segment to be double-circuited with the 115 kV circuit and terminate at the new substation.

**Segment 5** continues east from the new Lawrence Creek Substation to a point at CSAH 20 in Taylors Falls. The structures will be 70 foot (average) 161 kV single-circuit, single wood poles with distribution underbuild.

**Segment 6** runs underground down the river bluff east of CSAH 20 and under TH 95. The structures will be 3x3 161 kV single-circuit underground duct banks with access vaults. Steel overhead and underground transition structures will be required at each end. The Permittees will bury the existing distribution circuits paralleling the route down the bluff.

**Segment 7** will cross the St. Croix River into St. Croix Falls, Wisconsin. The structures used will be 80 foot (average) 161 kV single-circuit wood H-frame poles from TH 95 to the river. The structures employed for the river crossing will be a 70 foot (average) 161 kV single-circuit wood H-frame pole on each side of the St. Croix.

## **B. Substation Modifications and Construction Sites**

The site designated by the PUC for the new Lawrence Creek Substation and the other substation modifications authorized for the project are described below:

**Chisago County Substation.** Modifications to this substation to accommodate the upgrade of the 69 kV section of the existing double-circuit 115/69 kV transmission line to 115 kV include the addition of one 115 kV circuit breaker and associated foundations and structural steel within the existing graded and fenced area. This work will not require expansion of the existing substation.

**Lindstrom Substation.** Modifications to this substation accommodate the single-circuit 115 kV transmission line. The existing graded area will be expanded approximately 50 feet to the east, to accommodate the new equipment. At the northeast corner, an area approximately 100 feet east to west and 23 feet north to south will also be expanded and graded. Steel structures and associated concrete pier foundations will be installed to support high-voltage switches and bus work. Concrete pad foundations will be installed to support high-voltage circuit breakers and transformers. The existing 69/12.5 kV power transformers will be replaced with two new 115/12.5 kV power transformers. One new 115 kV circuit breaker will be installed.

**Shafer Substation.** Modifications to this substation accommodate the single-circuit 115 kV transmission line. The existing 69/12.5 kV power transformer will be replaced with a new 115/12.5 kV power transformer. A new 115 kV three-way switch mounted on a transmission line structure will be installed along the transmission line route to facilitate the new 115 kV connection to the substation. This work will not require expansion of the existing substation.

**Lawrence Creek Substation.** The new Lawrence Creek Substation is to be sited north of County Road 82 in Section 25, Township 34N, Range 19W (see Map #5 in Attachment B). Approximately 8.0 acres of property will need to be acquired to accommodate the substation construction for this Project.

The initial fenced area will be approximately 475 x 206 feet, or approximately 2.2 acres. The ultimate size of the fenced area will be 475 x 375 feet, or approximately 4.1 acres. Concrete pier foundations will be installed to support numerous steel w-flange (I-beam) columns and platforms

positioned throughout the substation for the placement of high-voltage bus work and switches. Concrete pad foundations will be installed for supporting high-voltage circuit breakers and transformers. A steel control house will also be erected within the fenced area that will enclose protective relay and control equipment. The main pieces of electrical equipment are included in the following list. However, the substation will be designed and constructed in a manner that will allow the future installation of additional circuit breakers and transformers:

- (4) 115kV Circuit Breakers
- 69 kV Circuit Breaker
- 115/161 kV Power Transformer
- 115/69 kV Power Transformer
- 115/12.5 kV Power Transformer
- Control House
- (1) 12.5 kV Switchgear Enclosure
- High-voltage bus work, switches and associated steel supporting structures

