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- **Minnesota Department of
Commerce**

Monticello to St. Cloud 345 kilovolt (kV) Transmission Line Advisory Task Force Report

PUC Docket No. ET-2, E-002/TL-09-246

September 2009

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Introduction

On April 8, 2009, Great River Energy and Xcel Energy (Applicants) submitted a route permit application to the Minnesota Public Utilities Commission (Commission) for a 345 kilovolt (kV) transmission line from an existing Monticello, Minnesota substation to a new Quarry Substation located west of St. Cloud, Minnesota (project). The proposed project is approximately 28 miles long, depending on the final route selection, and includes construction of the new Quarry Substation, modification of the existing Monticello Substation, and a 345 kV transmission line between Monticello and St. Cloud. The applicants have identified three potential routes for the transmission line (the applicants' preferred route and two alternate routes) and have identified two possible locations for the proposed Quarry Substation. (See Appendix A for a map of the proposed alternatives).

On May 13, 2009, the Commission authorized the Department of Commerce, Office of Energy Security (OES) to establish and charge, as appropriate, an advisory task force (ATF) to assist OES staff in determining the scope of the environmental impact statement (EIS) to be prepared for the proposed project. The Monticello to St. Cloud ATF was charged with: (1) reviewing the route permit application, (2) identifying specific impacts and issues of local concern to be assessed in the EIS, and (3) identifying potential alternative transmission line routes and substations locations to be assessed in the EIS (See Appendix B).

On June 15, 2009, the OES appointed fifteen persons to the Monticello to St. Cloud ATF (See Appendix C).

Methodology

The Monticello to St. Cloud ATF met three times – June 25, July 16, and August 6, 2009. The task force, through a facilitated process, discussed the proposed project and the charge given to the task force. Task force meetings were open to the public and additional people attended to listen to the discussion.

The first task of the ATF was to determine the impacts and issues that should be evaluated in the EIS for the project. This task was the focus for the first meeting. Task force members, through small and large group discussions, identified impacts and issues. Additionally, task force members submitted “homework” identifying specific impacts and issues that would be important to consider for the project.

At the second meeting, task force member reviewed and prioritized the impacts and issues identified at the first meeting. Task force members were asked to vote as to which impacts and issues were most important. Following this prioritization, task force members took up the second part of their charge – identifying alternative routes and substation locations. Task force members broke into small “brainstorming” groups and identified alternative routes, route segments, and substation locations. The small groups then reported back to the entire task force.

At the third meeting, the task force reviewed the alternatives identified at the second meeting and discussed pros and cons of each alternative. Clarifications, corrections, and variations within a route were discussed. The task force then discussed if there was strong support for one or several route(s), route segment(s), or substation locations, such that the task force wanted to indicate a preference or recommendation

The task force's work was captured in meeting notes recorded on flip charts by the meeting facilitator. Meeting notes and supporting materials for all meetings are available on-line: <http://energyfacilities.puc.state.mn.us/resource.html?Id=24571>

Impacts and Issues to Evaluate

Task force members identified impacts and issues by responding to the following question: "What land use planning or other impacts and issues need to be considered in the evaluation of proposed transmission line routes and/or sub-station locations?" The task force identified and prioritized seven impacts and issues to be evaluated in the EIS (See Appendix D).

Top priority impacts and issues to consider were:

- Minimize transportation corridor impacts
- Impacts on environmental features (wood, river, wetlands)
- Impacts to future residential and commercial development
- Conform to zoning and land use plans

Other important impact and issues to consider were:

- Cost impact
- Restate the need at every step in the process
- Impact of stray voltage

Transportation Corridor Impacts

The task force member representing the Minnesota Department of Transportation (MnDOT) made a brief presentation on MnDOT's role in the route permitting process to assist task force members in better understanding potential transportation corridor impacts. It was noted:

- MnDOT has a Utility Accommodation Policy (UAP) that provides guidance for utility permitting and installations on the trunk highway rights of way. Most utilities are allowed longitudinal installations and crossings by permit on roads that do not have access control (non-freeway sections). Interstates (such as I-94) are governed by federal regulation in addition to the state's UAP and typically do not allow longitudinal installations within the right of way. Variations from the state's UAP require an exception from the Federal Highway Administration (FHWA).

