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- **Minnesota Department of
Commerce**

North Rochester to Mississippi River Advisory Task Force Report

Hampton to Rochester to La Crosse 345 kilovolt (kV) Transmission Line

PUC Docket No. E002/TL-09-1448

June 2010

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Contents

Introduction	1
Methodology	1
Impacts and Issues to Evaluate	2
Identification and Review of Alternative Routes and Route Segments	3
Conclusions	8
Appendices	9

Introduction

On January 19, 2010, Xcel Energy (applicant) submitted a route permit application to the Minnesota Public Utilities Commission (Commission) for the Minnesota portion of the CapX 2020 Hampton to Rochester to La Crosse 345 kilovolt (kV) transmission line project (project). The proposed project is comprised of several sections, including a section between the proposed North Rochester Substation and the proposed Mississippi River crossing near Alma, Wisconsin, referred to here as the North Rochester to Mississippi River 345 kV section. The applicant has identified three route options for this section of the project: a preferred route, and two alternate routes (See Appendix A for a map of the applicant-proposed alternatives).

On March 16, 2010, the Commission established and charged two geographically-based advisory task forces (ATFs) to assist OES staff in determining the scope of the environmental impact statement (EIS) to be prepared for the proposed project. The North Rochester to Mississippi River ATF was charged to: (1) assist in determining specific impacts and issues of local concern that should be assessed in the EIS; and (2) assist in determining potential route alternatives that should be assessed in the EIS (See Appendix B).

On April 23, 2010, the OES appointed seven persons to the Hampton to Northern Hills ATF (See Appendix C).

Methodology

The North Rochester to Mississippi River ATF met three times – April 28, May 12, and June 3, 2010. 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 general impacts and issues.

At the second meeting, task force members reviewed and prioritized the general impacts and issues identified at the first meeting. Members were asked to vote as to which impacts and issues were most important. Task force members then took up the second part of their charge – identifying alternative routes for the transmission line. The task force “brainstormed” and worked collectively to identify alternative routes and route segments.

At the third meeting, the task force reviewed the alternatives identified at the second meeting in the context of the impacts and issues discussed in meetings one and two. The task force listed pros and cons of each alternative. Clarifications, corrections, and variations within a route were discussed. The task force then discussed if there were any routes or route segments proposed by the ATF that the members wanted to remove from consideration. None were removed.

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 online: <http://energyfacilities.puc.state.mn.us/resource.html?Id=26582>

Task force participation fluctuated between the three meetings from as few as four members present to as many as seven members present. The attendance for the three meetings was as follows:

Meeting #1

Member from:

1. City of Pine Island
2. Mazeppa Twp.
3. Highland Twp.
4. Oakwood Twp.
5. Mississippi River Parkway Commission
6. Wabasha County
7. North Route Group

Meeting #2

Member from:

1. City of Pine Island
2. Highland Twp
3. Mississippi River Parkway Commission
4. North Route Group

Meeting #3

Member from:

1. City of Pine Island
2. Highland Twp
3. Mississippi River Parkway Commission
4. North Route Group

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?” The task force identified and prioritized eight impacts and issues to be evaluated in the EIS (See Appendix D).

Priority impacts and issues to consider were:

- Environmental and natural resources: impacts nature and impacts people
- Health and safety
- Rural and agriculture land-use impacts
- Property values (under private ownership)
- Potential option from new technology
- Use existing corridors
- Conflicts with land use options
- Economic cost of construction and maintenance of line

Identification and Review of Alternative Routes and Route Segments

The task force identified four alternative routes for consideration in the EIS. (See Appendix E for maps of the specific ATF-generated alternatives). Also, the ATF discussed alternative route segments to address issues and/or concerns with some of the routes. Task force members used their own unique knowledge of the area and other local documents in developing the alternative routes.

The task force reviewed the alternatives generated by the ATF and the applicant's proposed routes, and identified pros and cons for each. This exercise was not intended to be a detailed analysis of each route but rather to determine if a route should be evaluated in the EIS. Pros and cons for each alternative (keyed to map names where appropriate), as well as task force discussion, are noted here:

Applicant preferred 345 kV route

Pros

- Uses existing corridors, both roadways and transmission lines
- Less deforestation
- Uses existing Zumbro River crossing

Cons

- Cuts through area of Pine Island planned growth (on east side)
- Health issues – impact on pace makers, etc.
- Conflicts with proposed new interchange in U.S. 52 north of Pine Island (interchange has been mapped by MnDOT and is expected to start construction in 2018)
- Culture and heritage issues: Native American mounds, graveyard, scenic area
- Impact on Gold Rush Days held in Oronoco
- Only one location for crossing of Mississippi River proposed by applicant; need to look at additional options: going underground at the river (A transmission line was placed under the St. Croix scenic riverway); additional crossing points for the Mississippi River need to be considered
[One ATF member noted that they oppose going under Mississippi River because it would not mitigate anything and would be cost prohibitive. Additionally, it would take more land on both sides of the river and maintenance costs (including blackout/brownout) would be increased.]

