

**STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION**

In the Matter of the Route Permit Application
by Great River Energy and Xcel Energy for a
345 kV Transmission Line from Hampton to
LaCrosse, Wisconsin

OAH DOCKET NO. 3-2500-21181-2
PUC DOCKET NO. ET002/TL-09-1448

**NOCAPX 2020, UNITED CITIZENS ACTION NETWORK
and
NORTH ROUTE GROUP's
INITIAL BRIEF**

I. INTRODUCTION

NoCapX 2020, United Citizens Action Network, and North Route Group are intervenors with full party status in this docket. NoCapX 2020 has been actively opposing CapX 2020 from its inception, intervening in the Certificate of Need proceeding, joining forces with United Citizens Action Network for the Certificate of Need appeal and the subsequent Brookings-Hampton, Fargo-St. Cloud and Hampton-LaCrosse routing dockets. The North Route Group, (hereinafter "NRG"), has joined NoCapX 2020 and United Citizens Action to assure its distinct and particular interests as directly affected landowners are represented in this docket.

NoCapX and U-CAN, over the multiple CapX transmission proceedings thus far, have been primarily focused on need for the line, not at issue in this routing docket. In routing dockets, NoCapX and U-CAN have noted that the applicants have not yet disclosed the ultimate owner of this transmission line, contrary to the directive in the Certificate of Need. In addition, in the Certificate of Need and the Brookings routing dockets, the range of magnetic field levels have been grossly understated. Although Applicants have admitted the full range of potential

magnetic fields in the Fargo routing docket, modeled at up to ten times higher than earlier disclosed in this application and those prior proceedings, they have not done so in this Hampton-LaCrosse docket. While appreciative of the admission in the Fargo docket, and aware of the safety function of right-of way width, NoCapX and U-CAN are concerned that the potential magnetic fields at the edge of the 150 foot right-of-way proposed are far higher than a precautionary approach would proscribe. NoCapX and U-CAN urge that the full range of magnetic field levels be acknowledged and that as a precaution, the right-of-way for this route be designated wide enough to provide for levels of no greater than 2mG at the right-of-way edge sufficient to protect landowners and residents.

NRG is an informal community-based coalition of directly-impacted stakeholders and landowners affected by the proposed 345kV High Voltage Transmission Line from Hampton to Rochester, in Minnesota, and on to Alma and LaCrosse in Wisconsin. NRG is particularly concerned about the part of CapX transmission known as “Segment 3” in Wabasha County and eastern Goodhue County, and the route proposed and known as Alternate Route 3A. NRG has researched, analyzed and identified several important distinctions in impacts between the proposed Segment 3 Modified Preferred, North Route and “Dam Route” and other alternatives under consideration and has submitted testimony with this information.

NRG has analyzed the Applicant’s information presented in the Application, Testimony and responses to Information Requests, reviewed the DEIS, and has demonstrated that Alternate Route 3A would have greater impacts than other routes, particularly the Modified Preferred Route. The Modified Preferred route would be in closer compliance with Minnesota’s non-proliferation policy as enunciated in PEER, the route has equal or lower cost, fewer acres of forest land would be clear-cut and forever lost, fewer acres of higher quality MCBS sites would

be affected, less fragmentation and edge effect impacts on wooded land, freshwater forested and shrub wetlands, no recreational land impacts, and cost savings would approach \$13 million.

NRG notes that the Applicants preference is the Modified Preferred Route.

The North Route Group is also very concerned about the content, tone and tenor of Oronoco Township's advocacy of the North Route, and the townships drive to push the transmission line off of the Preferred Route through the township with exaggerated claims of greater population density when the actual numbers of 18-19 directly affected residences show there is little difference; a misplaced focus on affected "parcels" when "parcels" is not a recognized siting criteria; and the township's unsavory willingness to foist the route on it's own unsuspecting and unnotified residents in a last-minute entry of a "new" route.

For these reasons, upon this analysis of the routes, using the statutory and rule-based criteria, NoCapX, U-CAN and NRG have several recommendations:

- For Segment 1, NoCapX recommends the routes that begin at Hampton, proceeding along the Preferred Route and then head southward through Dakota County's Lake Byllesby Park, a fitting tribute to Byllesby, the first CEO of Northern States Power, and south and east back to the Preferred Route.
- For Segment 2, NoCapX, U-CAN and NRG wish to avoid utilization of 2C3-003 and 2C3-004;
- For Segment 3, NoCapX, U-CAN and NRG support use of the Modified Preferred Route utilizing segments 3-P and 3P-002. NRG has found that although all routes inherently have a significant impact, the Segment 3 Alternate Route 3A has the greatest impacts across the spectrum of criteria. NoCapX, U-CAN and NRG support selection of a route utilizing the Modified Preferred Route and its "scoping alternative" routes because they

have more limited impacts than the other options presented for consideration.

Specifically, of the Modified Preferred Route and its “scoping alternative” routes, NRG recommends, beginning with DEIS Sheet MR1:

- Sheet MR1: Using the Modified Preferred Route from the Preferred North Rochester Substation, heading east on 3P across Hwy. 52, and running south along Hwy. 52 on the east side, utilizing corridor, to avoid the wetlands on the west side; and then consolidating the Preferred 345kV and 161kV in one corridor, heading east from Hwy. 52 along the Modified Preferred on 500th Street. Ex. 2, Hillstrom Direct p. 11, Schedule 2 and Schedule 15. NRG requests avoidance of the Alternate substation, to the north of the Preferred substation.
- Sheet MR2: Continuing east, at Co. Rd. 11, the Modified Route continues as it turns south for one half mile. This consolidation would place the 345kV and 161kV structures adjacent to each other along 500th Street and one half mile south on County Road 11.” Ex. 2, Hillstrom Direct, p. 11.
- Sheet Map MR4: One half mile south on County Road 11, the 161kV continues south and the 345kV heads east cross country through the middle of Section 27, incorporating Route Alternative 3P-0002 following half section lines, through Section 26. Ex. 2, Hillstrom Direct, p. 12. Turning south, following 230th Avenue for approximately ¼ mile, then turning east, joining the original Preferred Route, approximately ¾ mile then south following field/lines and cross country to Ash Road. Id., DEIS p. 142.
- Sheet Map MR5: Follow Modified Preferred Route south and then southeast on Ash Road;

- Sheet Map MR6: Following the Modified Preferred Route to the southeast then on the southwest side of County Road 18, then heading due east cross-country going past County Road 27/Power Dam Road NW and then south paralleling County Road 27/Power Dam Road NW for ½ mile, then east, avoiding populations and the dairy farm along White Bridge Road, following field lines/cross country for 2.2 miles;
- Sheet Map MR 10: Then jogging northeast crossing White Bridge Road and then east crossing the Zumbro River for for .32 miles and then northeast cross country for .22 miles then due east following field lines/cross-country for 3.7 miles.
- Sheet Map MR11, 12, 13, 14, 15, 16... In section 12, a breakpoint provides a nearly straight-south routing opportunity for the Chester 161kV line. Any northern route would be longer, less direct, and more costly.
- Parallel Hwy. 42 Ex. 2, Hillstrom Direct, p. 13, l. 14-21, see also Ex. 4, Schedule 2.

These route segment options have been identified as having the least impacts.

II. LEGAL BASIS FOR ROUTING DECISIONS

The legal basis for routing recommendations and Commission decisions is found in the Minnesota statutes and rules. In a routing case, a primary mandate is the statutory basis for routing comparisons and determinations. The statutory mandates of environmental review trump the Power Plant Siting Act's environmental rules:

Minn. Stat. § 216E.03 DESIGNATING SITES AND ROUTES (selected)

Subd. 5.Environmental review.

The commissioner of the Department of Commerce shall prepare for the commission an environmental impact statement on each proposed large electric generating plant or high-voltage transmission line for which a complete application has been submitted. The commissioner shall not consider whether or not the project is needed. No other state environmental review documents shall be required. The commissioner shall study and evaluate any site or route proposed by an applicant and any other site or route the commission deems necessary that was proposed in a manner consistent with rules concerning the form, content, and timeliness of proposals for alternate sites or routes.

Subd. 7. Considerations in designating sites and routes (language pertaining to generators eliminated).

(a) The commission's site and route permit determinations must be guided by the state's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.

(b) To facilitate the study, research, evaluation, and designation of sites and routes, the commission shall be guided by, but not limited to, the following considerations:

(1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

(2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;

(3) evaluation of the effects of new electric ... transmission technologies and systems ... designed to minimize adverse environmental effects;

...

(5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;

(6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;

(7) evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;

(8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

(9) evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;

(10) evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;

(11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved; and

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities.

(c) If the commission's rules are substantially similar to existing regulations of a federal agency to which the utility in the state is subject, the federal regulations must be applied by the commission.

(d) No site or route shall be designated which violates state agency rules.

(e) The commission must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the commission must state the reasons.

In addition to transmission routing statutes, there are statutes that prioritize siting criteria:

17.80 STATE AGRICULTURAL LAND PRESERVATION AND CONSERVATION POLICY.

Subdivision 1.Policy.

It is the policy of the state to preserve agricultural land and conserve its long-term use for the production of food and other agricultural products by:

(a) Protection of agricultural land and certain parcels of open space land from conversion to other uses;

(b) Conservation and enhancement of soil and water resources to ensure their long-term quality and productivity;

(c) Encouragement of planned growth and development of urban and rural areas to ensure the most effective use of agricultural land, resources and capital; and

(d) Fostering of ownership and operation of agricultural land by resident farmers.

Subd. 2.Methods.

The legislature finds that the policy in subdivision 1 will be best met by:

...