- MnDOT is trying to apply its policies consistently across all of the CapX 2020 transmission line projects within Minnesota.
- MnDOT concerns related to permitted utility installations and crossings include safety, maintenance, roadway expansions, cost, and scenic byways.

Identification and Review of Substation Locations, Alternative Routes, and Route Segments

The task force identified two alternative substation locations, and four alternative routes for consideration in the EIS. (See Appendix E for a map of the specific ATF generated alternatives). The task force reviewed the alternatives generated by the ATF and the applicant’s proposed routes, and identified pros and cons for each. Pros and cons for each alternative (keyed to map names where appropriate), as well as task force discussion, are noted here:

Substation Locations Reviewed

The applicant noted that the substation required for the 345 kV lines would have a footprint of approximately 15 acres. Further, the applicant noted it would likely require additional acres to be used as a buffer around the substation, for a total of approximately 40 acres.

Applicant Quarry Substation siting area – Alternative 1 – estimated area of 87 acres

Pros

- Area not currently populated
- Ability to plant a tree buffer in the 40 acres
- Roadway buffer – Hwy 23
- 40 acres available for buffer
- Shortest straight line distance between Monticello and St. Cloud
- On 115 kV line – comment provided by Xcel representative

Cons

- Four routes impacted out of five proposed for southwest beltway around St. Cloud and Waite Park
- Planned for single family housing in Comprehensive Plan
- Impacts mobile home park – Bel Clar Acres; environmental justice issue

Applicant Quarry Substation siting area – Alternative 2 – estimated area of 290 acres

Pros

- Area not currently populated
- Ability to plant a tree buffer in the 40 acres
- Roadway buffer – Hwy 23

- 40 acres available for buffer
- On 115 kV line – comment provided by Xcel representative

Cons

- Four routes impacted out of five proposed for southwest beltway around St. Cloud and Waite Park
- Planned for single family housing in Comprehensive Plan

ATF alternative substation siting area – Alternative Group 4 – 1: estimated area of 15 acres

Pros

- Natural buffers on three sides: Interstate 94, county road, and wetlands
- Area not populated in near future or planned for any development
- Limited development options
- Proposed line crosses close to site

Cons

- Need to run four power lines into the site
- Rockville development under ½ mile away
- Minimum and/or restrictive acreage
- Narrow lot
- Additional cost incurred by running 115 kV line to reach substation
- Potential for construction costs to be greater because of smaller site; don't know if substation could fit on site

ATF alternative substation siting area – Alternative Group 4 – 2: estimated area 15 acres, currently an existing distribution substation

Pros

- Close to proposed transmission line going toward Fargo
- Co-location with existing substation
- Eliminates problems with Quarry Substation siting areas

Cons

- Transmission line will have to run a long distance to reach substation
- Residential area impacted by lines coming into substation
- Smaller size of land area; may lose natural buffer
- On flyway, potential bird kill
- Close to river; impact on proposed Wobegon Trail

Transmission Line Routes Reviewed

Applicant preferred route

Pros

- Shortest route in miles
- Less impact on development for city of St. Augusta

- Natural buffer between residents and powerline along Interstate 94 (I-94), depends upon location along I-94
- Impacts least amount of agriculture area of the three routes proposed by applicant
- Least cost

Cons

- Number of times the route crosses I-94
- Impacts other cities along I-94 for commercial development
- Does not take advantage of already existing transmission line corridors
- Impact along Highway 23; limits development in the area south of Waite Park
- Higher number of residences impacted
- Limit future service road expansion in the area; especially along I-94
- Eliminates the potential for light rail along I-94
- Viewshed along I-94; scenic by-way, roughly 62,000 car per day use route
- Impacts flyways, possible bird kill
- Comment on other alternative ways to generate power for St. Cloud area – this is more of a need issue and need has already been determined