#### IV. GENERAL CONDITIONS

The Permittees 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 days before right-of-way preparation for construction begins, the Permittees shall provide the PUC 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 and the substation site. The Permittees may not commence construction until the 14 day period has expired or until the PUC has advised the Permittees in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittees intend to make any significant changes in its plan and profile or the specifications and drawings after submission to the PUC, the Permittees shall notify the PUC 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 Permit Application to the Minnesota Public Utilities Commission for a Route Permit for the Chisago Transmission Project dated January 5, 2007, PUC Docket E002/TL-06-1677, unless this Permit establishes a different requirement in which case this Permit shall prevail.
2. **Field Representative.** At least ten days prior to commencing construction, the Permittees shall advise the PUC in writing of the person or persons designated to be the field representative for the Permittees with the responsibility to oversee compliance with the conditions of this Permit during construction. This person's address, phone number, and

emergency phone number shall be provided to the PUC, which may make the information available to local residents and public officials and other interested persons. The Permittees may change the field representative at any time upon written notice to the PUC.

3. **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.
  4. **Vegetation Removal.** The Permittees shall minimize the number of trees to be removed as part of the construction of the line, taking into account Permit Condition IV.H.1, which recognizes that the Permittees have obligations to comply with clearance requirements.
  5. **Erosion Control.** The Permittees shall implement reasonable measures to minimize runoff during construction and shall plant or seed non-agricultural areas that were disturbed where structures are installed. Upon request, the Permittees shall submit to the PUC a copy of any Soil Erosion and Sediment Control Plan prepared for the Minnesota Pollution Control Agency as part of a storm-water runoff permit application.
  6. **Temporary Work Space.** The Permittees shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way.
  7. **Restoration.** The Permittees shall restore all temporary work spaces, access roads, and other private lands affected by construction of the transmission line. Restoration must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within sixty days after completion of all restoration activities, the Permittees shall advise the PUC in writing of the completion of such activities.
  8. **Notice of Permit.** The Permittees shall inform all employees, contractors, and other persons involved in the construction of the transmission line of the terms and conditions of this Permit.
- C. Periodic Status Reports.** Upon request, the Permittees shall report to the PUC on progress regarding finalization of the route, design of structures, and construction of the transmission line. The Permittees need not report more frequently than quarterly.
- D. Complaint Procedure.** Prior to the start of construction, the Permittees shall submit to the PUC the company's procedures to be used to receive and respond to complaints. The procedures shall be in accordance with the requirements set forth in Attachment A to this Permit.
- E. Notification to Landowners.** The Permittees 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.
- F. Drain Tile Restoration Plan.** Prior to the start of construction, the Permittees shall submit to the PUC its procedures for minimizing drain tile damage during construction and operation and restoration policies. Permittees must submit the Drain Tile Restoration Plan to the PUC for review prior to beginning construction as described in Permit General Conditions, Section IV.A, above.

## **G. Completion of Construction.**

1. **Notification to PUC.** At least three days before the line is to be placed into service, the Permittees shall notify the PUC of the date on which the line will be placed into service and the date on which construction was complete.
2. **As-Builts.** Within 180 days of completion of the project, the Permittees shall submit copies of all the final as-built plans and specifications developed during the project.
3. **GPS Data.** Within sixty days after completion of construction, the Permittees shall submit to the PUC, in the format requested by the PUC, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the transmission lines and each substation connected.

## **H. Electrical Performance Standards.**

1. **Grounding.** The Permittees shall design, construct, and operate the transmission line in such a manner that the maximum steady-state short-circuit current shall be limited to five milliamperes 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 short circuit current between ground and the object so as not to exceed one milliamperere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code.
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 rms.
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 Permittees 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.

## **I. Other Requirements.**

1. **Applicable Codes.** The Permittees shall comply with applicable North American Electric Reliability Corporation (NERC) planning standards and requirements of the National Electric Safety Code (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 Permittees shall comply with all applicable state rules and statutes. The Permittees shall obtain all required permits for the project and comply with the conditions of these permits. A list of the required permits is included in the permit application and the environmental impact statement. The Permittees shall submit a copy of such permits to the PUC upon request.