(h) Guiding the orderly construction and development of energy generation and transmission systems and enhancing the development of alternative energy to meet the needs of rural and urban communities and preserve agricultural land to the greatest possible extent by reducing energy costs and minimizing the use of agricultural land for energy production facilities; and

Environmental Review for transmission routing is governed by the Minnesota Environmental Policy Act:

116D.04 ENVIRONMENTAL IMPACT STATEMENTS. (selected)

...

Subd. 2a.When prepared.

Where there is potential for significant environmental effects resulting from any major governmental action, the action shall be preceded by a detailed environmental impact statement prepared by the responsible governmental unit. The environmental impact statement shall be an analytical rather than an encyclopedic document which describes the proposed action in detail, analyzes its significant environmental impacts, discusses appropriate alternatives to the proposed action and their impacts, and explores methods by which adverse environmental impacts of an action could be mitigated. The environmental impact statement shall also analyze those economic, employment and sociological effects that cannot be avoided should the action be implemented. To ensure its use in the decision-making process, the environmental impact statement shall be prepared as early as practical in the formulation of an action.

...

(g) The responsible governmental unit shall, to the extent practicable, avoid duplication and ensure coordination between state and federal environmental review and between environmental review and environmental permitting. Whenever practical, information needed by a governmental unit for making final decisions on permits or other actions required for a proposed project shall be developed in conjunction with the preparation of an environmental impact statement.

...

Subd. 2b. Project prerequisites.

If an environmental assessment worksheet or an environmental impact statement is required for a governmental action under subdivision 2a, a project may not be started and a final governmental decision may not be made to grant a permit, approve a project, or begin a project, until:

- (1) a petition for an environmental assessment worksheet is dismissed;
- (2) a negative declaration has been issued on the need for an environmental impact statement;
- (3) the environmental impact statement has been determined adequate; or
- (4) a variance has been granted from making an environmental impact statement by the environmental quality board.

Subd. 3a. Final decisions.

Within 90 days after final approval of an environmental impact statement, final decisions shall be made by the appropriate governmental units on those permits which were identified as required and for which information was developed concurrently with the preparation of the environmental impact statement. Provided, however, that the 90-day period may be extended where a longer period is required by federal law or state statute or is consented to by the permit applicant. The permit decision shall include the reasons for the decision, including any conditions under which the permit is issued, together with a final order granting or denying the permit.

...

Subd. 6. Prohibitions.

No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or

permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction. Economic considerations alone shall not justify such conduct.

Subd. 6a. Comments.

Prior to the preparation of a final environmental impact statement, the governmental unit responsible for the statement shall consult with and request the comments of every governmental office which has jurisdiction by law or special expertise with respect to any environmental effect involved. Copies of the drafts of such statements and the comments and views of the appropriate offices shall be made available to the public. The final detailed environmental impact statement and the comments received thereon shall precede final decisions on the proposed action and shall accompany the proposal through an administrative review process.

Subd. 7. Required consideration.

Regardless of whether a detailed written environmental impact statement is required by the board to accompany an application for a permit for natural resources management and development, or a recommendation, project, or program for action, officials responsible for issuance of aforementioned permits or for other activities described herein shall give due consideration to the provisions of Laws 1973, chapter 412, as set forth in section 116D.03, in the execution of their duties.

...

The Minnesota Rules pertaining to siting offer specific criteria as well (selected):

7850.1900, Subp. 2. Route permit for HVTL.

An application for a route permit for a high voltage transmission line shall contain the following information:

- A. a statement of proposed ownership of the facility at the time of filing the application and after commercial operation;
- B. the precise name of any person or organization to be initially named as permittee or permittees and the name of any other person to whom the permit may be transferred if transfer of the permit is contemplated;
- C. at least two proposed routes for the proposed high voltage transmission line and identification of the applicant's preferred route and the reasons for the preference;
- D. a description of the proposed high voltage transmission line and all associated facilities including the size and type of the high voltage transmission line;
- E. the environmental information required under subpart 3;
- F. identification of land uses and environmental conditions along the proposed routes;
- G. the names of each owner whose property is within any of the proposed routes for the high voltage transmission line;
- H. United States Geological Survey topographical maps or other maps acceptable to the commission showing the entire length of the high voltage transmission line on all proposed routes;
- I. identification of existing utility and public rights-of-way along or parallel to the proposed routes that have the potential to share the right-of-way with the proposed line;
- J. the engineering and operational design concepts for the proposed high voltage transmission line, including information on the electric and magnetic fields of the transmission line;

- K. cost analysis of each route, including the costs of constructing, operating, and maintaining the high voltage transmission line that are dependent on design and route;
- L. a description of possible design options to accommodate expansion of the high voltage transmission line in the future;
- M. the procedures and practices proposed for the acquisition and restoration of the right-of-way, construction, and maintenance of the high voltage transmission line;
- N. a listing and brief description of federal, state, and local permits that may be required for the proposed high voltage transmission line; and
- O. a copy of the Certificate of Need or the certified HVTL list containing the proposed high voltage transmission line or documentation that an application for a Certificate of Need has been submitted or is not required.

7850.2700 FINAL DECISION (selected).

Subp. 2. EIS adequacy.

The commission shall not make a final decision on a permit until the commission has found the environmental impact statement to be adequate.

7850.2500 EIS PREPARATION (selected)(emphasis added)

Subp. 3. Alternative sites or routes.

During the scoping process, a person may suggest alternative sites or routes to evaluate in the environmental impact statement. A person desiring that a particular site or route be evaluated shall submit to the commissioner of the Department of Commerce, during the scoping process, an explanation of why the site or route should be included in the environmental impact statement and any other supporting information the person wants the commissioner to consider. The commissioner shall provide the applicant with an opportunity to respond to each request that an alternative be included in the environmental impact statement. The commissioner shall include the suggested site or route in the scope of the environmental impact statement only if the commissioner determines that evaluation of the proposed site or route will assist in the commissioner's decision on the permit application.

Subp. 10. Adequacy determination.

The Public Utilities Commission shall determine the adequacy of the final environmental impact statement. The commission shall not decide the adequacy for at least ten days after the availability of the final environmental impact statement is announced in the EQB Monitor. The final environmental impact statement is adequate if it:

- A. addresses the issues and alternatives raised in scoping to a reasonable extent considering the availability of information and the time limitations for considering the permit application;
- B. provides responses to the timely substantive comments received during the draft environmental impact statement review process; and
- C. was prepared in compliance with the procedures in parts 7850.1000 to 7850.5600.

If the commission finds that the environmental impact statement is not adequate, the commission shall direct the staff to respond to the deficiencies and resubmit the revised environmental impact statement to the commission as soon as possible.

7850.4100 FACTORS CONSIDERED.

In determining whether to issue a permit for a large electric power generating plant or a high voltage transmission line, the commission shall consider the following:

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;
- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and
- N. irreversible and irretrievable commitments of resources.

In addition to siting and routing criteria in statute and rule, there is case law emphasizing that pre-existing rights-of-way must be used. More than three decades ago, the PEER decision set out the Minnesota transmission routing policy of “nonproliferation,” to maximize utilization of existing and proposed railroad and highway rights-of-way. In a clear statement of intent, with knowledge of the impact of establishment of nonproliferation on those near existing corridors:

We therefore concluded that in order to make the route-selection process comport with Minnesota’s commitment to the principle of nonproliferation, the MEQC must, as a matter of law, choose a pre-existing route unless there are extremely strong reasons not to do so. We reach this conclusion partly because the utilization of a pre-existing route minimizes the impact of new intrusion by limiting its effects to those who are already accustomed to living with an existing route. More importantly, however, the establishment of a new route today means that in the future, when the principle of nonproliferation is properly applied residents living along this newly established route may have to suffer the burden of additional powerline easements.

People for Environmental Enlightenment & Responsibility (PEER), Inc. v. Minnesota Environmental Quality Council, 266 N.W.2d, 858, 868 (Minn. 1978). The court compared proliferation with the MEQC's balance of non-compensable impairment of the environment against the compensable damages of number of homes to be condemned, and noted that:

Although the hearing examiner, the MEQC, and the district court all accepted both their reasoning and their conclusion, condemnation of a number of homes does not, without more, overcome the law's preference for containment of powerlines as expressed in the policy of nonproliferation. Persons who lose their homes can be fully compensated in damages. The destruction of protective environmental resources, however, is noncompensable and injurious to all present and future residents of Minnesota.

Id., p. 869. The PEER-based non-proliferation routing policy was recently emphasized with a legislative addition to the transmission routing criteria, requiring specific findings by the Commission:

The commission must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the commission must state the reasons.

Minn. Stat. §216E.03, Subd. 7(e).

III. NORTH ROUTE ALTERNATIVE 3A OVERVIEW

The "North Route" is the northern-most transmission alternative route, labeled 3A in the Draft Environmental Impact Statement (DEIS). It heads eastward from the Alternate "North Rochester" substation through Goodhue County. It crosses Wabasha County 1 at the Goodhue/Wabasha County line. It continues east cross country, transecting century farms, a tree farm and a ski hill, enters the R.J.Dorer Memorial Hardwood State Forest which begins through forested land and more tree farms, then The North Route crosses the Zumbro River and its flood plain. It again continues cross country east through two more registered tree farms, then east and southeast across agricultural and native hardwood forest land. After transecting U.S. Highway

63, it continues zig-zagging east and south to meet up with the Applicant's Preferred route via the 3A crossover. Route 3A, east of the 3A juncture with the Dam Route Option, is best described as crossing bluffland, numerous creeks and trout streams, and areas of moderate and high biological significance. Ex. 39, Testimony of Rohlfing and Hackman, p. 5; see also Ex. 47, North Rochester to Mississippi River Advisory Task Force Report; Ex. 56, DEIS..