Applicant alternative route A

Pros

- Reduces impact on I-94
- No Mississippi River crossings

Cons

- Longer than preferred route
- Lower percentage of use of existing right of way
- Highest percentage of agriculture land area impacted
- As the route moves south of I-94 it impacts residential and commercial development in the area
- More costly
- Follows highways that may impact future development and/or future housing
- Destroys integrity of townships along the way; impacts housing, development options, agriculture, recreation, open space, and businesses
- Does not use existing right of way (utility and roadway) for much of route
- Impact on development along County Road 137
- Route impacts area identified for future residential development

Applicant alternative route B

Pros

- No impact on I-94

Cons

- Of applicant's proposed routes, crosses most areas of wetlands and woods
- Longer than preferred route
- Lower percentage of use of existing right of way

- Highest percentage of agriculture land area impacted
- As the route moves south of I-94 it impacts residential and commercial development in the area
- More costly
- Follows highways that may impact future development and/or future housing
- Destroys integrity of townships along the way; impacts housing, development options, agriculture, recreation, open space, and businesses
- Does not use existing right of way (utility and roadway) for much of route
- Impact on development along County Road 137
- Route impacts area identified for future residential development

ATF alternative route segment to Applicant route B – Group 3, Alt. 2

Pros

- Follows Highway 39 right of way
- Straighter than Applicant route B

Cons

- Crosses areas of wetlands and woods
- Longer than preferred route
- High percentage of agriculture land area impacted
- As the route moves south of I-94 it impacts residential and commercial development in the area
- More costly
- Follows highways that may impact future development and/or future housing
- Destroys integrity of townships along the way; impacts housing, development options, agriculture, recreation, open space, and businesses

ATF alternative route – Group 3, Alt. 3 original (this route later modified by the ATF; see below. Working maps available on the ATF website:

<http://energyfacilities.puc.state.mn.us/resource.html?Id=24571>)

Pros

- Follows existing powerline
- Second least amount of agriculture land of all routes
- Second shortest route of all routes
- Least residential impact
- Least amount of impact to I-94 and MnDOT
- Avoids problems with applicants route

Cons

- May go through city of St. Augusta and impact water, sewer, and development options (could tie into I-94 preferred route just before St. Augusta to address this issue)
- Most impact on center pivot irrigation systems
- Two Mississippi River crossings

ATF alternative route – Group 4, Alt. 1

Pros

- Highest portion of existing use right of ways
- Second least amount of impact on residents
- Avoids I-94 issues at Monticello, Silver Creek, and Clearwater
- Addresses issues on applicant's routes
- Uses portion of existing power line right of way
- Two river crossings; at already existing transmission line river crossing sites

Cons

- Two river crossings; at already existing transmission line river crossing sites
- Impacts development planning and options in Waite Park area along Highway 23

Note: portions of this line are out of the area contacted by the applicant to review and comment on the transmission line; some area townships, towns, and other entities have not been notified of potential impact.

ATF alternative route – Group 4, Alt. 2 (may follow Highway 10 corridor through Becker and Clear Lake)

Pros

- High usage of existing corridors
- Highway 10 rules around accommodating transmission lines in right of way are more accommodating and flexible
- Affects less agriculture land
- Uses existing river crossings for Mississippi River
- Avoids problems of applicant routes

Cons

- Mississippi River crossings
- Large number of impacts on center pivot irrigation systems
- Impacts on historical sites
- Impacts airport – Clear Lake
- Impacts Waite Park development options and plans at it leaves I-94 and follows Highway 23
- Impact existing urban areas in Big Lake and Clear Lake
- Impacts rail line; Northstar Corridor

Selection of a Preferred Alternative Route

The task force considered whether there were any routes that they would like to single out and prioritize. After discussion, the task force voted 7 in support, 1 opposed, and 2 abstaining to prioritize the **ATF alternative route – Group 3, Alt. 3 with modifications**.