3. **Pre-emption.** Pursuant to Minnesota Statutes section 216E.10, subdivision 1, this Site Permit shall be the sole route and substation site approval required to be obtained by the Permittees for construction of the facilities 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 Permittees have not commenced construction or improvement of the route within four years after the date of issuance of this Permit, the PUC shall consider suspension of the Permit in accordance with Minn. Rules part 7849.5970.

## V. SPECIAL CONDITIONS

1. **Permanent Right-of-Way Acquisition:** Where the Permittees are not restricted to the existing ROW, it may obtain up to 50 feet of right-of-way when the transmission line does not parallel or utilize existing highway right-of-way. Where the transmission line parallels local, county or state roadways, the Permittees may acquire up to 30 feet of right-of-way outside the roadway right-of-way.
2. The Permittees must work with the City of Taylors Falls to coordinate placement of the Lawrence Creek Substation with the placement of the city's wastewater treatment ponds.
3. The Permittees must bury the existing distribution facilities along Segment 6 where it is burying the HVTL down the river bluff.

## VI. PERMIT AMENDMENT

This permit may be amended at any time by the PUC or authorized successor agency of the State of Minnesota. Any person may request an amendment of this permit by submitting a request to the PUC in writing describing the amendment sought and the reasons for the amendment. The PUC will mail notice of receipt of the request to the Permittees. The PUC may amend the permit after affording the Permittees and interested persons such process as is required.

## VII. PERMIT TRANSFER

The Permittees may request at any time that the PUC transfer this permit to another person or entity. The Permittees 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 PUC with such information as the PUC shall require to determine whether the new Permittees can comply with the conditions of the permit. The PUC may authorize transfer of the permit after affording the Permittees, the new Permittee(s), and interested persons such process as is required.

## VIII. REVOCATION OR SUSPENSION OF THE PERMIT

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

**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 permittees concerning the permit conditions for right-of-way preparation, construction, cleanup and restoration, 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 permittees.

4. Definitions

Complaint - A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of right-of-way preparation, construction, cleanup and restoration. Complaints do not include requests, inquiries, questions, or general comments.

Substantial Complaint - Written complaints alleging a violation of a specific Site 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 right-of-way preparation, construction, cleanup and restoration 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 directed to this project. The following procedures will satisfy this requirement:

- A. The Permittees shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
1. Name of the permittees and project.
  2. Name of complainant, address and phone number.
  3. Precise property description or tract number (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 PUC and phone number.
  8. Final disposition and date.
- B. The Permittees shall assign an individual to summarize complaints for transmittal to the PUC.

6. Requirements

The permittees shall report all complaints to the PUC according to the following schedule:

Immediate Reports - All substantial complaints shall be reported to the PUC the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to Permit Compliance at the following: [DOC.energypermitcompliance@state.mn.us](mailto: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, 121 7<sup>th</sup> 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 7<sup>th</sup> Place East, Suite 500, St. Paul, MN 55101-2198.

7. Complaints Received by the PUC

Copies of complaints received directly by the PUC from aggrieved persons regarding right-of-way preparation, construction, cleanup and restoration shall be promptly sent to the permittees.

