



**In the Matter of the Route Permit  
Application for a 345 kV Transmission  
Line from Monticello to St. Cloud**

**ENVIRONMENTAL IMPACT STATEMENT  
SCOPING DECISION DOCUMENT  
PUC Docket No.ET2, E002/TL-09-246**

The above matter has come before the Director of the Office of Energy Security (OES) for a decision on the Scope of the Environmental Impact Statement (EIS) to be prepared on the Northern States Power Company (Xcel Energy), a Minnesota corporation, and Great River Energy, a Minnesota cooperative corporation (Great River Energy) route permit application before the Minnesota Public Utilities Commission (Commission) for a proposed transmission line between Monticello and St. Cloud, Minnesota, under the full permitting process (Minnesota Rules 7850.1700 to 7850.2700).

## **PROJECT DESCRIPTION**

The applicants propose to construct and operate a 345 kilovolt (kV) transmission line, approximately 28 miles long, extending from the existing Monticello Substation in Monticello, Minnesota to the new Quarry Substation, to be located west of St. Cloud, Minnesota, in Stearns County. The applicants have proposed three possible routes for the transmission line, a preferred route and two alternate routes. These routes would cross portions of Wright and Stearns counties. The Project would also include the construction of a new substation. The Quarry Substation would be located west of St. Cloud in unincorporated Stearns County.

The applicants are requesting a 1,000 foot wide route width for the majority of the proposed project. The maximum route width of 1.25 miles is requested in specific areas to accommodate site-specific considerations and substation interconnection.

The applicants propose using primarily single-pole, double-circuit capable, self-weathering or galvanized steel structures that will range in height between 130 and 175 feet. The span length between structures will typically range in length between 600 and 1,000 feet depending on site-specific considerations. Although the proposed line will be built using double circuit capable poles, only one circuit will be installed for this Project. The second position would be available for a possible, future additional circuit. The right-of-way for the proposed 345 kV electrical transmission line generally would be 150 feet in width.

Construction of the proposed Quarry 345/115 kV Substation will require a graded, fenced area of six to 15 acres within a total area of up to 40 acres. As previously identified, Applicants have identified two Proposed Quarry Substation Siting Areas, both of which are comparable in their utility. The southern proposed site is the Quarry Substation Siting Area Alternate 1. The northern proposed site is the Quarry Substation Siting Area Alternate 2. The Quarry Substation Siting Area Alternate 1 is generally located west of St. Cloud, south and east of the existing railroad and northeast of the intersection of I-94 and State Highway 23. The Quarry Substation Siting Area Alternate 2 is generally located west of St. Cloud, north and west of the existing railroad, west of Highway 23, and generally northwest of the intersection of I-94 and Highway 23.

Equipment to be installed includes 345 and 115 kV equipment (including a transformer, switches, control panels, and circuit breakers), foundations and structures. The substation yard will also require access roads.

Proposed construction of the transmission line would begin in fourth quarter of 2011 with completion by second quarter 2012.

## **PROJECT PURPOSE**

The Project is designed to address three needs: local community reliability, regional reliability and generation outlet support. The demand for electric power in the St. Cloud area has exceeded the capability of the area's electrical system to reliably provide power during contingencies. The Project will provide sufficient additional capacity to meet the St. Cloud area's needs until approximately 2035 to 2040. The proposed 345 kV transmission line will also help improve the reliability of the bulk electric system serving Minnesota and portions of neighboring states. Finally, the Project provides a necessary 345 kV connection to the Twin Cities that will help facilitate additional generation development, including renewable generation, in eastern North Dakota and western Minnesota.