Another route regarded as a "North Route" is labeled 2C3-004-3 in the DEIS, and spurs southward from the North Route 3A, west of County 1, dividing Goodhue and Wabasha Counties. This route was added after the ATF meetings, included in the scoping decision, and is evaluated in the DEIS. Id. p. 3; see also Ex. 47, North Rochester to Mississippi River Advisory Task Force Report; Ex. 56, DEIS.

The North Route goes cross-country over steeply-sloped and heavily wooded terrain, crosses the Zumbro River and continues toward Alma. Ex. 39, Testimony of Hackman, Attachment G, response to IR 7, Slope Map. The North Route Group's primary interest is in the area on both sides of the Zumbro River crossing and the length cutting through the Richard J. Dorer Memorial Hardwood Forest. See Ex. 56, DEIS, Map 8.3-40.

This geographic area varies greatly in character. The predominant characteristics are that the area is agricultural with Century Farms¹ and a higher percentage of prime farmland and farmland of statewide or local importance than the Modified Preferred Route, wooded with higher percentage of forested land and tree farms than the Modified Preferred Route, more areas of difficult steeply-sloped and forested terrain than the Modified Preferred Route, with no pre-existing infrastructure corridor at the North Route Zumbro River crossing. Ex. 56, DEIS p. 3; p.

¹ Comments were made regarding Century Farms, see FEIS p. I-401, and Commerce refused to incorporate Century Farm data, available publicly online (<http://www.fbmn.org/safe/mnfarms/app/run.html>): "The requested information is not in a public database. The cost to independently develop this information for all of the routes outweighs its relevance to a reasoned choice among alternatives." FEIS, P. O-401.

154 Figures 8.3.4.4-1 8.3.4.5-1, p. 157 Map 8.3-35 and p. 169 Map 8.3-40. The North Route contains areas of High and Moderate Value biologic and native plant communities, and tree farms, primarily located near the Zumbro River crossing. See Ex. 56 DEIS and FEIS, §7 p.7-1 through 7-138; Map 8.3-34; Map 8.3-35; Ex. 39, Direct Testimony of Suzanne Rohlfing and Steve Hackman, p. 5-6; and (Ex. G) IR 7 Slope Map. Comparatively, there are 1,744 DNR Rare Native Communities on the Modified Preferred Route, and 2,724 on the North Route. Ex. 5, Hillstrom Direct, Schedule 3, Revised, p. 2 of 2.

The broad range of heightened impacts of the Alternate Route 3A detailed in Applicant Hillstrom's and NRG Rohlfing's Testimony, the Draft Environmental Impact Statement, and the Final Environmental Impact Statement, provide the factual basis for a finding that these routes are routes with more significant impacts and that they are not the most feasible and prudent alternative.

IV. NRG COMPARATIVE ANALYSIS OF ROUTES

North Route Group, NRG, has taken the information provided by the Applicants and found in the Draft Environmental Impact Statement (DEIS), the Final Environmental Impact Statement (FEIS) and its own exhaustive investigation of conditions and features along the routes. NRG then researched and analyzed the route proposals in light of the state's criteria for selection of a transmission route. Through this process, NRG has identified demonstrable trends in impacts of each of the proposed routes. NRG is submitting this analysis based upon our review of the application, the Draft Environmental Impact Statement (DEIS), the Final Environmental Impact Statement (FEIS) and our exhaustive on-the-ground investigation of conditions and features along the routes, all of which has been submitted in the docket in the form of DEIS Comments, Public Comments and Testimony. Our analysis is only of the northern-most segment of the

Hampton to LaCrosse route, as identified by the Applicants, and labeled North Route Alternative 3A in the DEIS. We have not evaluated the other Segments and offer only limited analysis on other segments.

To equitably compare the route options, NRG has used an analysis based on the charts in Tom Hillstrom's testimony,² using Applicants' Revised Schedule 3, introduced in Rebuttal Testimony. The comparison shows that the Applicant's Modified Preferred Route has lesser impacts than other route options.

NRG's analysis of Applicant and EIS data shows that of the options presented by the Applicants and evaluated in the Environmental Impact Statement, the North Route 3A has the higher impacts, and the Modified Preferred Route has demonstrably lower impacts when compared to the other routes in Segment 3, the "least harmful" of alternatives.³ The choice of route should focus on the Modified Preferred Route as the option with least proliferation, and least human and environmental impacts.

The Applicant's North Route Alternate 3A is an example of proliferation of a new transmission corridor. The Applicants proposed North Route Alternate 3A fails to utilize existing right-of-way corridor to the extent of the Modified Preferred Route, and would needlessly traverse, destroy and fragment sensitive wetlands, forested areas and prime agricultural farmland, all non-compensable impacts under the laws of the state of Minnesota.

CapX 2020 Applicants' North Route Alternate 3A is an unacceptable level of proliferation of transmission corridor and contrary to Minnesota transmission routing policy because it does not utilize existing rights-of-way. Proliferation of transmission corridors is inconsistent with Minnesota's longstanding policy of Non-proliferation established by People for

² See Ex. 39, NRG Testimony, Attachment A, NRG Charts; see also Ex. 5, Hillstrom's Direct, Schedule 3 Revised.

³ Ex. 40, NRG Direct Testimony.

Environmental Enlightenment & Responsibility (PEER), Inc. v. Minnesota Environmental Quality Council, 266 N.W. 2d 858 (Minn. 1978). For these reasons, understanding that all transmission has significant impacts, our analysis shows that the “least harmful” route for Segment 3, from the “North Rochester” to Alma segment of the Hampton to LaCrosse line, is the Modified Preferred Route.

A. APPLICANT’S MODIFIED PREFERRED ROUTE IS CONSISTENT WITH THE STATE’S POLICY OF NONPROLIFERATION

When compared with the North Alternate Route 3A, the Applicant’s Modified Preferred Route is consistent with the state’s policy of non-proliferation.

Minnesota has a longstanding policy of Non-proliferation established by People for Environmental Enlightenment & Responsibility (PEER), Inc. v. Minnesota Environmental Quality Council, 266 N.W. 2d 858 (Minn. 1978). This policy of non-proliferation of transmission corridors was further emphasized in recent legislation that added a section to the statute regarding criteria, focusing on use of existing corridor and requiring the Commission to explain any proliferation of corridors.

PEER provides guidance when weighing proliferating routes, such as the North Routes, with non-proliferation routes:

*As interpreted by this court, the prudent and feasible alternative standard is analogous to the principle of nonproliferation in land use planning. In County of Freeborn v. Bryson, 309 Minn. 178, 188, 243 N.W. 2s 316, 321, we noted that although the state’s past encouragement of highway construction resulted in the elimination or impairment of natural resources, “remaining resources will not be destroyed so indiscriminately because the law has been drastically cnaged by (MERA).” Similarly, in Reserve Mining Co. v. Herbst, Minn., 256 N.W. 2d 808, 827 (1977), we recognized the state’s “strongly held commitment * * * to protecting the air, water, wildlife, and forests from further encroachment,” which supported our choice of Mile Post 7 over Mile Post 20 (256 N.W. 2d 823). The court had no trouble deciding that the Department of Natural Resources, which, like the MEQC, had a statutory duty to protect the environment, had failed to comply with this policy of nonproliferation in choosing between the alternative*

sites. See, also, *No Power Line, Inc., v. Minnesota EQC*, Minn. 262 N.W. 2d 312, 331 (Yetka, J., concurring specially).

This policy of nonproliferation is also supported by legislative enactments. Minn. Reg. MEQC 74(d)(3)(ee), adopted pursuant to authority granted to the MEQC under the PPSA, requires the decisionmaker to consider as one factor in the selection process whether the proposed route will “maximize utilization of existing and proposed rights-of-way.” The legislature explicitly expressed its commitment to the principle of nonproliferation in its 1977 revision of the PPSA. The MEQC is now required to consider the utilization of existing railroad and highway rights-of-way and the construction of structures capable of expansion in capacity through multiple circuiting in making its selection from among alternative HVTL routes. L. 1977, c. 439, s 10.

We therefore conclude that in order to make the route-selection process comport with Minnesota’s commitment to the principle of nonproliferation, the MEQC must, as a matter of law, choose a pre-existing route unless there are extremely strong reasons not to do so. We reach this conclusion partly because the utilization of a new pre-existing route minimizes the impact of the new intrusion by limiting its effects to those who are already accustomed to living with an existing route. More importantly, however, the establishment of a new route today means that in the future, when the principle of nonproliferation is properly applied, residents living along this newly established route may have to suffer the burden of additional powerline easements.

People for Environmental Enlightenment & Responsibility (PEER), Inc. v. Minnesota Environmental Quality Council, 266 N.W. 2d 858, 872 (Minn. 1978)(emphasis added). The court emphasized the heightened importance of environmental resources because loss of these resources cannot be compensated, and that in weighing noncompensable impairment of the environment against the compensable damages of number of homes to be condemned, non-proliferation has great weight:

Although the hearing examiner, the MEQC, and the district court all accepted both their reasoning and their conclusion, condemnation of a number of homes does not, without more, overcome the law’s preference for containment of powerlines as expressed in the policy of nonproliferation. Persons who lose their homes can be fully compensated in damages. The destruction of protective environmental resources, however, is noncompensable and injurious to all present and future residents of Minnesota.

Id., p. 869. The PEER-based non-proliferation routing policy was recently emphasized by the addition of Minn. Stat. §216E.03, Subd. 7(e) requiring specific findings by the Commission:

The commission must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the commission must state the reasons.

The definition of corridors is also important. PEER and Minn. Stat. §216E.03, Subd. 7(e) both refer to existing high-voltage transmission route and highway right of way, and PEER also refers to railroad right-of-way.⁴ It is important to note that nowhere in the PEER decision or in the statutes are field lines and property boundaries equated with right-of-way, nor are field lines and property boundaries regarded as “corridor.” In environmental review and in argument, MOES has analyzed routes using field lines and property boundaries and characterized use of such as “non-proliferation” and consistent with Minnesota’s policy of non-proliferation, but this is a gross misinterpretation of the guidance in PEER and of the statute. A linear feature is not a transmission right-of-way or railroad right-of-way!