## **Route Maps**

**Map 1 - Proposed Route Overview**

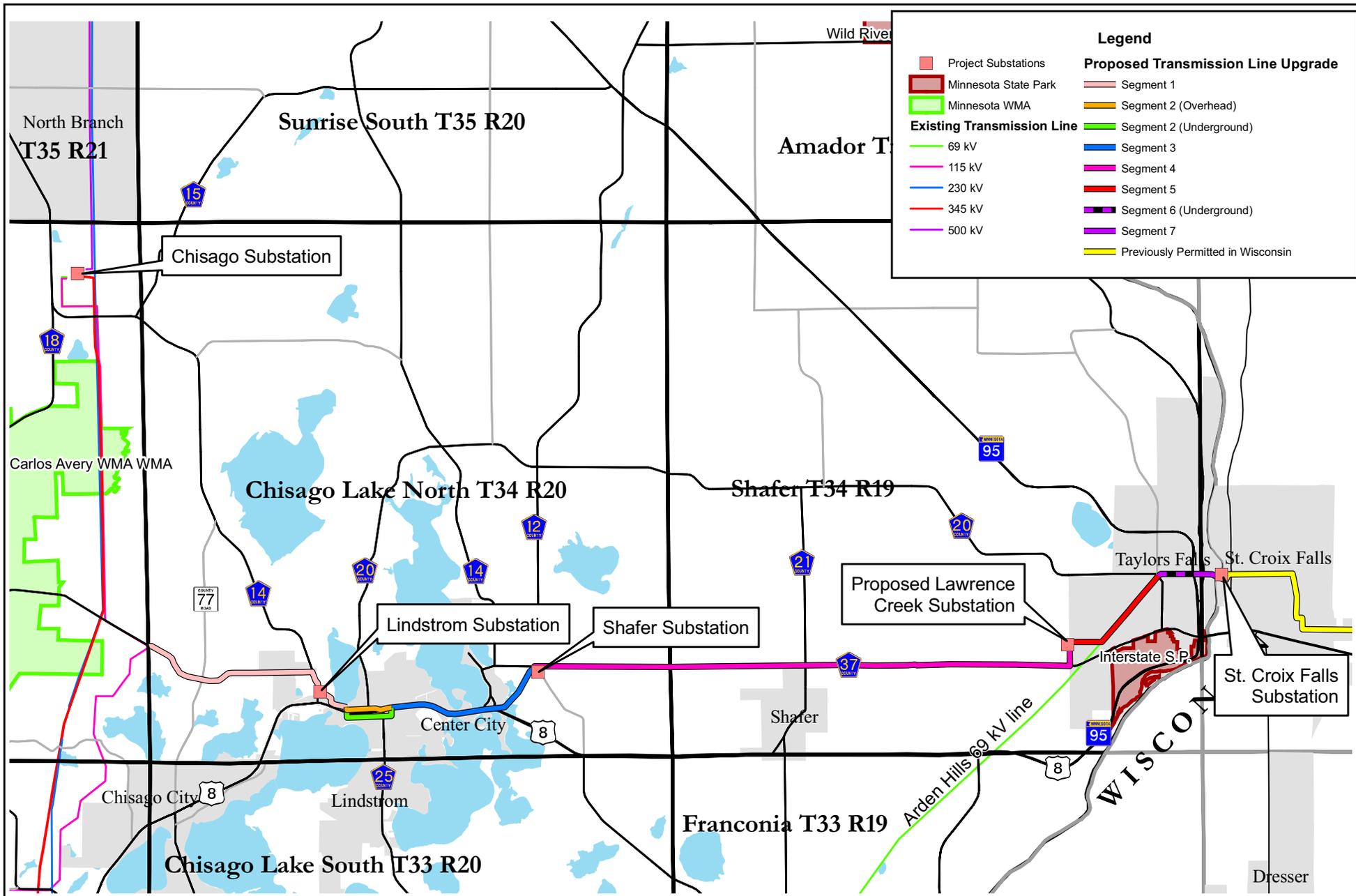
**Map 2 - Proposed Route Detail (Chisago Substation)**