## **REGULATORY BACKGROUND**

Applicants' request for a Certificate of Need for the Project and associated system connections has been granted by Commission. In the Matter of the Application of Great River Energy, Northern States Power Company (d/b/a Xcel Energy) and others for Certificates of Need for the Three CapX2020 345 kV Transmission Projects, Docket No. ET2, E002, et al./CN-06-1115 (Certificate of Need Application). On February 27, 2009, Administrative Law Judge (ALJ) Beverly Heydinger issued Findings of Fact, Conclusions and Recommendations and recommended approval of the Twin Cities to Fargo Project (this project has been divided into to separate route applications: the Monticello to St. Cloud Application and the Fargo to St. Cloud Application) in a double-circuit compatible configuration. The Minnesota Public Utilities Commission (Commission) concurred with the ALJ's recommendation and granted an order with conditions on May 22, 2009. The Commission reconsidered and issued another order on August 10, 2009 to amend conditions designed to ensure that the capacity of the Brookings to Dakota County line would be available to transmit electricity from renewable sources.

The applicants filed a route permit application on April 8, 2009, under the full permitting process of the Power Plant Siting Act (Minnesota Statute 216E). The application was accepted as complete by the Commission on May 13, 2009. Under the full permitting process the Commission has one year from the date the application was accepted as complete to make a decision on the route permit.

## **SCOPING PROCESS**

Route permit applications for high voltage transmission lines are subject to environmental review in accordance with Minnesota Rules 7850.1700 to 7850.2700 (full permitting process). Scoping is the first step in the permitting process after application acceptance. The scoping process has two primary purposes, to ensure that the public has a chance to participate in determining what routes and issues to study in the EIS, and to help focus the EIS on the most important issues surrounding the route permit decision.

OES staff collected and reviewed comments on the scope of the EIS by holding two Scoping Meetings and convening an advisory task force. The OES also accepted written comments through July 24, 2009. This scope identifies potential human and environmental issues and project route or substation site alternatives that will be addressed in the EIS. The scope also presents an anticipated schedule of the environmental review process.

### ***Advisory Task Force***

The advisory task force (ATF) was established by the OES. The ATF was charged with: (1) identifying local site or route specific impacts and issues of local concern, and (2) identifying alternative transmission line routes or substation locations that may maximize positive impacts and minimize or avoid negative impacts of the project. The task force met three times between June and August 2009. The recommendations of the

ATF have been considered during the preparation of this scope and can be found in the AFT Final Report dated September 2009. The ATF report is available at <http://energyfacilities.puc.state.mn.us/Docket.html?Id=19957>.

**Public Scoping Meetings**

Two public information meetings were conducted by the OES on July 2, 2009 at 1:00 pm and 6:00 pm in the Clearwater Township Hall. Approximately 100 people attended the two public meetings. The scoping meetings provided the public an opportunity to learn about the proposed project and the route permitting process, review the route permit application, ask questions and submit comments. A court reporter was present at each of the public meetings and transcribed questions asked and comments made by the public as well as responses from the OES and the applicants.

**Public Comments**

The public comment period ending on July 24, 2009, provided the public an additional opportunity to submit comments and alternative routes to be considered for the scope of the EIS. A total of 64 comments were received by the close of the comment period.

All of the written and oral comments submitted at the scoping meetings along with comments received by mail and email were reviewed and entered into a database. Each comment was evaluated for issues or concerns that should be considered for detailed evaluation in the EIS and were classified based on the major topics of the comments. Table 1 below summarizes the major issues raised in these comments, as well as the relative frequency the issue was raised. Table 2 summarizes common concerns about the project.

**Table 1. Major Issues\* Raised During Public Scoping Period**

<b>Issue</b>	<b>Number of Comments</b>
Biological Issues	1
Cultural Resources	3
EMF	6
General Routing/Alternatives	19
Land Use	5
Right of way Acquisition/Easements	4
Socioeconomic issues/Property Values	2
Visual and Aesthetic Impacts	2
Water Resources	6

\* Other included issues related to: data in route permit application, general opposition to the project, project need, and easement negotiation process, among others.

**Table 2. Common Concerns Identified During Scoping**

<b>Common Concerns</b>	<b>Number of Comments</b>
Desire for transmission line to be located within or along existing transportation corridors including I-94, I-10, CR 137, and an abandoned railroad.	11
Concerns that transmission line will negatively affect property values.	4
Desire to consider the existing Benton County line as a reasonable alternative.	4
Concern regarding potential negative effects to water resources such as Neenah Creek, Fish Lake, the Fish Creek Basin, and the Mississippi River.	4
Concerns that the line will impact the Chapel Hill historic area.	2

The public and the ATF suggested route modifications and alternative routes during the scoping process. The ATF recommended four additional route alternatives to the applicants' proposed routes. The public generally suggested route modifications to avoid specific resource areas, and expressed a preference for using existing infrastructure rights-of-way.

