



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

**ENVIRONMENTAL IMPACT STATEMENT
SCOPING DECISION DOCUMENT
PUC Docket No. ET2, E002/TL 09-1056**

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, a Minnesota corporation (Xcel Energy), 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 Fargo North Dakota, and St. Cloud, Minnesota, under the full permitting process (Minnesota Rules 7850.1700 to 7850.2700).

PROJECT DESCRIPTION

The Applicants are proposing to construct and operate a 345 kilovolt (kV) transmission line, approximately 211-250 miles long, extending from a new substation to be located in the Fargo area (Bison Substation), to the proposed new Quarry Substation (currently under review in the Monticello to St Cloud Environmental Impact Statement PUC Docket No. ET2, E002/TL-09-246), to be located west of St. Cloud, Minnesota, in Stearns County.

The Minnesota portion of the proposed Fargo to St. Cloud 345 kV Project will be approximately 169 to 180 miles long, extending from the Red River along the Minnesota and North Dakota border, particularly between Clay and Wilkin counties, to the existing Alexandria Switching Station located south of Alexandria; and to the new Quarry Substation to be located west of St. Cloud. The North Dakota portion of the proposed Fargo to St. Cloud 345 kV Project from the Bison Substation to the Red River, depending on the route selected, will be approximately 31 to 81 miles. The EIS covers only the Minnesota portion of the proposed transmission line.

The Applicants have proposed two possible routes for the transmission line, the Preferred Route and Alternate Route A. The Applicants also identified five shorter Preferred Route Segment Alternatives, which range in length between 1.5 and 46 miles. The Preferred Route Segment Alternatives were developed to provide options to modify the Preferred Route or connect a portion of the Preferred Route to Alternate Route A. These routes would cross portions of Clay, Douglas, Grant, Otter Tail, Pope, Stearns, Stevens, Todd, Traverse, and Wilkin Counties. The Project would also include modifications to the existing Alexandria Switching Station.

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 being requested in certain locations to accommodate site-specific considerations.

The Applicants are proposing to use 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 will be available for a future additional circuit and would require separate certificate of need and permit application. The right-of-way for the proposed 345 kV electrical transmission line generally would be 150 feet in width.

Modifications to the existing Alexandria Switching Station may include 345 and 115 kV equipment such as switches, a transformer, control panels, circuit breakers, foundations, and structures. Some additional land may be required depending on the ultimate configuration.

The construction start date being proposed by the Applicants is the third quarter of 2012 and the proposed in service date is the third quarter of 2015.

PROJECT PURPOSE

The Project is designed to address three needs: local community reliability; regional reliability, and generation outlet support. The proposed 345 kV transmission line will also help improve the reliability of the bulk electric system serving the Alexandria area, the southern zone of the Red River, and the St Cloud area. 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. 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.

The Applicants' request for a Certificate of Need for the Project and associated system connections was granted by the Commission in an Order dated May 22, 2009; see 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. ET-2, E-002, et al./CN-06-1115 (Certificate of Need Application). This project has been divided into two separate route applications: the Monticello to St. Cloud Application (the Record is currently under review - see PUC Docket No.E002, ET2/TL-09-246); and the Fargo to St Cloud Application.

REGULATORY BACKGROUND

The Applicants filed a route permit application on October 1, 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 November 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. 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 six Scoping Meetings and convening an advisory task force. The OES also accepted written comments through February 12, 2010. This scope identifies potential human/environmental issues and project route or

substation site alternatives that will be addressed in the EIS. The scope also presents a tentative schedule of the environmental review process.

Advisory Task Force

One 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 minimize or avoid negative impacts of the project. The task force met on January 22, February 4, and February 25, 2010. The recommendations of the ATF have been considered during the preparation of this scope and can be found in the ATF Final Report dated March 19, 2010. The ATF report is available at <http://energyfacilities.puc.state.mn.us/Docket.html?Id=19957>.

Public Scoping Meetings

A total of 12 public information meetings were conducted by the OES on January 19, 20, 21, 26, 27 and 28, 2010 at 1:30 pm and 6:30 pm. The meetings were held in the cities of Alexandria, Melrose, St. Joseph, Fergus Falls, Barnesville, and Elbow Lake. Approximately 1,000 people attended the 12 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, and ask questions and submit comments. A court reporter was present at each of the public meetings and recorded questions and comments made by the public.