Applicant alternative 345 kV route

Pros

- Solves Pine Island issues, goes outside of planned growth areas

Cons

- City of Mazeppa: route crosses growth and development area for city

- Reduces future eco-tourism opportunities for City of Mazeppa
- Pine Island township concerns: takes agriculture land; route divides parcels of land; impacts future land use; farms transected (including century farm); soil compaction from construction of line and poles
- Impacts cultural and heritage area surrounding the Zumbro River
- Route is contrary to Wabasha County Comprehensive Plan
- Wabasha County concerns: economic impact; loss of tax base, thereby leading to potential tax increase; decrease in land production, where poles are placed takes land out of production; because land taken out of production and property devaluation – reduced tax base for county; reduction in property values because of proximity to line; the impact of the transmission line should not be borne by one county – counties should share burden; inability of landowners to build additional buildings/outbuildings on property because of pole and line placement
- Impacts on hydrology and sustainable development; impacts the way the watershed moves; location of poles impacts the flow of water in the area
- Health issues
- Route is contrary to Minnesota non-proliferation policy
- Impacts ski hill
- Route does not use an existing Zumbro River crossing
- Impacts Zumbro River trail; DNR trail
- Close proximity to eagle nests
- Impacts sensitive habitat: oak savannah and remnant prairie
- Impacts private landing strip in Mazeppa
- Many sinkholes in the area
- Increased deforestation caused by route
- Limited use of existing corridors
- Impacts two tree farms
- Impacts property with DNR stewardship plans (management plans for forest and wildlife)
- Economic impact on eco-tourism and proximity to camping facilities

Applicant route 345 kV line Route Option segment – West of Mississippi River

Pros

- More favorable for DNR

Cons

- Longer route
- Electromagnetic impact on wildlife
- Impact on McCarthy Lake and Blanding's turtle
- Crosses rare prairie area
- Concern of adding to existing line
- Impacts critical habitat at Weavers Dunes

Applicant route 345 kV line Route Option segment – Dam route

Pros

- Has existing infrastructure for line at Zumbro River crossing – dam

Cons

- Camp proximity and area of biodiversity noted by DNR east of Zumbro River
- Impacts two family campgrounds, would destroy the natural character of each
- Requires cutting many hardwoods
- Does not comply with Wabasha County Comprehensive Land Use Plan
- Impact on agriculture land and farming
- Does not comply with the two registered Minnesota stewardship hardwood/woodland forest plans – totaling 117.5 acres
- Impacts wildlife area, including nesting eagles
- Native conifer – white pines present in route area

ATF alternative 1 – combines 345 kV and 161 kV lines for a majority of route

Pros

- Stays out of Pine Island growth area; route follows east side of city growth area

Cons

- Area has not been mapped or studied for transmission line route(s)
- Impacts Gold Rush days in August in Oronoco (One held at fairground in Rochester but the other is in Oronoco)
- Impacts outdoor recreation for Lake Zumbro and Zumbro River; impacts cabins in the area
- Sinkholes in the area; impact of unsteady ground on pole placement and cost
- Impacts farms in area still using top water aquifer
- Impacts watershed for North Fork of North Branch of Zumbro River
- Impacts multiple farms in the area
- Route transects century farm (at point where ATF alternative 1 parallels Applicant Alternative Route and then turns south – impacts east boundary of farm)
- Impacts another century farm (on east border of route)
- Impacts old stagecoach route on north/south portion of line (stagecoach line was Mantorville to Rochester to Wabasha line)
- Impacts small private cemetery (close to east corner of route where it turns south)

ATF alternative 2 – combines 345 kV and 161 kV lines for a majority of route

Pros

- Portion of route has already been studied for 161 kV applicant-preferred route
- Impacts Pine Island growth area but only in its 20-year-plus projections
- Combines 345 kV line and 161 kV line for a good portion of route – less visual impact
- Avoids two dairy farms and milking parlors

Cons

- Area has not been mapped or studied for transmission line route(s)
- Impacts Gold Rush days in August in Oronoco (held at fairground in Rochester)
- Impacts multiple farms in the area
- Does not use existing corridors (it partially follows corridors of applicant-preferred 161 kV route and County Highway 11)
- Area residents have not been notified of transmission line option

ATF alternative 3 – combines 345 kV and 161 kV line for first half of route

Pros

- Portion of route has already been studied for 161 kV applicant-preferred route
- Impacts Pine Island growth area but only in its 20-year-plus projections
- Combines 345 kV line and 161 kV line for a good portion of route – less visual impact
- Avoids two dairy farms and milking parlors