The task force meeting reports and scoping meeting comment reports, as well as each individual comment (letter or email) are available on the project website maintained by OES at: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=19957>

## **MATTERS TO BE ADDRESSED**

Having reviewed the matter, consulted with OES Energy Facility Permitting staff, and in accordance with Minnesota Rule 7850.2500, I hereby make the following Scoping Decision.

The applicants' route permit application describes their route analysis and contains the information required by Minnesota Rule 7850.1900, subp. 2, as determined by the Commission. The EIS will summarize the process the applicants' used to identify, evaluate, and select the routes. The EIS will also verify and supplement information provided in the route permit application and will incorporate the information by reference as appropriate.

The EIS on the proposed Monticello to St Cloud 345 kV transmission line project will address and provide information on the following matters:

- I. INTRODUCTION**
  - A. Project Description
  - B. Purpose of the Transmission Line
  - C. Project Location
  - D. Route Description
  - E. Route Width
  - F. Rights-of-Way
  - G. Project Cost
  
- II. REGULATORY FRAMEWORK**
  - A. Certificate of Need
  - B. Route Permit
  - C. Environmental Review Process

### **III. ENGINEERING AND OPERATION DESIGN**

- A. Transmission Line Conductors
- B. Transmission Line Structures
- C. Substations

### **IV. CONSTRUCTION**

- A. Transmission Line and Structures
- B. Substations
- C. Property/Right-of-Way Acquisition
- D. Cleanup and Restoration
- E. Damage Compensation
- F. Maintenance
- G. Underground Options

### **V. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES**

The EIS will include a discussion of the human and environmental resources potentially impacted by the project and its alternatives. Potential impacts of the proposed project and each alternative considered will be described. Based on the impacts identified, the EIS will describe mitigative measures that could reasonably be implemented to reduce or eliminate the identified impacts.

- A. Environmental Setting
- B. Socioeconomic Setting
- C. Human Settlement

- 1. Noise
- 2. Aesthetics
- 3. Displacement
- 4. Existing Utilities (pipelines, propane tanks, septic systems)
- 5. Domestic Water Well Installation/Maintenance

- D. Public Health and Safety

- 1. Electric and Magnetic Fields
- 2. Implantable Medical Devices
- 3. Stray Voltage

- E. Recreation

- 1. Parks (city, county, state, and federal)
- 2. Trails
- 3. Scenic Waterways

- F. Transportation and Public Services

- 1. Emergency Services
- 2. Airports
- 3. Highways and Roads (including scenic highways/byways and rest stops)

- G. Interference

- 1. Radio and Television (digital and satellite)
- 2. Internet
- 3. Cellular Phone
- 4. GPS-Based Agriculture Navigation Systems

H. Archaeological and Historic Resources

I. Zoning and Compatibility/Federal, State and Local Government Planning

J. Land-Based Economies

1. Agriculture
  - a. Prime Farmland
  - b. Aerial Crop Spraying/Dusting
2. Forestry
3. Mining

K. Property Values

1. Residential
2. Industrial
3. Agriculture

L. Air Quality (As it pertains specifically to this transmission line project only.)

M. Natural Resources

1. Surface Water
  - a. Lakes
  - b. Surface Flows
2. Groundwater
3. Wetlands
4. Floodplains
5. State Wildlife Management Areas/Scientific Natural Areas
6. National Wildlife Refuge/Waterfowl Production Areas
7. Forests

N. Flora

O. Fauna

P. Rare and Unique Natural Resources/Critical Habitat

**VI. ALTERNATIVE ROUTES AND SUBSTATION LOCATIONS TO BE EVALUATED IN THE EIS**

The EIS will identify and evaluate alternative routes and route segments to the proposed project. Two of the four ATF identified routes and one of two substation location alternatives will be evaluated in the EIS and are presented below and illustrated in Figure 1.