Public Comments

A public comment period was provided, ending on February 12, 2010, which provided the public an additional opportunity to submit comments and alternative routes to be considered for the scope of the EIS. Approximately 250 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. The following summarizes the major issues raised in the comment period:

- General Routing Issues
- Land Use
- Property Values
- Visual and Aesthetic Impacts
- Right of Way Acquisition
- Biological Issues
- Cultural Resources
- Health and Safety
- Suggested New Route Options
- Suggested New Routes
- Water Resources

The public and the ATF suggested route modifications and alternative routes during the scoping process. The ATF recommended six additional route alternatives to the Applicants' proposed routes; these alternatives were generally located between Freeport and St. Cloud. The task force meeting and final reports, as well as scoping meeting comments and individual comments, are available on the project website: <http://energyfacilities.puc.state.mn.us/resource.html?Id=25652>

The public suggested 11 additional route modifications to avoid specific resource areas, which are discussed in further detail in Section VI of this document. The public also suggested 14 alignments within the existing routes that were included in the permit application. The 14 alignments suggested will be addressed under the existing routes identified in the permit application.

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 Fargo 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
- D. Route Development and Selection 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)
- 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
- 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

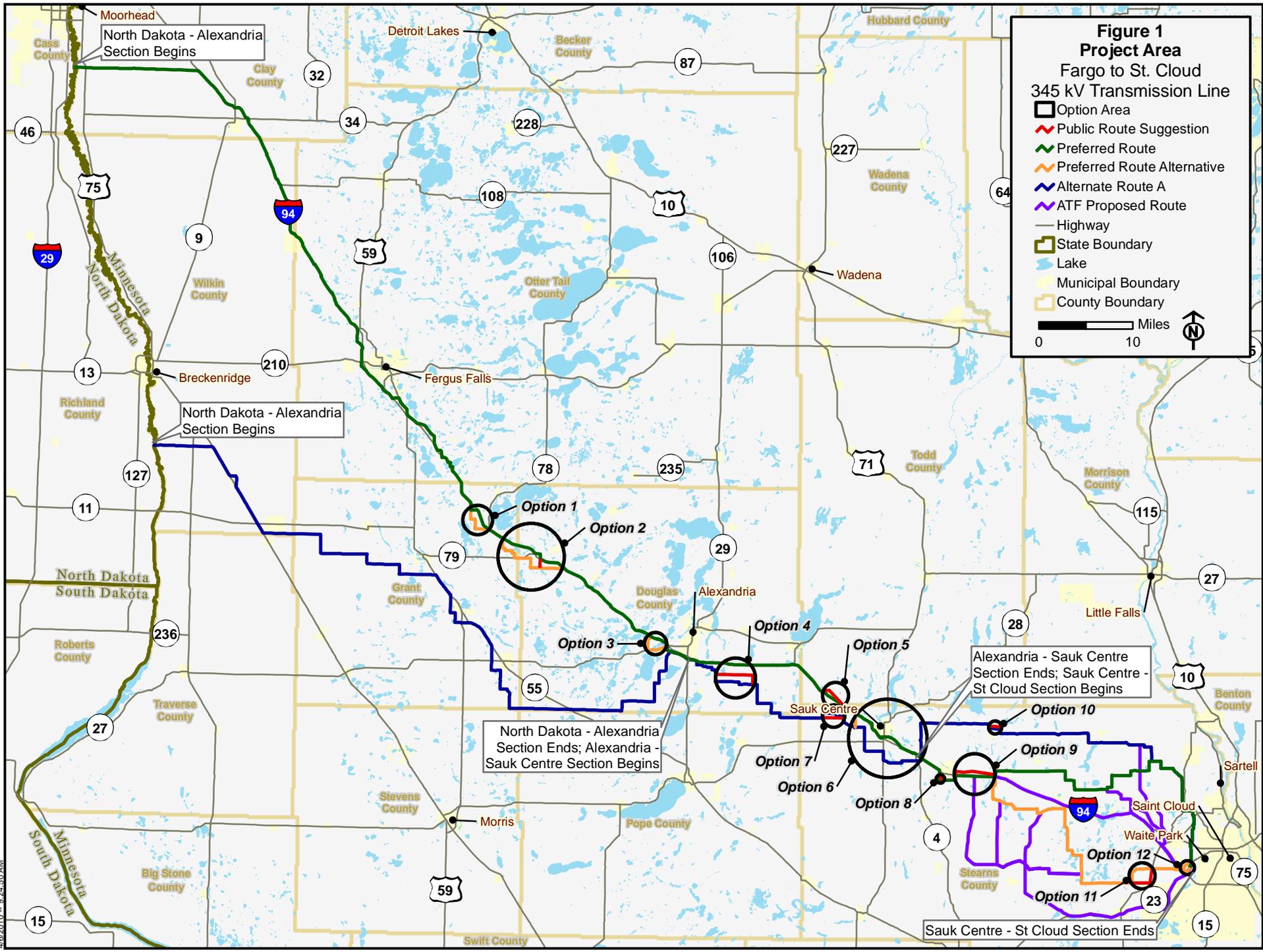
P. Rare and Unique Natural Resources/Critical Habitat