The proliferation data from Tom Hillstrom’s Rebuttal Testimony, Schedule 3 Revised, reveals that when considering transmission lines, roads or property lines, the Modified Preferred route is higher in miles, at 44.8, and percentages paralleling existing right-of-way, 84%, more closely complying with the state’s policy of non-proliferation than other routes,. Conversely, the North Route Alternative 3A is lower in miles, at 41.9, and lower percentages paralleling existing right-of-way, at 55%. When considering transmission lines or roads, the Modified Preferred

⁴ Minn. Stat. §216E.03, Subd. 7(b)(8) refers to “evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way” and field lines and property boundaries are referenced in Minn. Stat. §216E.03, Subd. 7(b)(9) addresses “evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations,” and not as non-proliferation. As factors to be considered, Minn. R. 7850.4100, Subp. H. addresses “use of paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries” and then separately in Subp. J, “use of existing transportation, pipeline, and electrical transmission systems or rights-of-way.”

Route has a higher percentage, 40%, and the North Route, only 29%. Use of the North Route would proliferate more than other routes, and would be further further from compliance with the state’s policy of non-proliferation than Applicant’s Modified Preferred Route.

**Summary Comparison of Impacts for
North Rochester to the Mississippi River
345 kV Modified Preferred and Alternative Routes**

Use or Paralleling of existing RoW (transportation, pipeline, and electrical transmission systems) and property lines.		
Total length of route (miles)	44.8	41.9
Length following Transmission Line (miles)	14.4	9.2
Percentage of route following Transmission Line	32%	22%
Length following road but not Transmission Line (miles)	5.4	1.6
Percentage of route following road but not Transmission Line	12%	4%
Length following property line but not transmission line or roads (miles)	7.7	12.4
Percentage following property line but not transmission line or roads	40%	29%
Total length following transmission line, roads, or property lines (miles)	37.5	23.3
Percentage of route following transmission line, roads or property lines	84%	55%
Length notn following transmission line, roads or property lines (miles)	7.3	18.8
Percentage of route not following transmission line, roads or property lines	16%	45%

The majority of this Alternate Route 3A proposal utilizes no existing rights-of-way, as seen in Figure 8.3.4.11-1 of the MOES DEIS. Some properties are transected using no linear route whatsoever⁵.

In the CapX Certificate of Need proceeding, a new 161kV line³ was certified, running from North Rochester to Chester, in Olmsted County. Xcel has requested in DEIS Comments that this new 161kV line route also be added to the DEIS. Ex. 33, Hillstrom DEIS letter, April 29, 2011; Ex. 15, Hillstrom Rebuttal, p. 15. This additional 161kv line from the North Rochester

⁵ Ex. 39, NRG Testimony of Rohlfing and Hackman, Appendix A – Sheet MR29.

substation to the Chester Substation in the Final EIS adds support for utilization of co-location or utilizing double circuiting on the Modified Preferred Route to avoid the North Route's additional HVTL miles and wider ROW because it is a "new" corridor with landing pads, going through forested land and a cluster of homes in Mazeppa, should the Modified Preferred not be used. Because a 161kV line will be routed, routing them jointly rather than separately, more closely adheres to Minnesota's policy of non-proliferation. It also reduces cost because if the lines were not co-located out of the southern "North Rochester" substation, the 161kV line would have to be longer to reach from the northern "North Rochester" substation to travel south to Chester.

The North Route Group supports Applicants' advocacy for the Modified Preferred Route, and its reduction in gross proliferation by limiting the number of residences affected and reducing non-compensable impacts.

Linear features are not transmission corridors under the statute. Consideration of linear features is appropriate in addressing agricultural impacts and for use in minimizing those impacts. Despite the clear focus of the statute and PEER on existing right-of-way, the DEIS did not properly address right-of-way sharing, and instead used "linear features" such as property lines and field lines as a measure of right-of-way sharing, perhaps following the lead of the application. The FIES did address corridor sharing, but also added "linear features paralleled along the routes," including "other linear features" such as "field lines" and "trail" and counted such "other linear features" as "corridor sharing."⁶ This characterization provides a distorted picture of corridor, leaving the impression that all the route options adhere more closely to the state's policy of non-proliferation when they do not:

Linear features such as property lines and field lines are appropriate in addressing agricultural impacts and for use in minimizing those impacts. Minn. Stat. §216E.03, Subd.

⁶ FEIS, Table 3.2-2, 3.2-3 and 3.2-4, p. 3-3 to 3-5.

7(b)(9).. However the characteristics of non-proliferation are addressed separately in Minn. Stat. §216E.03, Subd. 7(b)(8), and the two proliferation and agricultural preservation criteria are separate and characteristics should not be conflated.

B. APPLICANT'S DATA SHOWS THAT OVERALL, THE MODIFIED PREFERRED ROUTE HAS COMPARATIVELY LOWER IMPACTS

A review of Applicant's data, as above, and provided in the Schedules with the Direct and Rebuttal Testimony of Hillstrom, demonstrates that the Modified Preferred route has comparatively lower impacts. Whether analyzed for proliferation, human impacts or environmental impacts, when the state's criteria is considered, by their own accounting, the Applicant's Modified Preferred Route is the least harmful option because it's use requires has less new corridor proliferation and has lower impacts across criteria categories. See Ex.5, Hillstrom Direct Revised Schedule 3.

Comparatively, the North Route also has more long-span sections between structures. For example, although typical span distance is 600-1,000 feet, at the the Ski Hill the distance between structures 12 and 13 is 1,369 feet, and 15-16, 1,100 foot. Ex. 26, Stevenson, Direct, p. 11; Ex. 18, Hillstrom Rebuttal, Schedule 15, p. 4-5. At the proposed North Route Zumbro River crossing, the distance between structures 22 and 23, and 23 and 24 are 1,477 and 1,461 feet respectively, roughly one-quarter mile. Id. To completely span the river bluff-to-bluff would be 2,938 feet, over one-half mile, something that would have to be done to keep structures out of the FEMA flood plain and out of maximum flooding area in case of dam failure as happened at Shady Lake. Continuing to move eastward, the distance between structures 27 and 28 is 1,567 feet. Id. There are significant terrain issues graphically reflected in the pole placement diagrams. Id, An example of impacts of pole place is found on the Rohlfinds property Look at Suzanne's property property, where to avoid a MCBS site, a pole span there requires at least

1,500 feet, and they have to clear cut everything underneath it plus another 6 feet of Right of Way. Ex. 56, DEIS, MR 29.

The noise of the transmission line also has less impact on the White Bridge Road crossing when compared with the North Route. Background noise high at White Bridge Road, but not at North route. Ex.. 56, DEIS p. 38 7.3.2-1.

C. HUMAN IMPACTS ANALYSIS OF ROUTE OPTIONS

The state criteria and factors to be considered in siting transmission include human impacts, including displacement, and adverse human effects which can not be avoided. Minn. Stat. §216E.03, Subd. 7; Minn. R. 7150.4100, Subp. A, B, and M.

Human settlement impacts, as measured by numbers and distances of residences from the edge of the right-of-way, were listed in Tom Hillstrom’s Schedule 3 and in the Environmental Impact Statement. Ex. 5, Hilstrom Schedule 3 Revised; see also Ex. 56, DEIS.

**Summary Comparison of Impacts for
North Rochester to the Mississippi River
345 kV Modified Preferred and Alternative Routes**

Residences		
	Modified Preferred	North Route
Revised Number of Residences 0-75 feet from route centerline	0	0
Revised Number of Residences 76-150 feet from route centerline	1	0
Revised Number of Residences 151-300 feet from route centerline	10	4
Revised Number of Residences 301-500 feet from route centerline	19	16
Revised Density (residences/linear mile within 500 feet of route centerline)	0.7	0.5

Ex. 5, Hillstrom Schedule 3 Revised

Throughout this proceeding, the Applicants and MOES have failed to note two homes within the proposed North Alternative Route 3A near the Zumbro River that, when added, form the “Kennedy Cluster.” Public Testimony of Kennedy, Tr. Plainview 6:30, p. 78-82. Mr. Kennedy testified that they had made many comments on the record , to Applicants, and to Commerce staff, and their house and their neighbors’ house had yet to appear on any project

maps. “It’s not on there, it’s supposed to be right there, and my neighbors to the east, Cockers, theirs is not on there either.” Id. The DEIS doesn’t show it after MULTIPLE comments. See FWIA p. O-242; Ex. 56, DEIS MR 28. These consistently ignored homes are situated in a classic pinch-point pattern, a pinchpoint⁷ that cannot be mitigated by moving the alignment – any alignment would make it worse and could result in a displacement. Ex. 56, DEIS, Table 8.3.4.3-2, Pinch Points. Applicant’s preliminary pole placement, structure 18 is right in the middle of the four “Kennedy Cluster” houses, so close that if it fell in any direction , it would hit a house. “The “Kennedy Cluster” is a pinch point for which there is no mitigation – movement away from any two of the residences moves it closer to the other two. There are no pinch points on the Modified Preferred Route..