***The ATF Group 3 Alternate 3***

The ATF-proposed Group 3 Alternate 3 originates at the Monticello Substation and travels in a northwesterly direction for approximately four miles in Sherburne County. The route would turn in a westerly direction for approximately 15 miles where it would parallel existing road right-of-way and transmission infrastructure. The route would run in a southwesterly direction crossing the Mississippi River for approximately 1.5 miles. The route then turns north for two miles into the St Cloud area. The route runs east for approximately six miles through St Cloud and then turns north and proceeds for approximately three miles where it would terminate at the proposed substation area.

### ***The ATF Group 3 Alternate 2***

The ATF-proposed segment alternate Group 3 Alternate 2 would commence at the Applicant's Alternate B route in Silver Creek Township, Wright County, and travel west for approximately six miles avoiding a wet area in the far west corner of the segment. The route would turn straight north for approximately 1.5 miles where it would reconnect with the applicant Alternate B.

### ***The ATF Substation Alternate Group 4-1***

This location covers approximately 13 total acres in the southeast corner of T124 R29 S36 and the northeast corner of T124 R29 S1 in Stearns County. The area is bounded to the north by CSAH 6, to the east by the eastern boundary of T124 R29 S1 and to the south and west by I-94.

## **VII. REJECTED ALTERNATIVE ROUTES AND SUBSTATION LOCATIONS**

Two of the alternative routes suggested by the ATF (Proposed Routes Group 4 – Alternate 1 and Group 4 – Alternate 2) will be described in the EIS, but will not be considered for further study or evaluation in the EIS. The route segments were rejected as they did not meet the stated need of the project as defined in the Certificate of Need (CapX 345 kV Transmission Projects, Docket No. ET-2, E-002, et al./CN-06-1115). Additionally, in some instances, they had more impacts relative to the criteria used by the Commission in route permit determinations as defined in Minnesota Statute 216E.03, subd. 7.

The applicants conducted a study (the CapX 2020 Vision Plan) to ensure system reliability which forecasted the amount of system-wide growth the region would experience by 2020, and concluded that the region would experience transmission overloads, outages, and voltage problems unless new capacity were added. They then considered which arrangement of transmission facilities could best accommodate this growth under different scenarios. The applicants developed routes to ensure system reliability by avoiding existing transmission infrastructure in the area. There are several other transmission corridors that originate at the Monticello Substation. To ensure system reliability the applicant has avoided placing new transmission infrastructure in those areas in the event of a severe weather incident or some other event that would cause outages.

### ***ATF Group 4 Alternate 1***

The ATF-proposed route Group 4 Alternate 1 will not be considered for further study or evaluation because it does not meet the Purpose and Need approved by the Commission through the Certificate of Need (CON) process. This route would parallel an existing 230 kV transmission line and an existing transmission 115 kV line which commences at the Monticello Substation, crosses the Mississippi River, and travels north through Becker County for approximately seven miles, then travels in a northwesterly direction through Sherburne County for approximately seven miles. The route then turns west for approximately eight miles and parallels existing road right-of-way (there is no existing transmission infrastructure in this eight mile segment). The route then turns north for two miles into the St Cloud area. The route runs west for approximately six miles through St Cloud and then turns north and proceeds for approximately three miles where it would terminate at the proposed substation area.

This ATF alternate route was dropped from consideration because it parallels an existing 230 kV transmission line and a 115 kV transmission line. This route would not meet the purpose and need of the project because it would not provide system reliability and diversity. This route also crosses the Mississippi River twice. There would also be impacts to existing and planned development, including potential relocations, in the Waite Park area along Highway 23.