VI. ROUTES ALTERNATIVES AND OPTIONS

The Fargo to St. Cloud 345 kV transmission line Project will be approximately 169 to 180 miles long, extending from the Red River along the Minnesota and North Dakota border between Clay and Wilkin counties, to the existing Alexandria Switching Station located south of Alexandria, and then to the new Quarry Substation to be located west of St. Cloud.

The EIS will identify and evaluate the 2 alternative routes and 5 route segments proposed by the Applicant. In addition, the EIS will evaluate 6 routes that were identified by the ATF. The OES will also be evaluating the 12 route segment alternatives suggested by the public during the comment period.

Because of the extensive length of the transmission line corridor, the project area will be divided into three distinctive geographic areas in the EIS to illustrate a combination of routes and alternative route segments developed by the Applicant, the ATF, and the public during the public comment period. The three areas will include the Fargo to Alexandria area, the Alexandria to Sauk Centre area, and the Sauk Centre to St Cloud area. The following discusses the route alternatives and options in each of the three areas.



Fargo to Alexandria

The Fargo to Alexandria area is depicted in Figure 2. The EIS analysis for this area will include both the Applicant Preferred Route (which would begin where the proposed transmission line crosses the Minnesota border near Fargo), and Alternate Route A (which would begin where the transmission line crosses the Minnesota border approximately 5.5 miles south of Breckenridge). The Fargo to Alexandria project area ends where I-94 and State Highway 29 intersect in Douglas County. There are also three route option areas that will be analyzed in the Fargo to Alexandria portion of the project.

Option 1

Option 1 (presented in the Application as Applicant Preferred Route Segment Alternative 5) is approximately 4 miles in length and is shown in Figure 2. Option 1 deviates from the Applicant Preferred Route corridor to avoid an area where an existing residence is immediately adjacent to the I-94 right-of-way along one side of the interstate and lands held in fee or easement by the U.S. Fish and Wildlife Service (USFWS) occur along the opposite side of the interstate. The OES determined that Option 1 as identified on Figure 2 is a viable option and will be carried forward in the EIS.

Option 2 a, b, and c

Option 2a is the portion of the Applicant Preferred Route Alternative within Option 2.

Option 2b (presented in the Application as Preferred Route Segment Alternative 4) is approximately 9 miles in length and is shown in Figure 2. Option 2b deviates from the Applicant Preferred Route to avoid USFWS land and residences in the area. In addition, an existing residence is immediately adjacent to the I-94 right-of-way but on opposite sides of the interstate. The OES determined that Option 2b as identified on Figure 2 is a viable option and will be carried forward in the EIS.