Cons

- Area has not been mapped or studied for transmission line route(s)
- Impacts Gold Rush days in August in Oronoco (held at fairground in Rochester)
- Impacts multiple farms in the area
- Does not use existing corridors (it partially follows corridors of applicant-preferred 161 kV route and County Highway 11)
- Area residents have not been notified of transmission line option
- More residents are impacted
- Deforestation in Dry Creek area
- 345 kV route (where it splits from where it is coupled with the 161 kV line) is new, unstudied ground

ATF alternative 4

Pros

- Uses existing corridor – follows U. S. 52
- Eliminates spraying for plants underneath lines
- Area along highway is part commercial and part industrial

Cons

- Impacts proposed north interchange in Pine Island (interchange has been mapped by MnDOT and is expected to start construction in 2018)
- Impacts residences along U.S. 52; they have not been notified of transmission line option
- Impacts cemetery
- Impacts waste treatment plant for Pine Island
- Route goes close to North Branch of Zumbro River
- Along U.S. 52 – one side has cliffs with houses, and the other side is in a flood plain
- Erosion issue along U.S. 52
- This route does not have an end point for 345 kV line after it ends on U.S. 52
- Impacts environmentally sensitive area – Middle Fork North Branch of Zumbro River

New alternative route segments

The ATF members identified and discussed four segments to various routes proposed. The segments include:

ATF alternative 5 (shown on map)

On applicant-preferred 345 kV route: at quarter mile west of where route turns south (where it meets Dam route option meets and goes east); angle route south along lot line and when lot line intersects with 510 street angle to applicant's preferred route about one-half mile south of existing turn.

Combine 345 kV and 161 kV lines (where applicant preferred 345 and 161 kV routes create a "box" between Zumbrota and Pine Island)

Combine 345 kV and 161 kV lines where applicant's preferred routes for both 345 kV and 161 kV exit at southeast corner of substation location rectangle; a square box is formed. The 345 kV route goes east, and the 161 kV route goes south (following existing 345 kV transmission line), and then each route turns at a 90-degree angle and cross again at U.S. 52. Either option (northeast or southwest of square) would reduce the footprint of the route. Both options should be studied. It was noted by an ATF member that a DNR sensitive area is in close proximity to the southwest portion of this segment.

Extend ATF alternative 4

Extend ATF alternative 4, 345 kV route from the end point identified to follow proposed County Road 12 as it extends east of the new interchange and connect up with applicant preferred 345 kV route where proposed County Road 12 crosses that route.

Continue Dam Route Option east to Hwy 21 then go south

Continue the Dam Route Option east of Highway 21, then go south and follow existing 69 kV transmission line to meet Applicant Preferred Route. This route segment would not cross the Zumbro River at the dam and would avoid camps and high biodiversity area east of Zumbro. Further, it uses an existing transmission line. However, it would add more transmission line in Wabasha County.

These new alternative route segments were developed at the end of the third meeting and in reviewing meeting notes. The ATF did not discuss pros and cons of the new alternative routes because of limited time.

Conclusions

- 1. Study all of the alternative line routes and route segments identified by the task force.** A good amount of effort and thought went into the creation of the task force's alternative transmission line routes and route segments. The task force recommends that all alternatives be carried forward in the EIS process with the pros and cons identified by the task force.
- 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.