The modifications include:

- shift the route moving east to west to the Applicant's Preferred Route at a point where the two routes intersect close to the border between Lynden Township and Saint Augusta and then follow the Applicant's Preferred Route to the Applicant identified substation; and
- use the existing Mississippi River crossing in the southern part of Haven Township and then connect to the Applicant Preferred Route along I-94

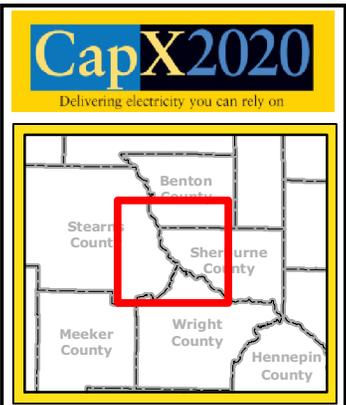
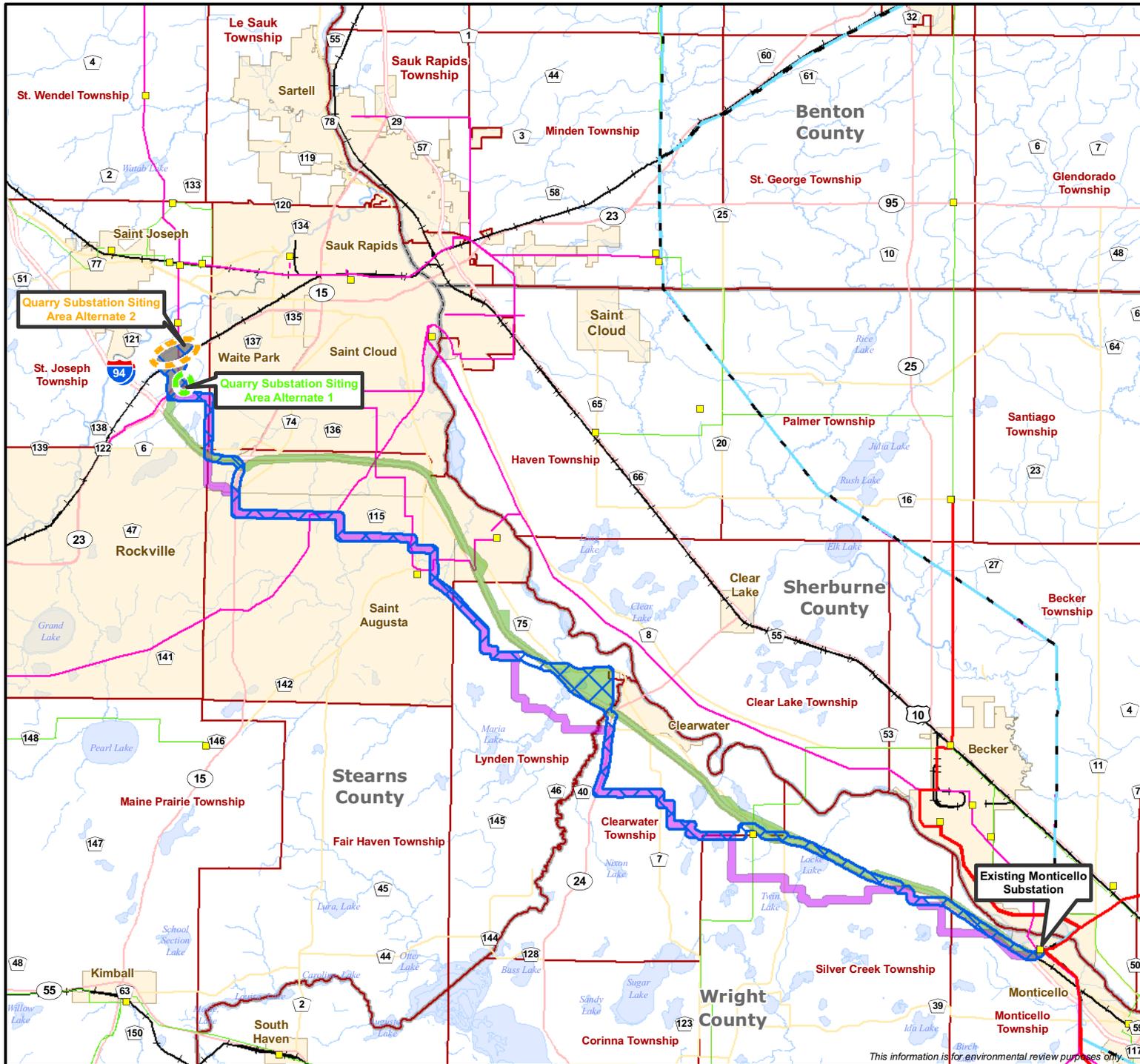
The task force noted that all route and substation alternatives identified by the ATF should be carried forward.