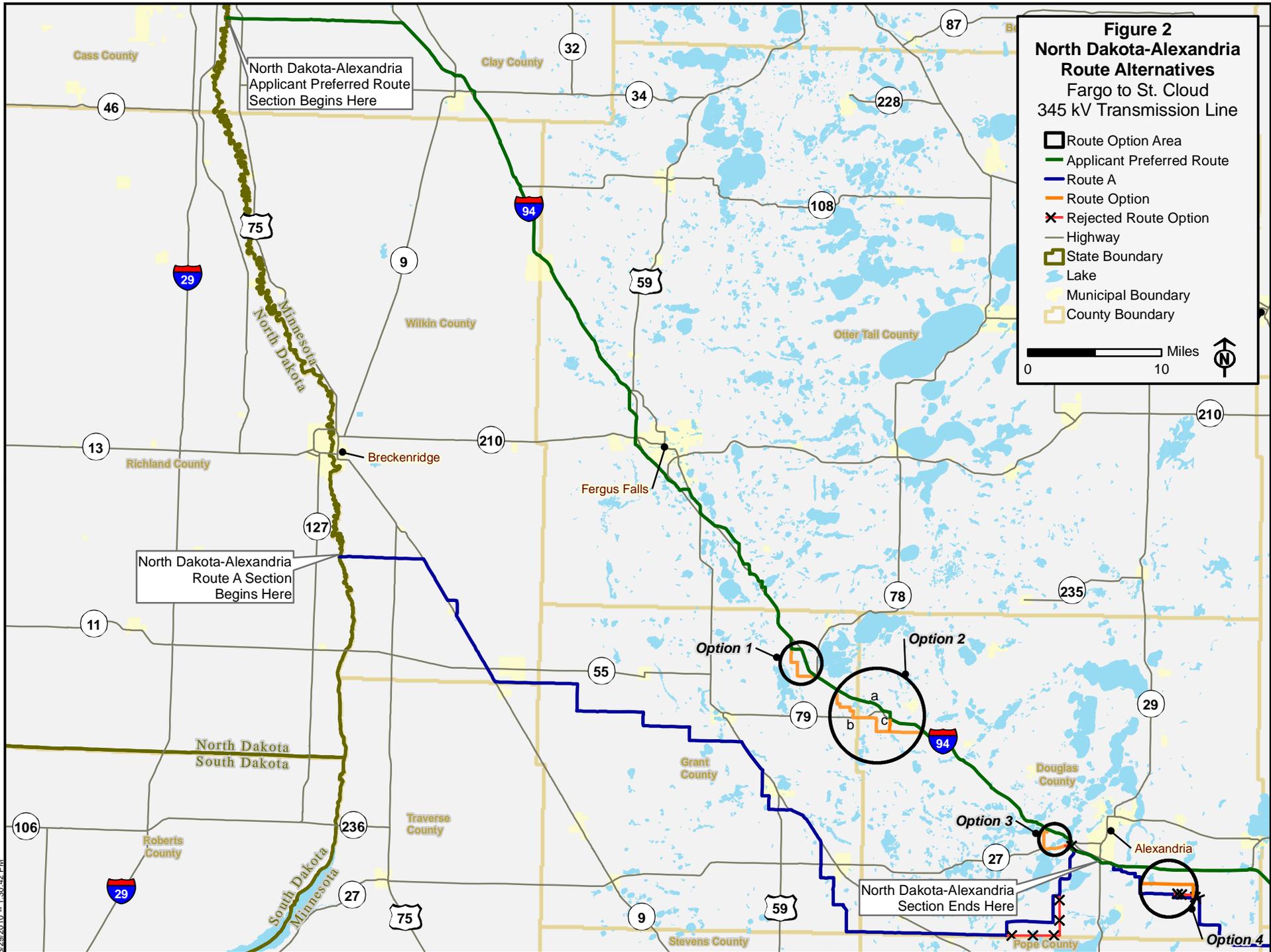
Option 2c is approximately one mile in length and is an alternative connection between the Applicant Preferred Route and Alternate Route A. Several commenters suggested this option to avoid building sites. The OES determined that Option 2c as identified on Figure 2 is a viable option and will be carried forward in the EIS.

Option 3

Option 3 (presented in the Application as Preferred Route Segment Alternative 3) is approximately 4 miles in length and is shown in Figure 2. Option 3 deviates from the Applicant Preferred Route in an area just west of Alexandria to avoid an area confined by an existing lake on both sides of I-94, lakeshore residences, an existing 115 kV electrical transmission line, and a pipeline all immediately adjacent to the I-94 right-of-way. The OES determined that Option 3 as identified on Figure 2 is a viable option and will be carried forward in the

Eliminated Options in Fargo to Alexandria

Two public comments suggested an option that deviates from Alternate Route A on the Douglas and Pope County border. This option is identified on Figure 2 and was eliminated from further consideration in the EIS because of the degree of likely impacts to wetlands and homes in the area.