Appendices

A – Project overview map

B – Advisory Task Force charge

C – ATF members notice of appointment

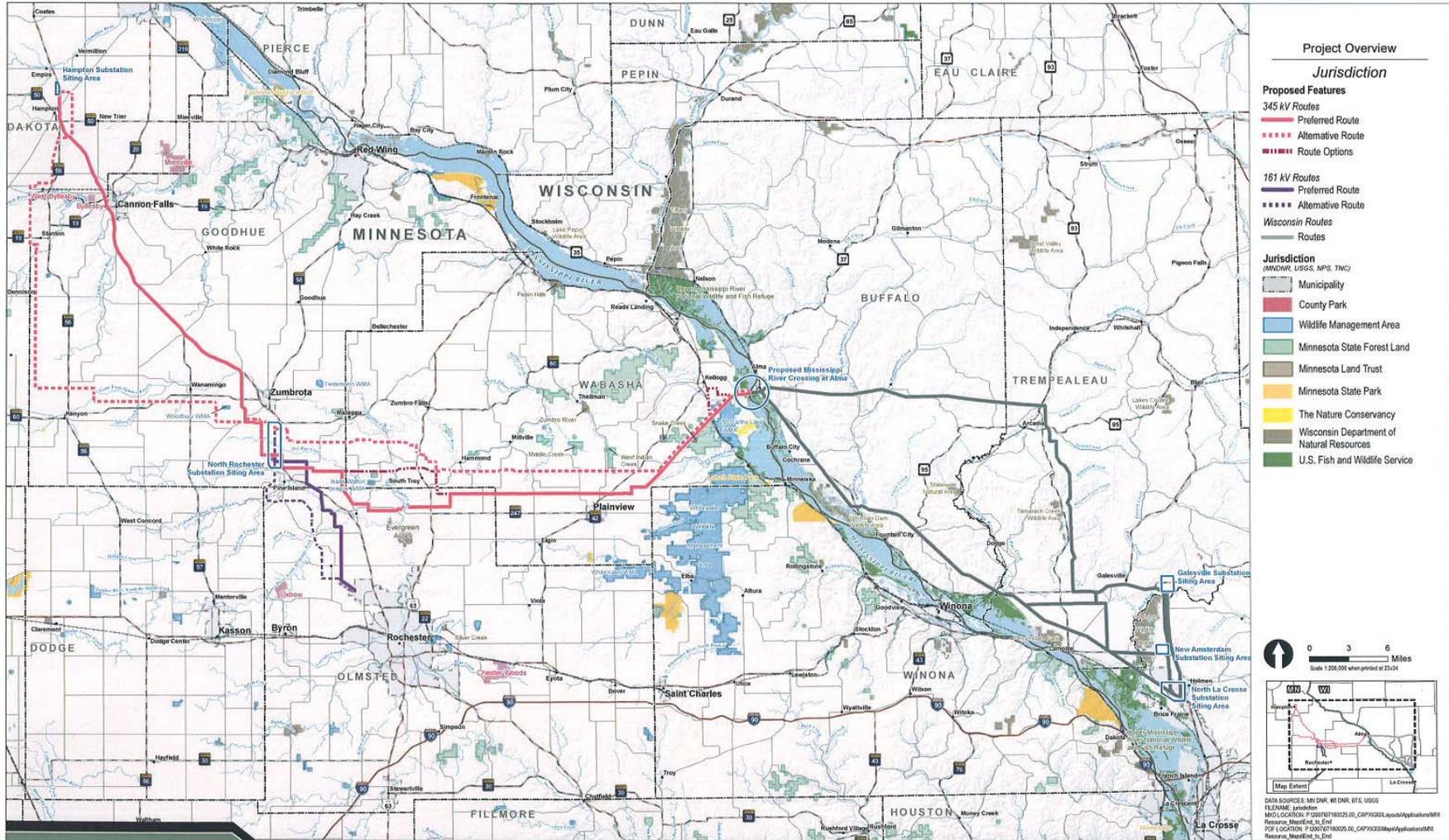
D – Impacts and Issues Table

E – Maps of Alternatives Identified by ATF

E.1 – Map of routes

E.2 – Map with greater detail (Zumbrota, Pine Island, and Oronoco area)

Appendix A – Applicant-proposed Alternatives



CapX2020

Hampton • Rochester • La Crosse 345 kV Transmission Project

Jurisdiction Project Overview
 MN Route Permit Application

1.0-1: Project Overview



**In the Matter of the CapX 2020 Route
Permit Application for a 345 kV and 161 kV
Transmission Line Project from Hampton
to Rochester to La Crosse, Wisconsin in
Dakota, Goodhue, Olmsted and Wabasha
Counties**

**CAPX 2020 HAMPTON-ROCHESTER
-LA CROSSE
ADVISORY TASK FORCES
DECISION AND CHARGE
PUC Docket E002/TL-09-1448**

**CAPX2020 HAMPTON-ROCHESTER-LA CROSSE
ADVISORY TASK FORCES AUTHORIZATION**

The above-entitled matter has come before the Office of Energy Security (OES) Director for a decision on the appointment of advisory task forces (ATF) to advise the Public Utilities Commission (Commission) on the application by CapX2020 route permit for the Hampton to Rochester to La Crosse 345 kV and 161 kV Transmission Line Project (Project).

As authorized by the Commission, the OES Director is establishing Advisory Task Forces 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 Hampton-Rochester-La Crosse Transmission Lines Project. One Task Force would focus on the area between the Hampton Substation and the Northern Hills Substation; and another Task Force would focus on the area between the North Rochester Substation and the Mississippi River crossing in Wabasha County. Combined, the two Task Forces would include representatives (as listed below) along the entire length of the project from the Hampton Substation in Dakota County to the Mississippi River crossing in Wabasha County.

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

Hampton to Northern Hills Advisory Task Force

County	Dakota
County	Goodhue
County	Olmsted
City	Cannon Falls
City	Dennison
City	Hampton
City	Pine Island
City	Randolph
City	Rochester
City	Wanamingo
Township	To be determined
Township	To be determined
Township	To be determined

The ATF will include 13 local government members and up to an additional two representatives of governmental or nongovernmental entities, as appropriate.

North Rochester to Mississippi River Advisory Task Force

County	Goodhue
County	Olmsted
County	Wabasha
City	Kellogg
City	Pine Island
Township	To be determined
Township	To be determined
Township	To be determined

The ATF will include 8 local government members and up to two additional representatives of governmental or nongovernmental entities, as appropriate.