Conclusions

- 1. Study the preferred alternative route (ATF alternative route – Group 3, Alt. 3 with modifications) in the EIS and consider the other alternative routes and substation locations identified by the task force.** A great amount of effort and thought went into the creation of the task force's alternative substation locations and alternative transmission line routes. The task force worked hard and found agreement around a particular transmission line route, and this route should be reviewed in the EIS. Additionally, the other routes and locations identified by the ATF are options that should be evaluated for inclusion in the EIS.
- 2. All impacts and issues identified by the task force are important.** The impacts and issues identified by the task force are all important and should be evaluated in the EIS. The prioritization of impacts and issues performed by the task force may be helpful in guiding OES staff in the development of the EIS, but is not intended to diminish the importance of all impacts and issues raised and discussed by the task force.

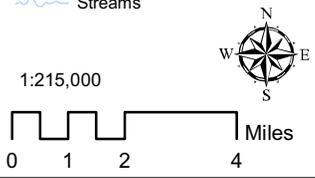
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Legend

- Preferred Route
 - - - Alternate Route A
 - - - Alternate Route B
 - Existing Substation
 - - - Quarry Substation Siting Area Alternate 1
 - - - Quarry Substation Siting Area Alternate 2
- Existing Transmission Line (kV)**
- 345
 - 230
 - 115
 - 69
- Township
 - Municipal Boundary
 - Lakes
 - ~ Streams



Proposed Routes

**Monticello to St. Cloud
345 kV Transmission Line**

DATE: 07/21/09 REVISED: 07/21/09

DRAWN BY: MLTeichert

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This information is for environmental review purposes only.



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

**MONTICELLO TO ST. CLOUD
ADVISORY TASK FORCE
DECISION AND CHARGE
PUC Docket E002, ET2/TL-09-264**

MONTICELLO TO ST. CLOUD ADVISORY TASK FORCE AUTHORIZATION

The above-entitled matter has come before the Office of Energy Security (OES) Director for a decision on the appointment of an advisory task force (ATF) to advise the Public Utilities Commission (Commission) on the application by Xcel Energy and Great River Energy for a route permit for the Monticello to St. Cloud 345 kV Transmission Line Project (Project).

As authorized by the Commission, the OES is establishing an Advisory Task Force by this Order to assist in identifying impacts and route alternatives to be evaluated in the environmental impact statement (EIS) prepared by OES Energy Facilities Permitting (EFP) staff for the proposed Monticello to St. Cloud 345 kV Transmission Line Project.

OES herein charges the ATF members to:

1. Become familiar with the proposed Project by reviewing the HVTL Route Permit application;
2. Assist in determining specific impacts and issues of local concern that should be assessed in the EIS by adding detail to the draft Scoping Document;
3. Assist in determining potential route alternatives that should be assessed in the EIS.