**Map 3 - Proposed Route Detail (City of Lindstrom)**

**Map 4 - Proposed Route Detail (Shafer Tap to Lawrence Creek Substation)**

**Map 5 - Proposed Route Detail (Lawrence Creek Substation)**

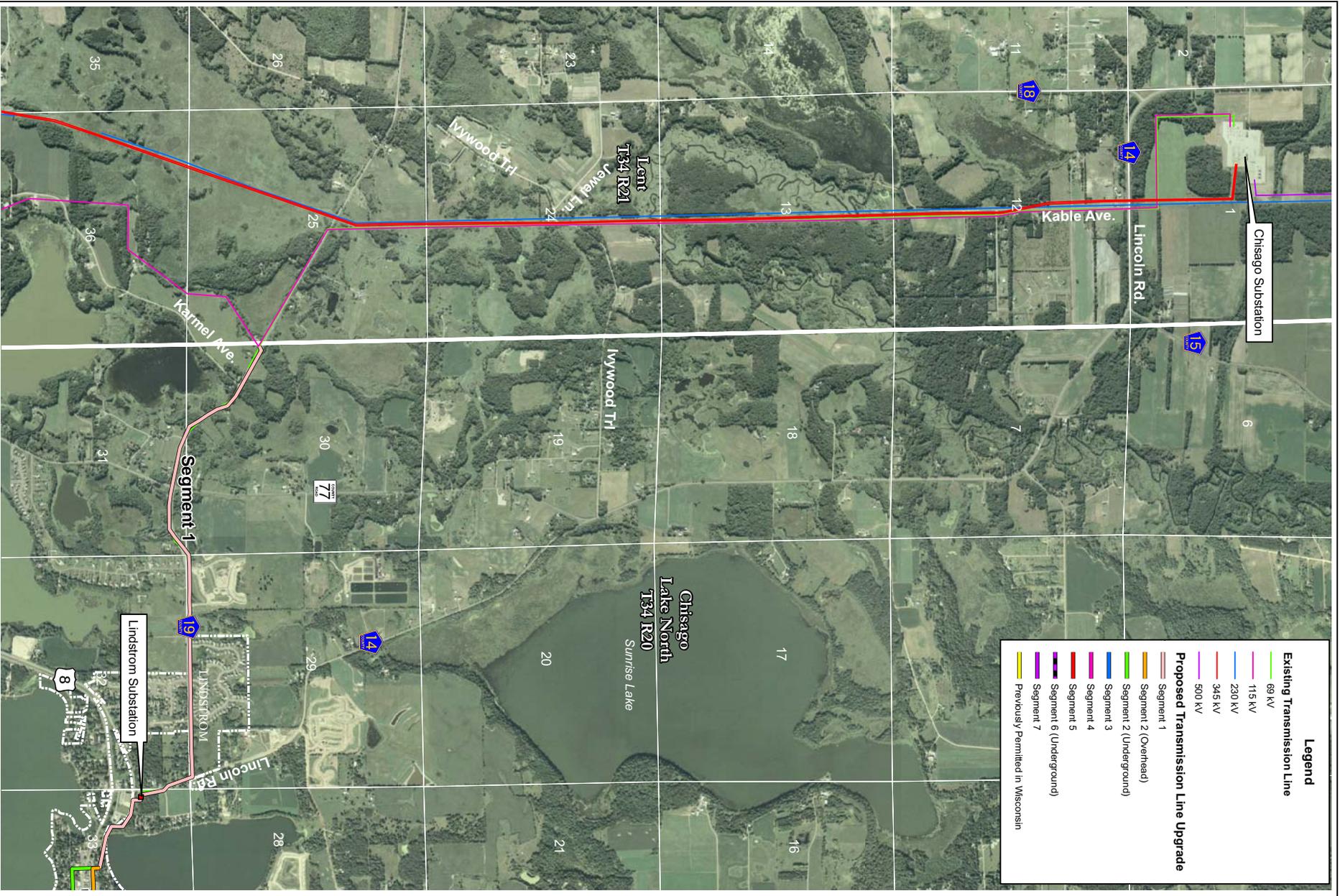
**Map 6 - Proposed Route Detail (Taylors Falls to St. Croix)**



Map 1 Proposed Route Overview Map  
 Chisago Transmission Project  
 Chisago County, Minnesota