When the “Kennedy Cluster” pinchpoint homes are added to the chart above, this is the result:

Residences		
	Modified Preferred	North Route
Revised Number of Residences 0-75 feet from route centerline	0	0
Revised Number of Residences 76-150 feet from route centerline	1	0
Revised Number of Residences 151-300 feet from route centerline	10	4 6
Revised Number of Residences 301-500 feet from route centerline	19	16 18
Revised Density (residences/linear mile within 500 feet of route centerline)	0.7	0.5

To the extent that “human impacts” is defined as residential structures in the alignment, the Modified Preferred Route and the North Route have relatively equal human settlement impacts, when measured by number of residential structures within 500 feet of the alignment, 19 and 18 respectively. When comparing the additional number of miles of proliferation on the Modified Preferred route to the Alternate Route, it is important to note that the addition of the

⁷ DEIS p.148, narrow areas along each of the proposed route alternatives. In these areas, human settlement features or important resources on either side of the proposed route and avoiding impacts by modifying route alignment may not be possible.

“Modified” segment to the Preferred route, resulting in “Modified Preferred” route, also added a number of residences, increasing the numbers of affected residences to what they are today. Further, when comparing the Modified Preferred Route with Alternate Route 3A, for every additional mile that the Preferred Route does follow existing right-of-way, there are additional residences compared to non-right-of-way miles because homes tend to be built alongside of roads. The difference of one home within the right of way is not statistically significant.

The North Alternative Route 3A has a pinch point near the proposed Zumbro River crossing that cannot be mitigated, and should be avoided. Impacts to any and all affected residences along the Modified Preferred route can be mitigated by careful placement and movement of the line.

The close numbers of residences, comparatively, can be further reduced in impact in the western part of the Modified Preferred route, crossing Highway 52. Ex; 56, DEIS Sheet map MR2. In the first two miles, the first six residences are all on north side of road, so final alignment to south side of road would mitigate impacts on those six residences. Id.

Impacts of routing using the Modified Preferred Route can be mitigated and those impacts that are mitigated, and those that are not or that are unavoidable, are compensable.

D. NATURAL RESOURCE IMPACTS ANALYSIS OF ROUTE OPTIONS

Natural resources are considered through a number of statutory criteria and factors, including conservation of resources, effects on land water and air, vegetation, animals, materials and aesthetic values, environmental evaluation of routes, evaluation of adverse direct and indirect environmental effects that cannot be avoided, evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations, effects on natural environmental, air and water quality and flora and

fauna, rare and unique natural resources. Minn. Stat. §216E.03, Subd. 7; Minn. R. 7850.1400. Impacts to environmental and natural resources were the primary concerns of members for the North Rochester to Mississippi River Advisory Task Force. Ex. 47, North Rochester to Mississippi River Advisory Task Force Report; Ex. 49, NRG Testimony, p. 4. z

A primary example of an “important” natural resource to be protected is the Zumbro River, which the Applicant intends to cross, whichever route is used. Testimony of Schrenzel, Vol 3,p.131. The Modified Preferred Route’s crossing of the Zumbro River at White Bridge Road would result in the least impact from clearing because it utilizes an existing river crossing. Ex. 39, NRG Testimony, Attachment B, DNR Scoping and DEIS Comments, both p. 3. According to the area addressed by the Minnesota DNR “ Zumbro River and Whitewater River: A Water Trail Guide⁸,” the 3A Alternate Route would transect one of the “two most popular trips of the Zumbro River.” See also FEIS, p. O-423. Petitions were entered into the record with over 200 signatures pf property owners, people adjacent to the property, people canoeing and kayakers canoeing down the Zumbro River showing broad utilization of this River Water Trail, and reflects their concerns about potential impacts of transmission at the North Route River Crossing. Those concerns in clued that the North Route 3A is almost entirely within the R.J. Dorer Memorial Hardwood State Forest now celebrating its 50th year, that it would cause more deforestation and habitat fragmentation in Wabasha County, that there is no existing infrastructure, is contrary to Minnesota’s policy of nonproliferation of corridors, and that Minnesotan’s voted overwhelmingly for the 2008 Legacy Amendment to protect clean water, land and to restore, protect and enhance wetlands, prairies, forests, and habitats for game, fish, and wildlife. Testimony of Wheatley, Tr. Cannon Falls 6:30, p. 66; see also Public Exhibit 48;

⁸ Zumbro River and Whitewater River: A Water Trail Guide, available online at: <http://www.ccakc.org/images/zumbro.pdf>

Similar concerns were expressed by the Nature Conservancy about potential for fragmentation of the remaining blocks of forests, prairie, grassland and wetlands, impacts on sites of Biodiversity Significance, McCarthy Lake Wildlife Management Area, introduction of invasive species, and impacts on a major migratory flyway. Ex. 40, Attachment I, DEIS Comment Letter of the Nature Conservancy, April 28, 2011.

Canoeing and fishing are primary tourist activities in the Upper Valley Area. Steeplechase Ski Resort is a four season facility that relies heavily on the present landscape and aesthetics for visitor use of the ski hills themselves and the 5-mile trail network used for hiking, biking, snowmobiling and cross country skiing. Of special consideration are the specifics of downhill ski terrain specifications, leaving only the north half of the property for expansion potential. This business contributes to the local economy through employment, operating expenditures and utilization of other local businesses. Testimony of Kevin Kastler, Public Hearing, Pine Island 1:30 p.m. p. 69; see also Letter to ALJ.

In its application, Xcel notes in its own testimony that “The northern alternative for crossing the Zumbro River along the alternative 345kV route does not use existing infrastructure corridor.” Hillstrom p. 9, l. 18-20. In response to an Information Request, Hillstrom stated, regarding this reference to existing infrastructure corridor:

This reference is to a portion of my testimony discussing the Zumbro crossing locations, specifically comparing the existing setting at each crossing. I noted that the North Crossing does not follow an existing infrastructure corridor; whereas the Zumbro Dam Crossing crosses at a dam and the White Bridge Road crossing crosses at a road. In this context, I was referring to the fact that the North Crossing does not have an existing road, railroad corridor, transmission corridor, dam or other existing infrastructure.

Exhibit 79, Xcel Energy response to IR 6.

The DNR has also reviewed proliferation and impacts and Commented that “the Zumbro

River Crossing at White Bridge Road,” the Modified Preferred Route,” appears to result in the least impact from clearing and utilizes an existing river crossing.” Ex. 39, NRG Testimony of Rohlfing, Ex. G, DNR Scoping May 20, 2010, p.3; DNR DEIS Comments, Apr. 29, 2011, p. 3.

In general, crossing public waters should be located where there is existing infrastructure. For example, the Zumbro River should be crossed where existing infrastructure exists, and there is the least impact from clearing or construction activities.

Id. This was reiterated in Schrenzel’s testimony, where she stated:

The White Bridge Road crossing, our reviewers found that that had the least impact. The North crossing is a green crossing, which the DNR generally does not recommend. We recommend using existing infrastructure to reduce impacts, in this case forest clearing, impacts to possible avian species by creating new possible collision area.

Testimony of Schrenzel, Tr. Vol. 3, p. 89-90. In addition, Schrenzel noted concern about fragmentation that would result, damaging “large block habitat, interior habitat, fragmentation that area would be the North crossing area.” Tr., Vol. 3, p. 120-121. Another example of natural resources that must be considered include the Minnesota County Biological Survey sites of Biodiversity Significance, native plant communities, trail crossings, the many varieties and sizes of wetlands, streams, drainage, floodplains and wells.

The MCBS sites and DNR Rare Native Communities are of particular concern. The DEIS, on page 7-114 notes, (reference FEIS) regarding Rare Native Communities demonstrates that there are significantly higher numbers of Rare Native Communities along the North Route.

The North Route goes cross-country over steeply-sloped and heavily forested land, crosses the Zumbro River and continues toward Alma. Ex. 39, Testimony of Hackman, attached Ex. G, response to IR 7, Slope Map. The preliminary pole placement plans show that those proposed for the North Route would have a greater impact on the viewshed than those at the White Bridge Road because they are higher on the bluffs and there is a greater distance from the

Zumbro River to the top of the pole at the North Route crossing. Ex. 18, Hillstrom Rebuttal, Schedule 15.

This bluffland is protected:

Wabasha County recognizes the historic, environmental and economic values of the bluffs that line the rivers, creeks, and valleys of the County. These standards set out to protect and preserve the sensitive physical features of the bluffland areas by regulating development, preventing erosion and maintaining vegetative cover on the slopes and tops of the bluffs.

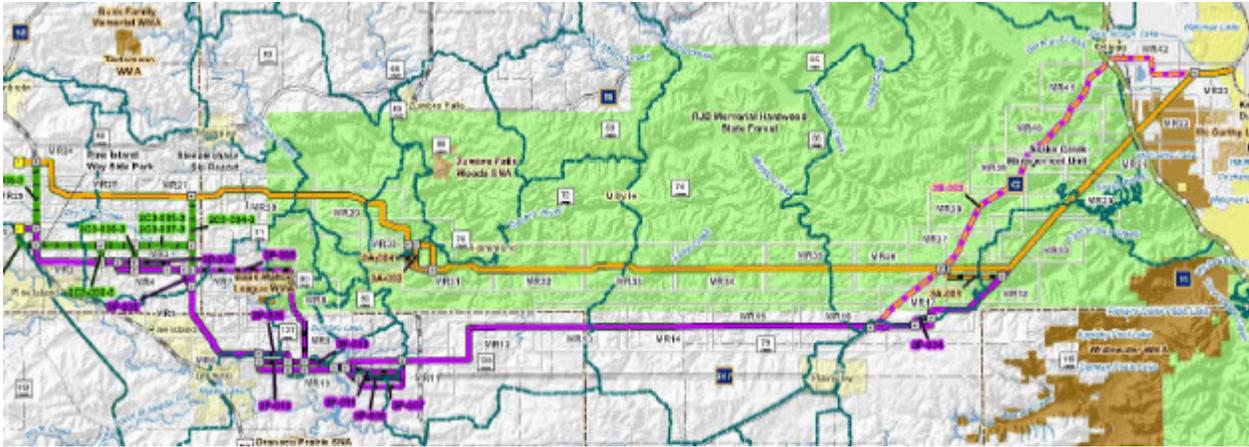
Ex. 39, NRG Testimony, Attachment E, Wabasha County Ordinance Article 4, Bluffland Area Protection; see also Ex. 40, Attachment J, Wabasha County Comprehensive Plan. Structures must be set back from the bluff, and “[n]o towers, with the exception of emergency towers, shall be located within one-quarter (1/4) mile of the bluff impact zone., grading, excavating or filling is not allowed, and vegetation alterations are allowed only as proscribed in the county ordinance. Id.