ATF members have been solicited, as required by Minn. Stat. 216E.08, Subpart 1, from the following governmental units:

County	Stearns
County	Wright
City	Clearwater
City	Monticello
City	Rockville
City	St. Augusta
City	St. Cloud
City	Waite Park
Township	Clearwater
Township	Lynden
Township	Monticello
Township	Silver Creek
Township	St. Joseph
Federal Government	FHWA
State Government	MnDOT

The ATF will comprise no more than 16 members, including possible participation of up to three citizens representing nongovernmental organizations.

ATF members will be expected to participate with OES staff in up to three meetings and to assist staff with the development of a summary of the task force's work including their preferences or recommendations, if any. Meetings will be facilitated by Management Analysis Division as engaged by OES staff.

The Monticello to St. Cloud ATF will expire upon issuance of the OES Director's EIS scoping decision.

THE DIRECTOR MAKES THE FOLLOWING ORDER

WHEREAS, the applicants submitted an application for a route permit for the Project on April 08, 2009; and

WHEREAS, Minn. Stat. 216E.08 provides for the establishment of an ATF to assist the Commission in carrying out its duties; and

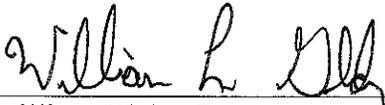
WHEREAS, in its May 13, 2009, Order the Commission authorized OES to establish an ATF and develop a structure and charge for the ATF; and

WHEREAS, Minn. Stat. 216E.08 establishes that an ATF comprise at least one representative from each county and municipal corporation, and one town board member from each county in which a route is proposed to be located;

THEREFORE, OES establishes the Monticello to St. Cloud Advisory Task Force in this matter, authorizes OES EFP to appoint members of the ATF and adopts the above determination with regard to its structure and charge.

Signed this 15th day of June, 2009

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE
OFFICE OF ENERGY SECURITY



William Glahn, Director



Energy Facility Permitting

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June 16, 2009

The Minnesota Department of Commerce (DOC) Office of Energy Security (OES) has selected the following individuals to serve as members on an Advisory Task Force (ATF) for the Monticello to St. Cloud 345 KV Transmission Line Project. The ATF will assist OES staff in developing the scope of the Environmental Impact Statement (EIS) and in determining specific impacts, issues of local concern and route alternatives that should be assessed in the EIS.

Monticello to St. Cloud Advisory Task Force

Jennifer Wothe Administrator Clearwater City	David Nelson Chairman Clearwater Township	William Lohr ROW Program Manager FHWA	Valerie K.R. Svensson Utilities Director MnDOT
Jerry Finch Supervisor Lynden Township	Bruce Westby City Engineer Monticello City	Franklin Denn Chairman Monticello Township	Rena Weber Administrator/Clerk Rockville City
John F. Jones III Chairman Silver Creek Township	Bob Kroll Mayor St. Augusta City	Matt Glaesman Development Director St. Cloud City	Matt Symalla Supervisor St. Joseph Township
Leigh Lenzmeier Commissioner Stearns County	William Barber Planning Coordinator Waite Park City	Rose Thelen Commissioner Wright County	

The ATF will meet three times, Thursday, June 25, 2009, Thursday, July 16, 2009, and Thursday, August 6, 2009. The meetings will be held in the Clearwater Town Hall from 1:00 pm to 4:30 pm. The ATF will, through a facilitated process, discuss and make recommendations to the Director of the OES in accordance with its charge. The meetings are open for viewing to the public; however, participation in the discussions is limited to members of the ATF.

The ATF will expire upon completing the above charge or upon designation by the Director of the OES of Scoping Decision for the EIS, whichever occurs first.