### ***ATF Group 4 Alternate 2***

The ATF proposed Group 4 Alternate 2 will not be considered for further study or evaluation because it does not meet the purpose and Need approved by the Commission through the CON process. This route would parallel an existing 230 kV and 115 kV which commences at the Monticello Substation, crosses the Mississippi River and travels north for approximately four miles. The route would run in a northwesterly direction for 12 miles paralleling Highway 10. The route then turns north for two miles into the St. Cloud area. The route runs west for approximately six miles through St Cloud and then turns north and proceeds for approximately three miles where it would terminate at the proposed substation area.

This ATF alternate route was dropped from consideration because it is in an area with a high density of transmission infrastructure. As described above, this route would not meet the purpose and need of the project because it would not provide system reliability and diversity. This route also crosses the Mississippi River twice. This route also impacts the Clear Lake airport and would not comply with FAA regulations. There would also be impacts on several center-pivot irrigation systems and likely impacts on historical sites. There would also be impacts to existing and planned development in the Waite Park area along Highway 23, in addition to impacts to existing urban areas in Big Lake and Clear Lake.

### ***ATF Substation Alternate Group 4-2***

This location covers approximately 17 total acres in T124 R29 S13 and T124 R29 S24 in Stearns County. The southern boundary is 138<sup>th</sup> St. The western boundary is a north/south line beginning approximately 2700' east of 86<sup>th</sup> Ave along 138<sup>th</sup> street. The eastern boundary is a north/south line beginning approximately 3800' west of 75<sup>th</sup> Ave along 138<sup>th</sup>. The northern boundary is an east west line approximately 1000' north of the southern boundary of T124 R29 S13.

This location was dropped from consideration in the EIS because it is only a viable substation option if the ATF Group 4 Alternate 1 or Alternate 2 routes are considered. Since both these transmission line routes are eliminated from further consideration, the ATF Substation Alternate Group 4-2 is also eliminated.

## **VIII SUMMARY OF ALTERNATIVES TO BE ANALYZED IN THE EIS**

The Project Description section and sections VI and VII of this Scoping Decision Document discuss alternative routes and substations that will be analyzed in the EIS. In summary, the following transmission line routes and substation locations will be carried forward into the EIS (see also Figure 1):

- The Applicants' Preferred Route
- The Applicants' Alternate Route A
- The Applicants' Alternate Route B
- The ATF Group 3 Alternate 3
- The ATF Group 3 Alternate 2
- The Applicants' Quarry Substation Alternate 1
- The Applicants' Quarry Substation Alternate 2
- The ATF Substation Alternate Group 4-1



The analysis will address the resources identified in Section V of this scoping decision document. To provide a robust analysis, the EIS will consider the allocation of resources within each given route with respect to reasonable transmission line alignments within each route. In some cases, these alignments will primarily consist of the centerline of the proposed route, while in other cases the alignments will be driven by the presence of pre-existing infrastructure within the route, such as roadways and transmission lines. This approach will enable an informed decision on the potential of the route alternatives to provide a transmission line that avoids or minimizes social, economic, and environmental impacts.

## IX. REQUIRED PERMITS AND APPROVALS

The EIS will include a list and description of permits that will be required for the project.

## X. ISSUES OUTSIDE THE SCOPE OF THE EIS

The following issues will not be considered or evaluated in the EIS:

- A. Any route or substation alternatives not specifically identified in this scoping decision
- B. Questions of need, including size, type, and timing; questions of alternative system configurations; or questions of voltage.
- C. The no-build option regarding the high voltage transmission line.
- D. The impacts of specific energy sources, such as carbon outputs from coal-generated facilities.
- E. Policy issues surrounding whether utilities or local-government should be liable for the cost to relocate utility poles when roadways are widened.
- F. The manner in which land owners are paid for transmission rights of way easements, as that is outside the jurisdiction of Public Utilities Commission.

## XI. SCHEDULE

The Draft EIS shall be completed and available by January 2010. A public hearing will be held in Clearwater Township Hall before an Administrative Law Judge after the Draft EIS has been issued and notice served. The exact date of the public hearing has not been set.

Signed this 9<sup>th</sup> day of October, 2009

STATE OF MINNESOTA  
DEPARTMENT OF COMMERCE  
OFFICE OF ENERGY SECURITY



William Glahn, Director