OES herein charges the ATF members to:

1. 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;
2. Assist in determining potential route alternatives that should be assessed in the EIS.

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 the Management Analysis Division of the Minnesota Management and Budget Office as engaged by OES staff.

The CapX2020 Hampton to Northern Hills and North Rochester to Mississippi River ATFs 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 January 19, 2010; and

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

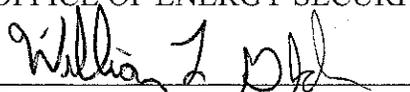
WHEREAS, in its March 16, 2010, Order the Commission authorized OES to establish ATFs and develop a structure and charge for the ATF; and

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

THEREFORE, The OES Director herein establishes the CapX2020 Hampton to Northern Hills and North Rochester to Mississippi River Advisory Task Forces, authorizes OES EFP to appoint members of the ATF and adopts the above determination with regard to its structure and charge.

Signed this 17th day of March, 2010

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE
OFFICE OF ENERGY SECURITY



William Glahn, Director

CapX2020

Executive Summary

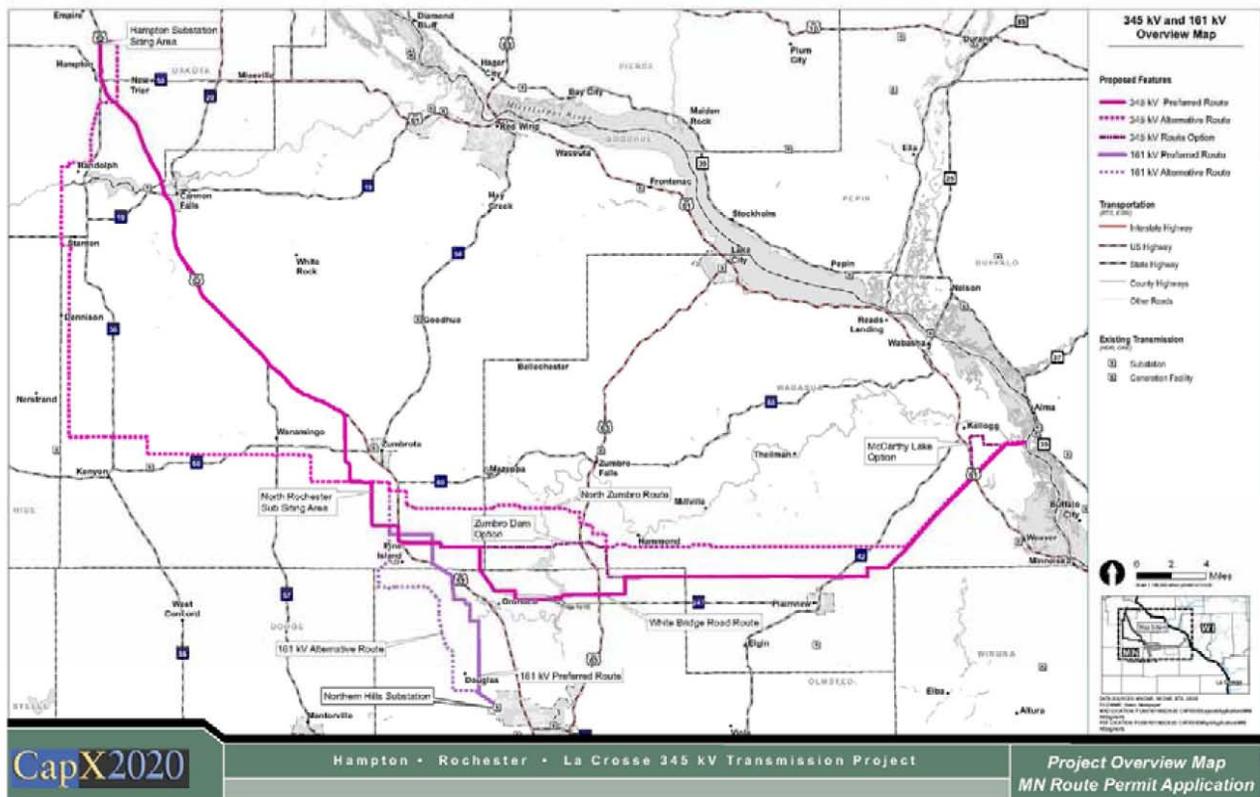


Figure ES-1: Project Overview Map
 Hampton ▪ Rochester ▪ La Crosse 345 kV Transmission Project



STATE OF MINNESOTA
Office of Energy Security



Issued: April 23, 2010
Revised: June 3, 2010

**NOTICE OF APPOINTMENT FOR THE
NORTH ROCHESTER TO MISSISSIPPI RIVER
ADVISORY TASK FORCE**

In the Matter of the Application by Xcel Energy for a Route Permit for the Hampton-Rochester-La Crosse 345 kV Transmission Line Project

PUC Docket No. E002/TL-09-1448

PLEASE TAKE NOTICE that the Minnesota Department of Commerce Office of Energy Security (OES) has appointed the following individuals to serve as members of the North Rochester to Mississippi River Advisory Task Force (ATF) for the proposed Hampton-Rochester-La Crosse 345 kV transmission line project. Additional or replacement appointments may be made as necessary.