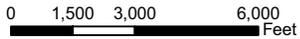
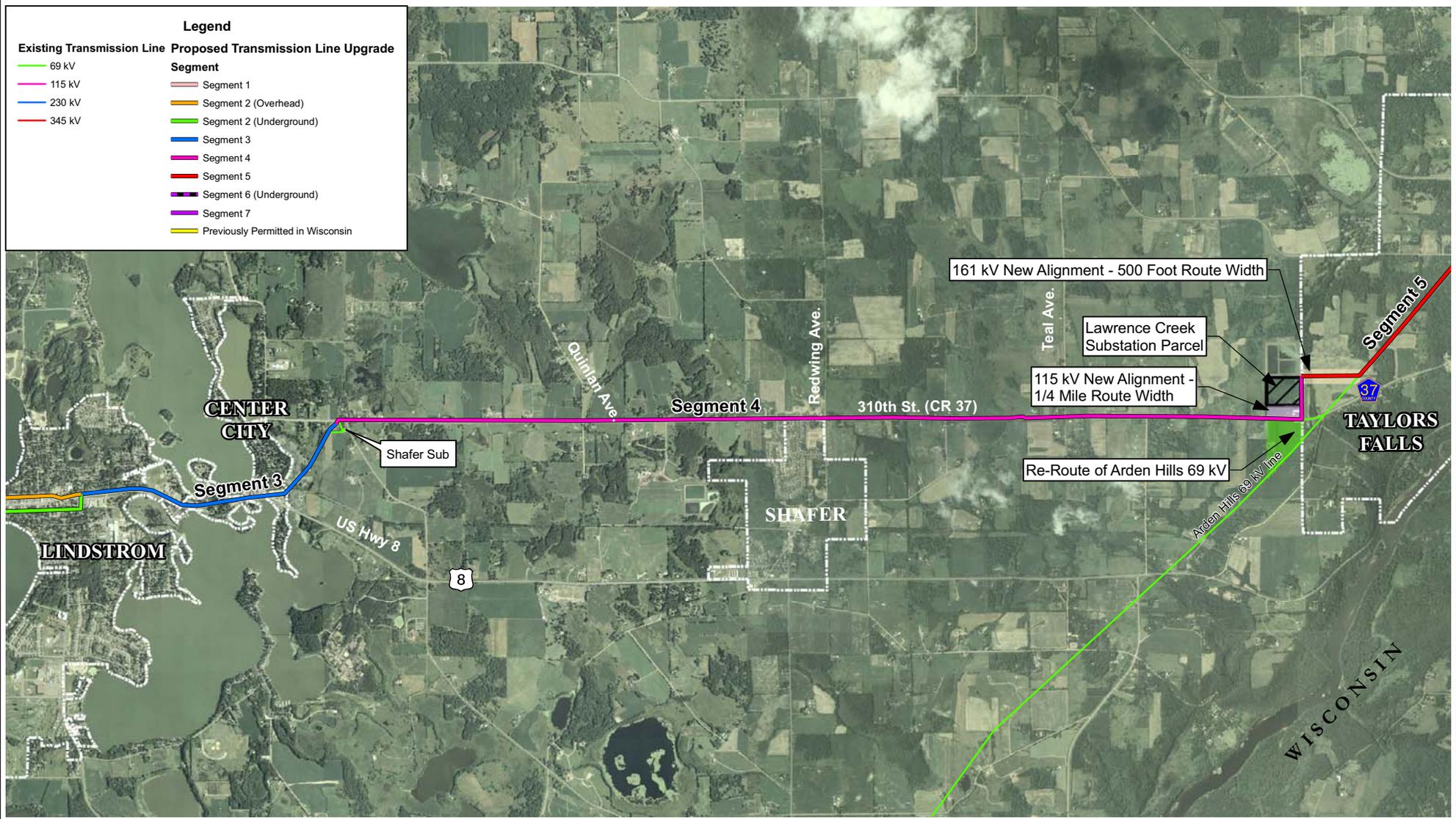


0 1 2 Miles



Map 2. Proposed Route - Detailed Maps  
 Chicago Transmission Project  
 Chisago County, Minnesota





Map 4 Proposed Route - Detailed Maps  
 Chisago Transmission Project  
 Chisago County, Minnesota