Alexandria to Sauk Centre

The Alexandria to Sauk Centre area will also analyze the Applicant Preferred Route and Alternate Route A. The Applicant Preferred Route parallels I-94 for approximately 25 miles. Alternate Route A deviates south of the Applicant Preferred Route just south of Alexandria and travels in a easterly direction where the proposed transmission line would cross I-94 again just east of State Highway 4 in Stearns County. There are also four route option areas that will be analyzed in the Alexandria to Sauk Centre portion of the project.

Option 4

Option 4 is approximately 5 miles long and is shown on Figure 3. This option was suggested in a public comment as an alternative to a portion of Alternate Route A. The OES considered the comment and determined that Option 4 as identified on Figure 3 is a viable option and will be carried forward in the EIS because it would provide the opportunity to place the transmission line further away from existing homes and would have fewer wetland impacts.

Option 5

Option 5 is approximately 3 miles long and is shown on Figure 3. This option was suggested by a property owner in the area and it slightly deviates from the Applicant Preferred Route. The proposed option would avoid cutting through a farm in the area. The OES determined that the Option 5 as identified on Figure 3 is a viable option and will be carried forward in the EIS.

Option 6

Option 6 (presented in the Application as a Preferred Route Segment Alternative) is approximately 1.5 miles long and is shown on Figure 3. Option 6 allows for a transition between the Preferred Route and Alternate Route A so that the west and east sections of the routes can be combined to form new routes in the route selection process. The OES determined that the option identified on Figure 3 is a viable option and will be carried forward in the EIS.

Option 7

Option 7 is approximately 2 miles long and is shown on Figure 3. The option suggested in this area slightly deviates from Alternate Route A. The suggested option was proposed because it would avoid homes in the area. The OES determined that the option identified on Figure 3 is a viable option and will be carried forward in the EIS.

Eliminated Options in Alexandria to Sauk Centre

Two suggestions from the public in the Option 4 area were reviewed and eliminated from further consideration (see Figure 3). These two suggested route options would either impact more homes or wetlands than Option 4.

Sauk Centre to St Cloud

The Sauk Centre to St Cloud area will analyze nine Routes which include the Applicant Preferred Route and the Alternate Route A. Six of the eight routes being analyzed were developed through the ATF process. One of the routes being analyzed was an Applicant proposed route segment that is now being considered a route because of its size. The Sauk Centre to St Cloud Area will also analyze four route option areas. The routes and options are discussed below.

Applicant Preferred Route

The Applicant Preferred Route would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of APP1, APP 2, APP 3, AAP4, and APP 5 make up the Applicant Preferred Route (APR).

Alternate Route A

Alternate Route A would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments A1, A2, and APP 5 make up Alternate Route A.

Route B

Route B (presented in the ATF report as ATF Group 1 Alternative 2) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments A1, B1, B2, B3, B4, and B5 make up Route B.

Route C

Route C (presented in the ATF report as ATF Group 4 Alternative 1) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, APP2, APP3, C1, B3, B4, and B5 make up the Route C.

Route D

Route D (presented in the ATF report as ATF Group 1 Alternative 1 which has an above and partially underground component) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, APP 2, D1, B2, B3, B4, and B5 make up the Route D.

Portions of Route D would be analyzed for impacts that may occur if the transmission line were constructed underground. The underground segments through Freeport and Albany are each approximately 1.5 miles long. At Avon, the route goes underground between Big Spunk Lake and Middle Spunk Lake and briefly turns northeast for approximately 3.5 miles, and then turns southeast again paralleling County Road 122 to skirt Collegeville and the western and southern city limits of St. Joseph. It rejoins the I-94 corridor south of St. Joseph and goes back above ground until terminating south of the city at the proposed Quarry Substation location in St. Joseph Township. The transmission line would be underground for approximately 10 miles from Avon to St. Joseph.

Route E

Route E (presented in the ATF report as Applicant Preferred Route Segment Alternative 1) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, APP 2, E1, E2, E3, E4, and E5 make up the Route E.

Route F

Route F (presented in the ATF report as ATF Group 2 Alternative 1) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, APP 2, E1, E2, F1, and B5 make up the Route F.