To learn more about the proposed project visit the project webpage at:

<http://www.energyfacilities.puc.state.mn.us/Docket.html?Id=19957>

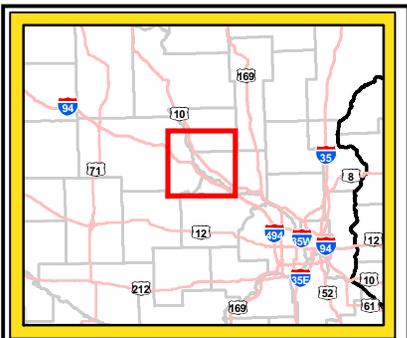
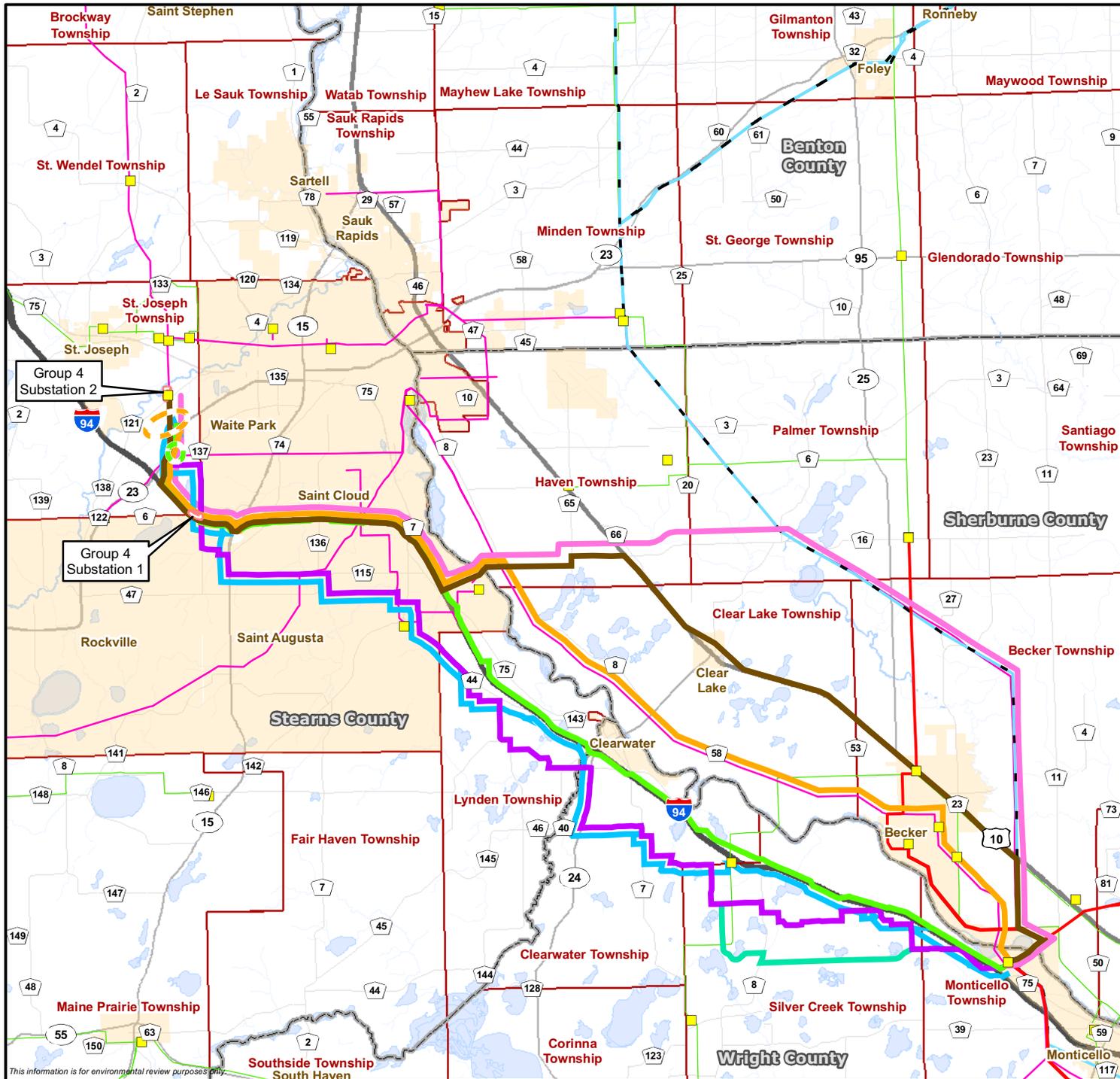
Questions about the ATF should be directed to David Birkholz (david.birkholz@state.mn.us), Department of Commerce, Office of Energy Security, 85 7th Place East, Suite 500, St. Paul, MN 55101. Telephone 651.296.2878, facsimile 651.297.7891 (TTY relay service 800.627.3529).