North Rochester to Mississippi River Advisory Task Force

Name	Affiliation	Contact
John Adams	Mazzepe Township	jjadams@sleepyeyetel.net
Brent McNallan	Oakwood Township	mbmcnallan@aol.com
Ed Rother	Highland Township	507-534-3522
Sheronne Mulry	Mississippi River Parkway Commission	sheronne@gmail.com
Merl Norman	Wabasha County	mapanorman@usfamily.net
Suzanne Rohlfing	The North Route Group	caraway57@aol.com
Paul Perry / Karen Doll	City of Pine Island	proff72@juno.com

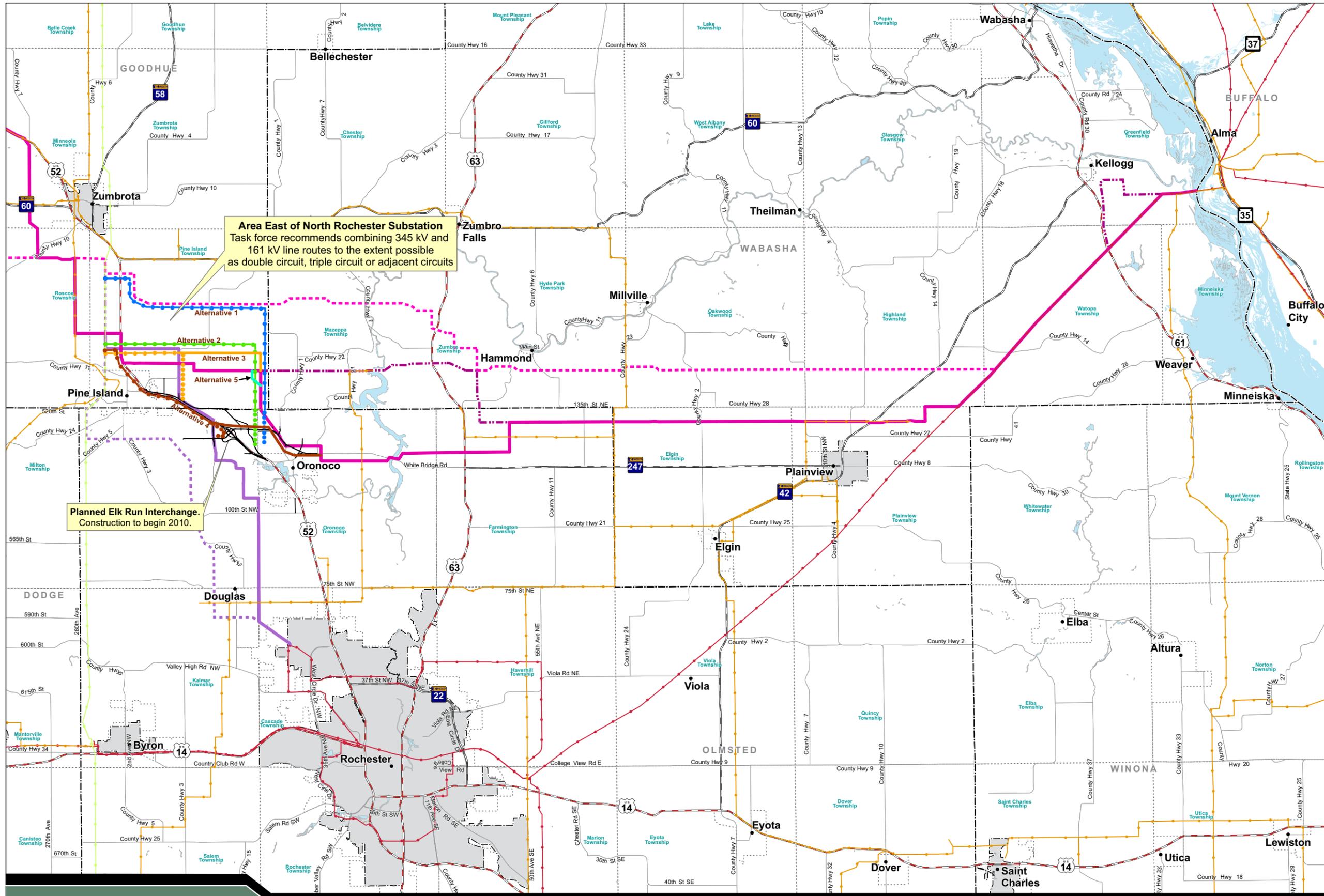
The ATF will assist OES Energy Facility Permitting (EFP) staff in developing the scope of the environmental impact statement for the proposed project.