Route G

Route G (presented in the ATF report as ATF Group 3 Alternative 1) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, APP 2, E1, G1, G2, E4, and E5 make up the Route G.

Route H

Route H (presented in the ATF report as ATF Group 3 Alternative 2) would begin just east of the intersection of State Highway 4 and I-94. The route would consist of a combination of segments identified on Figure 4. The combination of segments APP1, H1, G2, E4 and E5 make up the Route H.

Option 8

Option 8 is approximately 0.5 mile long and was suggested by a property owner to avoid an area that may be used for a future feedlot expansion on his property. Setback limitations to wetlands and city limits prohibit the property owner from expanding his feedlot to the east. The OES determined that the segment identified on Figure 4 will be carried forward in the EIS because it would avoid the placing the transmission line in an area that may be used for future development by the City of Melrose and there would be fewer wetland impacts.

Option 9

Option 9 is approximately 5 miles long and is shown on Figure 4. OES analyzed this option and decided to carry it forward in the EIS as it takes advantage of existing railroad ROW.

Option 10

Option 10 option is approximately 1.5 miles long. A commenter suggested a slight deviation from the Alternate Route A in this area to avoid his farm. OES evaluated this option and found it to be a viable option to carry forward in the EIS.

Option 11

Option 11 is approximately 3 miles long. A commenter suggested a deviation from Route E (Formerly Applicant Preferred Route Segment Alternative 1) to avoid homes in the area. OES evaluated this option and found it to be a viable option to evaluate in the EIS.

Option 12

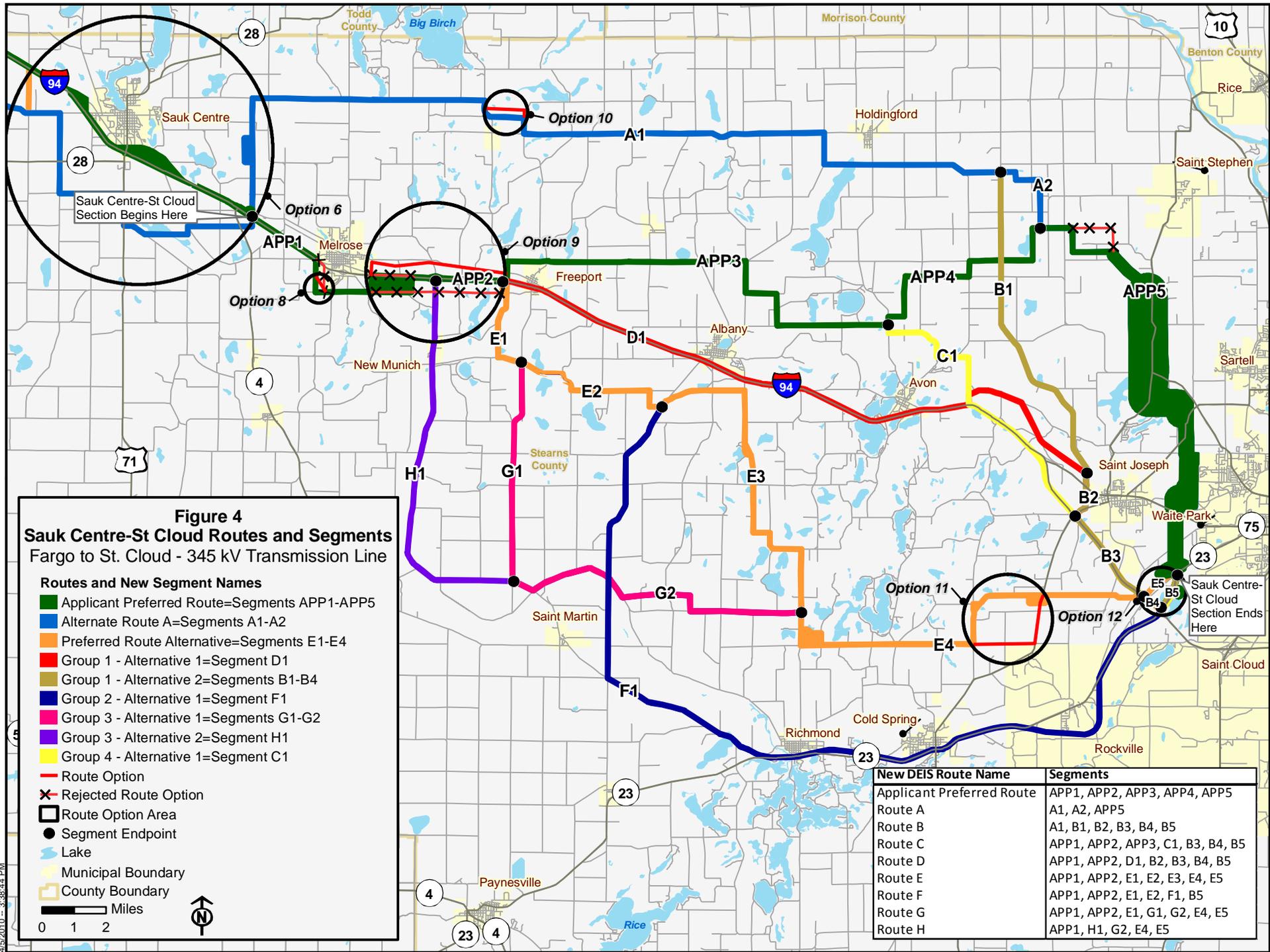
Option 12 area consists of segments B4, B5, and E5. These segments are shown on Figure 4. B4 and B5 measure approximately 2 miles in length and E5 is approximately 1 mile in length. This option was developed to provide the ability to compare segments in this area.