Monticello to St. Cloud Advisory Task Force

June 25, 2009

Identification of Impacts and Issues as prioritized - *What land use planning or other impacts and issues need to be considered in the evaluation of proposed transmission line routes and/or sub-station locations?*

Cost impact	Restate the need at every step in the process	Impact of stray voltage	Minimize transportation corridor impacts	Impacts on environmental features (wood, river, wetlands)	Impacts to future resident and commercial development	Conform to zoning and land use plans
<i>Priority Three votes</i>	<i>Priority One vote</i>	<i>Priority One vote</i>	<i>Top priority 10 votes</i>	<i>Top priority 8 votes</i>	<i>Top priority 10 votes</i>	<i>Top priority 12 votes</i>
<ul style="list-style-type: none"> ▪ Cost impact on rate payers for alternative vs. preferred ▪ Minimize cost shifting; local costs for infrastructure or other; state costs for same 		<ul style="list-style-type: none"> ▪ Stray voltage; don't raise it, prepare to respond to it 	<ul style="list-style-type: none"> ▪ Minimize transportation corridor impacts; seek input from local, regional and state agencies regarding existing and planned transportation corridors and facilities ▪ Protect township roads and right-of-way during construction; reconstruct as necessary; impacts roadway expansion ▪ Impacts on future road and interchange construction and expansion ▪ Why is 'MnDOT not easily allowing the powerline route in or near their right-of-way; land is now non-productive, 75 ft. into prime agland ▪ Impact to airport fly zone: St. Cloud, Maple Lake, Clearlake 	<ul style="list-style-type: none"> ▪ Environmental concerns ▪ Impact on water sources; this primary route runs through the City of Clearwater DWSMA, with the north side of I-94 being the emergency response areas and the south side a future emergency response area (future well site for additional development ▪ Wild and scenic river and sensitive wetland by Fish Lake, I-94 ▪ Meet regulatory requirements: environmental, permitting; scenic byway, historic and cultural, rest areas, wetlands and water resources, agricultural lands, endangered species ▪ Rural landscapes of Silver creek and Clearwater marred by zigzag line through townships ▪ Energy generation: coal versus wind 	<ul style="list-style-type: none"> ▪ Bel Clare Acres potential development area – St. Joe township ▪ Impact on underdeveloped land – industrial and other; this will impact the marketability of lands ▪ Alt. route – prime development, residential area (St. Joe Township and Waite Park – along Hwy 137 ▪ The alt. route south of Clearwater goes through a potential growth area ▪ Should locate substation to industrial area ▪ Residential and high density areas most impacted ▪ Proposed substation is right in middle of growth area 	<ul style="list-style-type: none"> ▪ Impacts to existing housing ▪ How about existing plans in the works ▪ Negative impacts on community aesthetics ▪ Agland existing right-of-ways least impact ▪ Impact on existing farming operations



Legend

Applicant Proposed Routes and Substation Siting Areas

- Preferred Route
- Alternate Route A
- Alternate Route B
- Quarry Substation Siting Area Alternate 1
- Quarry Substation Siting Area Alternate 2

ATF Proposed Routes and Substation Siting Areas

- Group 3 - Alternate 2
- Group 3 - Alternate 3
- Group 4 - Alternate 1
- Group 4 - Alternate 2
- ATF Proposed Substation Siting Areas

- Township
- Municipal Boundary
- Lakes
- Streams
- Existing Substation

Transmission Line

- 69 kV
- 115 kV
- 230 kV
- 345 kV



1:230,000



**Advisory Task Force
Alternatives**
**Monticello to St. Cloud
345 kV Transmission Line**