Information about the proposed project can be found on the Minnesota Public Utilities Commission's website: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=25731>. Questions about the ATF should be directed to Matt Langan (651-296-2096, matthew.langan@state.mn.us) or Ray Kirsch (651-296-7588, raymond.kirsch@state.mn.us), Department of Commerce, Office of Energy Security, 85 7th Place East, Suite 500, St. Paul, MN 55101.

Appendix D – North Rochester to Mississippi River Advisory Task Force April 28, 2010

Identification of Impacts and Issues - *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?*

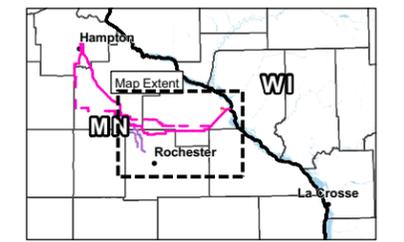
Environmental and natural resources: impacts nature and impacts people	Property values (under private ownership)	Health and safety	Rural and agriculture land-use impacts	Potential option from new technology	Use existing corridors	Conflicts with land use options	Economic cost of construction and maintenance of line
<ul style="list-style-type: none"> • Save wildlife habitat • Environmental impacts: wildlife, natural beauty of the area • Environment: critical and rare – habitat and biodiversity • Migratory flyway (birds, bats, butterflies) located on United States Fish and Wildlife Service land, Department of Natural Resources land, close to Nature Conservancy land • Bluffland, watershed, wetland, water quality: destruction and decreased quality from construction and maintenance • Effects on rare and unique resources; i.e. wild/scenic bird roosting sites • Save woodlands in stewardship project, especially hardwoods • Recreation/Aesthetics: loss and hindrance of • Good stewardship • Intrinsic qualities required to maintain National Scenic Byway: cultural/heritage, environment, agriculture and recreation area, marketing (these are federal highway department criteria) 	<ul style="list-style-type: none"> • Property valuations: fair compensations for property owners (future use) • Home/Property values; aesthetics of powerline could decrease existing values • Side by side structures double negative impacts for landowners (Pine Island’s 161 lines would be separate) • Most economical: river crossing, easements, private property impact 	<ul style="list-style-type: none"> • Safety; increase of stray voltage affecting cattle and electromagnetic fields (EMF) affecting humans • Health concerns: stray voltage – wildlife and agriculture; EMS – humans • Health issues; human, animal emotional distress caused 	<ul style="list-style-type: none"> • Farming; destruction of crops during construction and maintenance of lines • Land-use: both of plan implementation, productions, growth and income (both individual and community) • Sight “looks” – duplication of lines, waste of agriculture land 	<ul style="list-style-type: none"> • Land use – sustainability and green usage – future technologies (options for new technologies to create electricity, impacts on local economy) 	<ul style="list-style-type: none"> • No existing environmental corridors; need to clear-cut areas, proposed transmission lines creates fragmentation of property and habitat • Use public property (road right-of-way) rather than private property 	<ul style="list-style-type: none"> • City of Pine Island; proposed 345 and 161 kV lines will be built in areas the city has designated for future residential growth and development 	