Steep slopes are also forested, and the wooded slopes serve to prevent high levels of run off into the Zumbro River by providing vegetative cover. Because of the failure of the dam and draining of Shady Lake, the Zumbro River Dam has been subject to scrutiny and planning. It is an old dam, and, although regularly maintained, failure could be disasterous. RPU and Wabasha Emergency Management have developed a plan to alert residents to any problem with the dam. If transmission were sited on the North Route, it would be in the Zumbro Dam floodplain, and in that case, if the dam failed, a flood would cause destruction and possibly death. If sited on the North Route, the transmission line would be right in the path of the flood. Ex. 39, NRG Direct Testimony, Attachment C, RPU and Wabasha Emergency Management Meeting with Residents Living Downstream of the Zumbro River Dam, April 19, 2011, p. 10.

The steep slopes graphically demonstrated by the slope map, are more commonly found along the North Route than on the Modified Preferred route. See Ex. 39, Attach. G, Applicant Response to IR 7, Slope Map; see also FEIS p. 164. These slopes make construction difficult and can present challenges and constraints through limitations on access and placement. The DEIS notes that “working areas would have to be graded level or fill would be brought in to create working areas. DEIS Section 5.3.1, p. 19. Sloped terrain can require taller poles for longer spans, larger working pads, wider easements because the easement on a slope is wider than if on flat land, additional cost of easement compensation to landowners, and wider easements mean there would also be more clearing of vegetation. Ex. 39, NRG Direct Testimony, p. 17; Ex. 2 Hillstrom Direct.

The DOT has also expressed concerns about additional costs, work, impacts and future maintenance associated with steep slopes, particularly side slopes. DOT DEIS Comment, April 29, 2011. All of this also means that there is additional installation cost for transmission on steeply sloped land. The North Route 3A has a greater percentage of slope variations, and issues of sloped terrain are not present to the same degree on the Modified Preferred Route.

All but a small part of the 3A route lies within the statutory boundaries of the Dorer Forest. The Dorer Forest is a legislatively established forest comprised of both public and private land, and some private land owners have Stewardship Plans with the Minnesota DNR to compliment the long term management plan of the State of Minnesota’s forests. The state legislatively designated the boundaries of the state forest, depicted on Map 8.3-40 of the DEIS, with an active plan for the state to acquire more land within those boundaries. Exhibit 39, NRG Direct Testimony, Attachment A, p. 54. The statutory boundaries of the Dorer Memorial Forest extend to Dakota, Fillmore, Goodhue, Houston, Olmsted, Wabasha and Winona counties:



For full map, see DEIS, Map 8.3-40. 6

The Minnesota Forest Assessment & Strategies, identifies the area of the North Route Zumbro River crossing as an area of the highest potential for parcelization and fragmentation of Minnesota’s forest and those things that are a threat to the maintenance of Minnesota’s forest landbase.

Minnesota forest lands have a long history of being managed with the primary consideration given to long[-term ecosystem integrity and sustaining health economies and human communities. Forest resource policy and management decisions are based on credible science, community values, and broad-based citizen involvement.

Ex. 99, Part I, p. 7 (Assessment, quoting Minnesota Forest Resource Council). This North Route Zumbro River crossing is of special concern for forestland use, for highest potential for parcelization between the Cannon Falls and Rochester corridor and for fragmentation in the same rough area. See also Part I 110-111; Part II, Chap. 4, p. 31. The Minnesota Forest Assessment and Strategies is the state’s Forestry plan, required by the 2008 federal farm bill, a directive similar to that for Minnesota’s Tomorrow’s Habitat for the Wild and Rare. Ex. 98, Tomorrow’s Habitat for the Wild and Rare.

Tomorrow’s Habitat for the Wild and Rare “Identifies habitat loss and degradation as the primary problem facing species in greatest conservation need in Minnesota.” Id. Transmission

corridor, if sited on a new route, contributes to parcelization and fragmentation. The FEIS lists, for each route, the total acreages of forested land that would need to be cleared and cannot be reforested. For the Modified Preferred route, only 949.59 acres is within the route width, and for the North Route, 3,622.17 acres, essentially four times as much acreage that would be cleared and could not be reforested. FEIS, App. J, second to last page (unnumbered).

In addition, there are five tree farms are located along the North Route in Mazeppa and Zumbro Townships. Three of these tree farms are registered and/or certified by the American Tree Farm System, a program of the American Forest Foundation's Center for Family Forests. Organized in 1941, the American Forest Foundation is a nonprofit conservation and education organization that strives to ensure the sustainability of America's family forests for present and future generations. Ex. 39, Attachment D, American Tree Farm System.

The FEIS does not show tree farms on Sheet Maps. They are found in separate narrative map, p. 165, Map 8.3-34. This map is missing at least one tree farm, there should be 2 on east side of river. The Hofschulte's farm is one that is missing, Mr. Hofschulte has identified the location of his missing farm but it is still not on the map. See FEIS p. O-213 with photo. Another that noted their tree farm was missing was the Tessmer's farm, but that is now listed on the map. See FEIS, p. O-478 with map. The North Route as proposed would transect their tree farm, because it does not follow any corridor or property line.

These tree farmers have a formal Stewardship Plan. As part of the DNR's Minnesota Forest Stewardship Program, the DNR provides technical advice and long range forest management planning to voluntary landowners. See FEIS O-177; O-179; O-183. The FEIS notes that a route that crosses land that is a part of a Forest Stewardship Plan may be incompatible with that plan. Another affected tree farm owner, Dean Regniers, a tree farmer

with a Forest Stewardship Plan, has commented about it at the Public Hearing to bring this to the attention of those evaluating the route and its environmental impacts. See Testimony of Regniers, Tr. Plainview 1;30, P. 55.

Transmission easements require clearing, and with clearing, there is also potential for introduction, spread and increase in invasive species once native habitats in forested and sensitive environments are temporarily or permanently disturbed during construction or maintenance of the transmission lines. Ex. 40, Attachment I, Letter, Nature Conservancy, April 28, 2011. NRG is are concerned with the methods of right-of-way clearance and maintenance of forested and other natural areas, particularly regarding whether “mechanical” clearing or “chemical” clearing is used. Applicants have a preference for “chemical” clearing, which although less costly, has detrimental and long term impacts to the right-of-way and land beyond. Forested and sensitive land would need more specific maintenance. Ex. 39, NRG Direct Testimony. Reliance on chemicals is also now also a legally questionable practice since the recent appellate decision holding that “chemical pesticide drifting from one farm to another because of errant overspray may constitute trespass.”⁹

As stated in the Applicant’s Route Application¹⁰, there are two approaches to clearing and maintenance of rights-of-way, “mechanical” and “chemical” using herbicides. Chemical, along with the toxic nature of it and how it would affect water and fish, flora and fauna, it would eliminate native species, allowing more invasive species, which wrecks havoc on forests, what is left of them, and prairies and prairie restoration projects. There are at least three prairie restoration projects, some of which include prairie remnant, and oak savannah remnant. These

⁹ See Johnson v. Paynesville Farmers Union Cooperative Oil Company, A10-1596 and A10-2135, File No. 73-CV-09-5042 (July 25, 2011), available online: <http://www.lawlibrary.state.mn.us/archive/ctappub/1107/opa101596-0725.pdf>

¹⁰ Application, p. 213, 437 and 444.

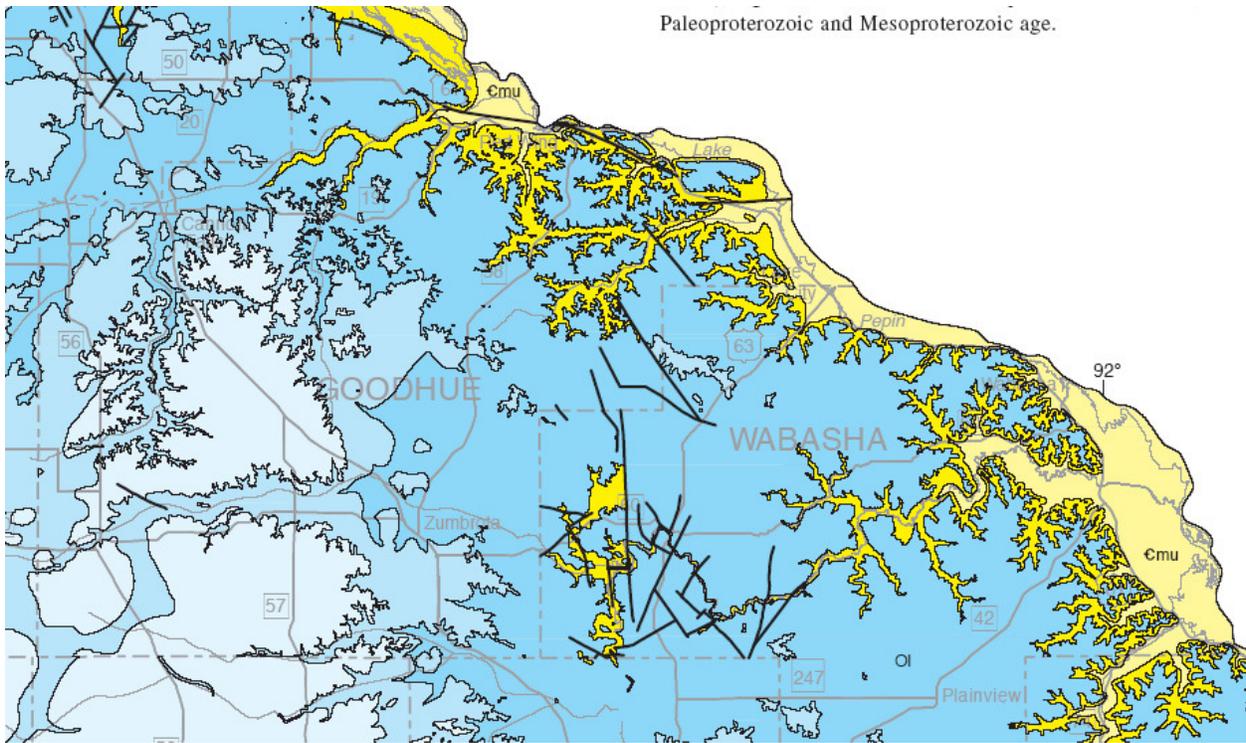
preservation projects would be destroyed by chemical maintenance. Impacts of clearing practices have not been sufficiently evaluated¹¹. Because a greater number of acres of forest would be affected on the North Route, additional acres of clearing and maintenance would be required, a higher number of acres of forested land would not be replanted or allowed to grow, resulting in a greater impact to the North Route than would be found on the Modified Preferred Route.