Eliminated options in Sauk Centre to St Cloud

A commenter suggested two deviations from the Applicant Preferred Route in the Option 8 area. One of the suggested options was eliminated because it had a greater potential for impacts to wetlands and possible future development by the City of Melrose.

Several commenters in the in the Option 9 area suggested route options that deviated from the Applicant Preferred Route. One of the suggested options was eliminated because it passed over a lake and would impact homes in the area.

A commenter suggested an option that deviated from the Applicant Preferred Route in the St. Stephen area. This option was eliminated because there would be impacts to forested wetlands and homes in the area.



VII SUMMARY ROUTES AND OPTIONS TO BE ANALYZED IN THE EIS

Table 1 provides a summary of the routes to be analyzed in the EIS. This table also identifies the titles that will be used for each of the routes in the EIS.

Table 1. Routes to be Analyzed in the EIS

Existing Title	Title in EIS
Applicant Preferred Route	Applicant Preferred Route
Alternate Route A	Route A
ATF Group 1 Alternative 2	Route B
ATF Group 4 Alternative 1	Route C
ATF Group Alternative 1 underground/above ground	Route D
Applicant Preferred Route Segment Alternate 1	Route E
ATF Group 2 Alternative 1	Route F
ATF Group 3 Alternative 1	Route G
ATF Group 3 Alternative 2	Route H

Table 2 provides a summary of the options to be analyzed in the EIS. This table also identifies where the options are located within the project area.

Table 2. Options to be Analyzed in the EIS

Option Location	Option number
Fargo to Alexandria	1, 2a, 2b, 2c, and 3
Alexandria to Sauk Center	4, 5, 6, and 7
Sauk Center to St Cloud	8, 9, 10, 11, and 12

The analysis will include 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 and route option with respect to reasonable transmission line rights of way within each route. In some cases, these rights of way will primarily consist of the centerline of the proposed route, while in other cases the rights of way will be influenced by the presence of pre-existing infrastructure within the route, such as roadways and transmission lines. This approach will result in an informed decision on the potential for the route alternatives to provide the ability to construct and operate a transmission line that avoids or minimizes social, economic, and environmental impacts.

IX. REQUIRED PERMITS AND APPROVALS

The EIS will include a list 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. The manner in which land owners are paid for transmission rights of way easements, as that is outside the jurisdiction of Public Utilities Commission.

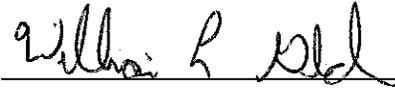
XI. SCHEDULE

Following is the intended schedule:

- Beginning of August 2010 - Draft EIS available
- End of August 2010 - Draft EIS public meetings
- October 2010 - Final EIS available

Signed this 15th day of April, 2010

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE
OFFICE OF ENERGY SECURITY



William Glahn, Director