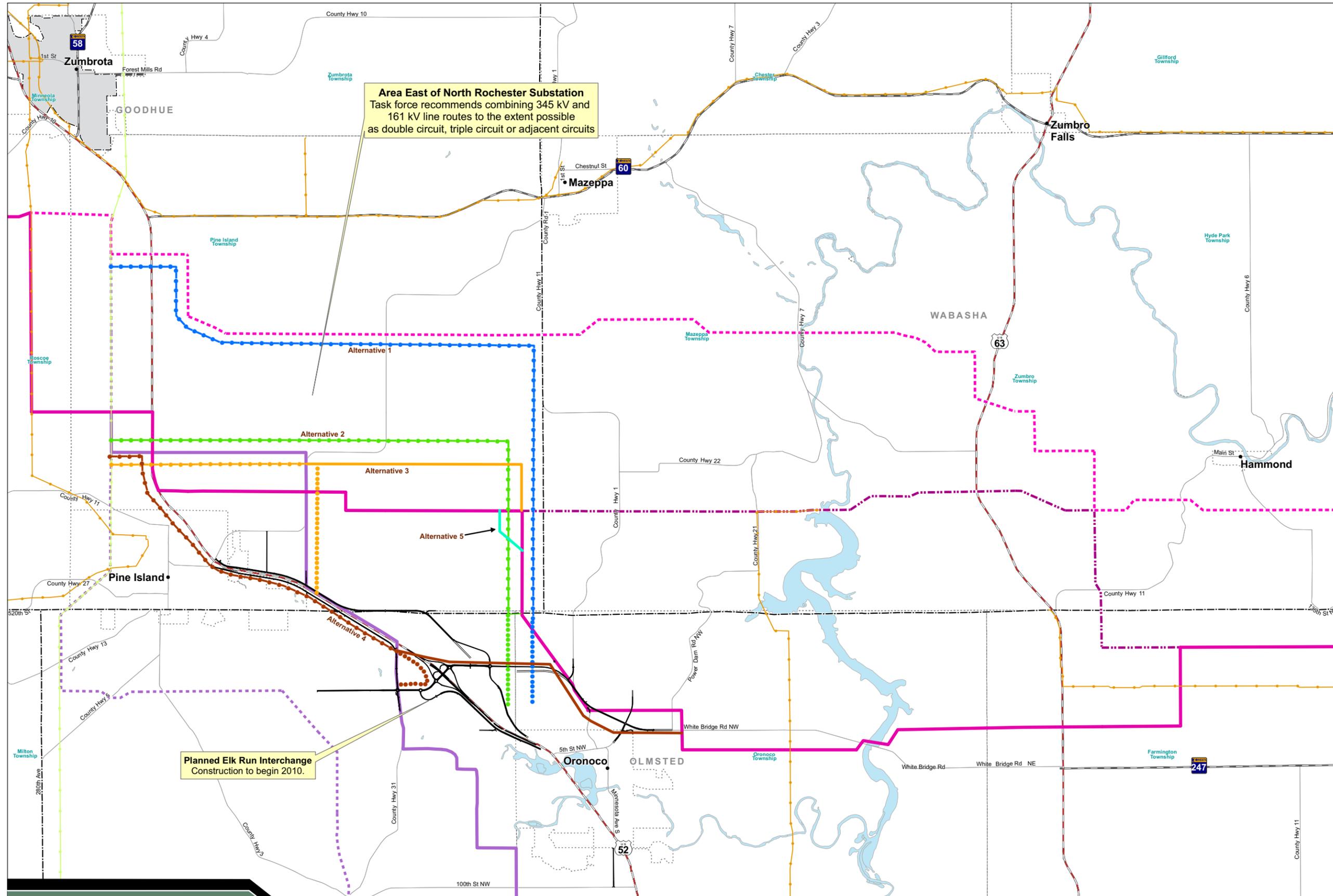
Area East of North Rochester Substation
 Task force recommends combining 345 kV and 161 kV line routes to the extent possible as double circuit, triple circuit or adjacent circuits

Planned Elk Run Interchange.
 Construction to begin 2010.

- ### Legend
- Applicant's Proposed Routes**
- Preferred 345 kV Route
 - Alternative 345 kV Route
 - Preferred 161 kV Route
 - Alternative 161 kV Route
 - Route Option
- Task Force Proposed Routes**
- 345/161 kV Transmission Line
 - 345 kV Transmission Line
 - 161 kV Transmission Line
- Transportation (BTS, ESRI)**
- Interstate Highway
 - US Highway
 - State Highway
 - County Highways
- Existing Transmission (HDR, GRE)**
- 69 kV Transmission Line
 - 115 kV Transmission Line
 - 138 kV Transmission Line
 - 161 kV Transmission Line
 - 230 kV Transmission Line
 - 345 kV Transmission Line
- Township



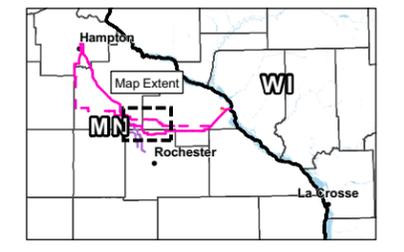
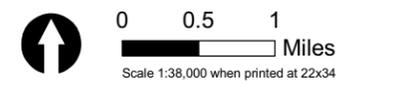
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Area East of North Rochester Substation
 Task force recommends combining 345 kV and 161 kV line routes to the extent possible as double circuit, triple circuit or adjacent circuits

Planned Elk Run Interchange
 Construction to begin 2010.

- ### Legend
- Applicant's Proposed Routes**
- Preferred 345 kV Route
 - Alternative 345 kV Route
 - Preferred 161 kV Route
 - Alternative 161 kV Route
 - Route Option
- Task Force Proposed Routes**
- 345/161 kV Transmission Line
 - 345 kV Transmission Line
 - 161 kV Transmission Line
- Transportation**
 (BTS, ESRI)
- Interstate Highway
 - US Highway
 - State Highway
 - County Highways
- Existing Transmission**
 (HDR, GRE)
- 69 kV Transmission Line
 - 115 kV Transmission Line
 - 138 kV Transmission Line
 - 161 kV Transmission Line
 - 230 kV Transmission Line
 - 345 kV Transmission Line
- Township



DATA SOURCES: MN DNR, WI DNR, BTS, USGS
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