Tresspassing now with spray drift, recent case,

Eagles frequent the area of Alternate Route 3A, and we are concerned about the Potential impacts of this transmission project on eagles. We understand that the presence of eagles, nesting, roosting and foraging, is an issue to be considered when siting transmission. The presence of eagles near the North Route 3A has been documented by the DNR and USFWS, and MCBS sites located there are, and have been, sites of eagle nests, foraging and roosting along the Zumbro River at and near the proposed North Route Crossing. There continues to be significant eagle activity in this area, including roosting and foraging that is verified by residents and those that frequent this section of the Zumbro. The Zumbro River below the dam, which includes the proposed North 3A crossing, remains ice free in large areas throughout the winter. It is used by Bald Eagles as a fishing resource during winter months when most other water sources are frozen over. Ex. 39, Testimony of Rohlring, p. 22.

¹¹ Exhibit B, p. 5, DNR Comment.

In addition to natural resources that may be harmed by transmission, there are natural resources that may harm transmission by providing dangerous or “challenging” conditions for construction. Southeastern Minnesota is known for karst, a geological feature found in areas of limestone bedrocks, and which is associated with sinkholes, stream sinks and/or springs. These Karst features present stability issues for putting in 50+ foot foundations for structures. Ex. 39, Attachment H, Minnesota Geological Survey map of Minnesota; FEIS p. _____.



The narrative in the Application¹² and DEIS regarding karst refers only to sinkholes, but those are only the surface manifestation of karstic conditions, which exist throughout SE Minnesota. Sinkholes appear regularly in the area, and members of NRG have sinkholes on their property that have been added to the FEIS. There are sinkhole areas along the route that have not been identified and all karstic areas should be avoided. The black lines on the map are geological

¹² Application p. 7-1 to 7-2; DEIS p. 40.

faults, and the North Route just east of the Zumbro River contains many faults that should be avoided. *Id.*

The destruction of protective environmental resources, however, is noncompensable and injurious to all present and future residents of Minnesota.

PEER. 266 N.W.2d 858, 869 (Minn. 1978).

The Applicants' Modified Preferred Route has lower natural resource impacts, when measured by the criteria in the statute and rules.

E. AGRICULTURAL RESOURCE IMPACT ANALYSIS OF ROUTE OPTIONS

In addition to the criteria and factors pertaining to agriculture, Minnesota has a strong statutory policy of protection of agricultural land, which specifically contemplates the impacts of transmission:

Guiding the orderly construction and development of energy generation and transmission systems and enhancing the development of alternative energy to meet the needs of rural and urban communities and preserve agricultural land to the greatest possible extent by reducing energy costs and minimizing the use of agricultural land for energy production facilities...

Minn. Stat. §17.80, Subd. 2(h).

Looking at Agricultural impacts by criteria categories as set out in Hillstrom's Schedule 3, the Modified Preferred route is clearly an inferior option, with higher impacts in nearly every category and lesser impacts in only one category. Alternatively, the Modified Preferred route has lower impacts based on having lower number of square feet of permanent impacts based on pole placement footage.

The costs of transmission to tree farms are different than other agricultural operations, because trees cannot be grown around the transmission structures or within easements. The loss of productive land and income is permanent, and as such, is non-compensable.

The Century farms have been ignored by the Applicants and Dept. of Commerce. These farms are important agricultural resources, and should also be considered as historical and cultural resources. Several Century Farm landowners made public comments regarding their farms in the record, detailing how long the farm had been in their family and the history of their farms. See, e.g., comments of Schreaders, Grossbach's, Stabus, Burdick, Scheffler. See FEIS, p. O-461

The Century Farm program, operated by Farm Bureau and the Minnesota State Fair, maintains a public database¹³, available online. In responding to a Comment on failure to identify and address Century Farms, the Dept. of Commerce stated:

The requested information is not in a public database. The cost to independently develop this information for all of the routes outweighs its relevance to a reasoned choice among alternatives.

FEIS, P. O-401. This information is public, available online, and the Dept. of Commerce statement that it is not in a public database is false.

Other historical sites have been identified near the Zumbro River and 3A route proposal, including Bright's caves and the Red Bridge school house foundation. The Old Stagecoach Trail runs through the area, with wagon ruts visible to the naked eye. These routes are between Rochester and extend to both Lake City and Zumbrota, documented in Arthur J. Larsen's "Roads and Trails in the Minnesota Triangle: 1849-60." Ex. 39, Testimony of Rohlfing, p. 20.

The view of "historical sites" and "archeological sites" taken by Commerce is too limited, because so many historical and archeological sites were not mentioned in the DEIS and then not addressed in the FEIS. The laws and rules regarding historical and archeological sites do not contain any definition of "historical site" or "archeological site" nor is there any limitation for historical and archaeological sites.

¹³ See Farm Bureau Century Farm site: <http://www.fbmh.org/safe/mnfarms/app/run.html>

V. COST COMPARISON

The applicant’s Modified Preferred route is by far the least costly route. Using the cost data provided by the Applicants, a comparison of costs shows that there is a cost savings of \$13 million with the Modified Preferred Route. The cost estimate for the Segment 3 Modified Preferred Route is \$88 million, and for the North Alternate Route 3A the cost is estimated at \$101 million. Ex. 5, Hillstrom, Revised Sched. 3.

For the entire route, estimates for the entire route from Hampton to the Mississippi River have shifted somewhat as the project has developed. While the full Modified Preferred Route has remained the same, at \$194 million, the North Route Alternate 3A was \$202 million and has dropped approximately \$11 million. Ex. 26, Stevenson Direct, p. 14. The most recent cost estimate puts the full routes at essentially equal cost:

	Total	345kV line	Additional 161kV
White Bridge	\$ 194,000,000	\$ 194,000,000	----
Dam	\$ 191,200,000	\$ 191,200,000	----
North	\$ 192,200,000	\$ 190,600,000	\$ 1,600,000

Ex. 71, Oronoco IR7 to Xcel, Attachment 4/5-1, Page 1 of 2.

The full routes, when compared utilizing the different Segment options, are essentially the same cost, except that if the North Route is chosen, a \$1,600,000 premium for the additional length of the 161kV line to Chester has been disclosed. Id.

Looking at the revised costs for Segment 3 from North Rochester to the Mississippi River, the comparative costs reflect that the Modified Preferred Route costs significantly less than the North Route. Ex. 5, Hillstrom Direct Schedule 3. This cost differential is sufficient to tip a decision in favor of the Modified Preferred route.

VI. RIGHT OF WAY SHOULD BE WIDENED TO ASSURE LOWER MAGNETIC FIELD LEVELS AT EDGE OF RIGHT OF WAY

Magnetic fields are a concern of NoCapX 2020 and United Citizens Action Network. In the Certificate of Need and the Brookings routing dockets, the range of magnetic field levels have been grossly understated. Although Applicants have admitted a broader range of potential magnetic fields in the Fargo routing docket, modeled at up to ten times higher than earlier disclosed in this application and those prior proceedings, they have yet to do so in this Hampton-LaCrosse docket. While appreciative of the admission in the Fargo docket, and aware of the safety function of right-of way width, NoCapX and U-CAN are concerned that the potential magnetic fields at the edge of the 150 foot right-of-way proposed are far higher than a precautionary approach would proscribe.

The modeled magnetic field levels provided in the application were misleadingly low. The conductor is a high capacity 345kV bundled 954 kcmil or conductors of similar capacity. Ex. 26, Stevenson Direct, p. 11, l. 6-8. These conductors in a single circuit configuration have thermal limits (Summer Thermal Ampacity and MVA Ratings) at approximately 3,700 amps and 2211 MVA¹⁴, or 3,347 amps and 2050MVA,¹⁵ depending on the reference. The planned right-of-way is 75 feet on each side of the line, 150 feet total, and in the North Rochester to Alma “Segment 3” of the line, between 18 and 19 residential structures are within 500 feet of the alignment.¹⁶ In those 18-19 residences, there are an unknown number of individuals affected. The Application shows “Calculated Magnetic Fields for Proposed 345kV Transmission Line Designs” for the 345kV line, with amps ranging from to 106 to 415 amps, and millegaus levels at the centerline ranging from 10.29mG to 71.85mG, at the 75 foot edge of right of way from

¹⁴ Ex. 99, Attachment B, Direct Testimony of Schedin Attachment J, p. 3.

¹⁵ Ex. 1, Application, p. 3-28 ; Ex. 99, Aff. Of Bruce McKay,

¹⁶ Ex. 2, Direct Testimony of Hillstrom, Schedule 3.

2.58mG to 17.44mG, and at 300 feet ranging from 0.30mG to 1.35mG. When additional magnetic field calculations were performed and information was provided in the Affidavit of Bruce McKay, P.E., as a Comment for the DEIS¹⁷, it showed his calculation of potential magnetic fields ranging at the centerline from 13.58mG to 359.33mG, at edge of right-of-way ranging from 2.73mG to 124.64mG, and at 300 feet, ranging from 0.30mG to 12.17mG, up to an alarming 10 times higher than stated in the Application. Ex. 88, Affidavit of Bruce McKay, P.E..

Similarly low magnetic field levels were provided in the DEIS. Ex. 56, DEIS, table 7.1.1.2-1 and 2.

These amperage (current) levels used in the Application and in Testimony are not consistent with Certificate of Need testimony and Compliance Filing. Applicants' undergrounding estimate for this project¹⁸ identifies capacity and loading, which show a specified amperage of 3,700A, a load factor of 75% of that amperage, and a "large load transfer capacity requirement of 2,000MVA per circuit" in numerous places in the study:

This McKay Affidavit and other DEIS Comments were filed¹⁹ putting MOES on notice that the modeling was materially in error based on these other documents. These modeled levels were challenged by an engineer in an Affidavit submitted in the CapX 2020 Brookings docket, and as a result, the Applicants filed a revised chart in the Fargo CapX docket (09-1056) Lahr's Direct Testimony, Schedule 7 (see Attachment B, for clearer graphic). In this docket, instead, Amanda King's testimony claims maximum expected loading of 600 MVA.

Right-of-ways are established to protect the public health and safety. The planned 150 foot right-of-way, with 75 feet on each side of the centerline, does not provide sufficient levels of precaution to protect the public safety from the potential impacts of magnetic fields. If a routing

¹⁷ FEIS, Commentor 139, p. O-303 – O-311, Response O-312-313.

¹⁸ FEIS, Appendix D (CapX Hampton-Rochester-LaCrosse 345kV Project Underground Report), p. 2, 5

¹⁹ FEIS, Comment38-39, p.2-19 & 2-20.

permit for this line is granted, NoCapX and U-CAN urge that the full range of magnetic field levels be acknowledged and that as a precaution, the right-of-way for this route be designated wide enough to provide for levels of no greater than 2mG at the right-of-way edge sufficient to protect landowners and residents.

VII. ARGUMENTS OF ORONOCO TOWNSHIP ARE SPECULATIVE AND ARE NOT CREDIBLE BECAUSE THEY ARE NOT BASED ON ROUTING CRITERIA

Oronoco Township's arguments are speculative, based on planned and hoped for development, yet it accepts and has no objections to the the 161kV transmission line. The township appeared unwilling to acknowledge, or unaware, that their area was receiving power from the 345kV and instead claimed that it was not getting anything from this project. Public Testimony of Stolp, Collins, Tr. Public Hearing Pine Island 1:30 p, p. 35, l. 22-24. Oronoco's consultants admitted that the 345kV was powering the 161kV line. When Smith was questioned by Applicants:

Q: Are you aware that both the 345 and 161 will connect at the same substation?

A: I am aware of that.

Q: And do you have an understanding of how the 345 system – or the 345 line in this case will be stepped down to provide power to the 161 system?

A: I am aware of that.

Testimony of Smith, Tr. Vol. 2, p. 58.

Oronoco Township is a latecomer to this process, having sat on the sidelines during the Advisory Task Force Process and Environmental Scoping. Testimony of Broberg, Tr. Vol 2, 144-148; Ex. 42, Notice of Commission Meeting on Advisory Task Force Structure and Charge. It was NoCapX and U-CAN that filed and argued the Motion that secured a second Citizen Advisory Task Force, without which there would have been only one Task Force, focused on Dakota County, and without which Ornooco Township would have had no opportunity to be

represented on a Task Force²⁰ Task Force meetings were noticed, invitations to townships sent, meetings held, and other county, city and township representatives participated at three meetings of each Task Force. Oronoco Township failed to participate. Ex. 44, PUC Order Accepting the Application as Complete and Requesting Proposals for Task Forces; Ex. 45, PUC Order Authorizing the Establishment of Two Advisory Task Forces; Ex. 47, North Rochester to Mississippi River Advisory Task Force Report.

Oronoco Township was also provided notice of EIS Scoping, and failed to propose alternate routes as provided in the rules.

Minn. R. 7850, 2500, Subp. 3. Alternative sites or routes.

During the scoping process, a person may suggest alternative sites or routes to evaluate in the environmental impact statement. A person desiring that a particular site or route be evaluated shall submit to the commissioner of the Department of Commerce, during the scoping process, an explanation of why the site or route should be included in the environmental impact statement and any other supporting information the person wants the commissioner to consider. The commissioner shall provide the applicant with an opportunity to respond to each request that an alternative be included in the environmental impact statement. The commissioner shall include the suggested site or route in the scope of the environmental impact statement only if the commissioner determines that evaluation of the proposed site or route will assist in the commissioner's decision on the permit application.

Minn. R. 7850.2500, Subp. 3; see also Minn. R. 7850.2400; Ex. 46, Notice of Public Information and EIS Scoping Meetings; Ex. 48, Hampton to Northern Hills Advisory Task Force Report. Ex. 49, Public Comments on the Scope of the Draft EIS. Oronoco Township failed to propose alternate routes.

Instead of legitimately offering a route proposal, Oronoco waits until the last minute, after completing its testimony and case-in-chief, and contrary to rules for proposals of routes, submitted an utterly new route, one that had not been previously proposed, one for which

²⁰ [20103-47852-01](#) PUBLIC 09-1448 TL NOCAPX 2020 & U-CAN MOTION--MOTION FOR CATF & JOINT ENVIRONMENTAL REVIEW 03/10/2010

landowners had not received notice, and one that had not been evaluated in environmental review. Ex. 89, New Capx 20202 Route Proposed by Oronoco Township. The Township attorney admitted, when introducing it:

I neglected to put in a document at the beginning of his testimony that I would like to distribute. I spoke yesterday and indicated to you Oronoco Township's position about how we could adjust this route so that the issues Oronoco is raising could be handled, along with a lot of the issues that you heard last week from property owners, particularly to the west of – to the east of Oronoco.

And I've asked Mr. Broberg to prepare a map that reflects that, and I would like to mark this as 89, if that's acceptable, our Honor, and to ask him to identify it.

Tr. Vol/. 2, p. 158.

. The Township consultant asked, upon introduction, "Is this my cue?" Testimony of Broberg, Tr. Vol.2, p. 158, l. 18. After a long off the record discussion, and a discussion on the record, when questioned, Broberg testified that this proposal was a last minute effort hatched the evening before at a Township Planning Commission meeting. Testimony of Broberg, Tr. Vol.2, p. 166, l. 18- p. 167 l. 16. He testified that Oronoco Township made this proposal without doing any impact analysis under Minn. R. Ch. 7850. Id., p. 167. Broberg also testified that the residents along the new portion of the "route" had not been notified. Id., p. 163. The Applicants walked parties through the route on Google Earth, and many residences were visible along Wabasha County Road 80 turning into Olmsted County 11th Avenue N.E. Ex. 35, Xcel Google Earth kmz files. These Oronoco Township residents were not notified that their township had offered up their land as an alternate route.

The rest of the township's case was as lacking in credibility. Smith's testimony takes into account only two of the many routing factors that the Commission is to consider. In looking at "human settlement" both Township witnesses relied heavily on "planned future" development, which is no more than wishful thinking. Smith expanded the distance parameters to 1,350 feet,

or a one-half mile corridor. His selection of 1,350 feet for analysis was claimed to be based on visibility over distance where trees have no leaves, a condition present everywhere transmission is sited in Minnesota, not only in Oronoco Township. This approach does not address variation in elevation of pole placement over distance, distinctions in variety and harmony, such as transmission in developed areas versus forested lands, man-made infrastructure versus natural environment and landscape, and over hilly terrain versus flat, and visual impact mitigation available, as seen in the DEIS section 7.3.1, Visual and Aesthetic Impacts; Exhibit G, slope map; and Hillstrom Rebuttal, p. 2-5, Schedule 15; and Ex. 35, Xcel's Google Earth. Contrary to the Township's arguments, there will be increased visual impacts on the Alternative North Route because of the prevailing natural landscape elements and minimal human modifications to this landscape, such as infrastructure, presenting scenarios where there is more impact because there is greater contrast.

Oronoco Township also relies heavily on speculation, on township plans for development and on housing development patterns, in its opposition to the Modified Preferred Route. The Township also makes an unfortunate comparison of property valuation in Olmsted County and Wabasha in an effort to deflect the route, arguing that its property is worth more in Olmsted than property in Wabasha. These theories are not founded in routing criteria, are not a basis for a route selection, and reflect poorly on the township. As Xcel's Tom Hillstrom notes:

While the effect on land-based economies is one of the 14 factors listed in Minnesota rule 7850.4100 that must be evaluated when selecting a route, this factor has, to my knowledge, never been interpreted to require a comparison of the taxable value of properties within each route alternative. Mr. Broberg's interpretation would also result in favoring affluent counties and neighborhoods at the expense of less affluent counties and neighborhoods.

Ex. 15, Hillstrom Rebuttal, p. 5-6.

Oronoco Township’s primary argument against the Applicant’s Modified Preferred Route is that it would impinge future development, and that this claim should be considered under the “human settlement” criteria. However, future development is speculative, as noted by Applicant witness Hillstrom. Id.

Looking at the dates of the township’s ordinances, the February, 2011 Zoning Ordinance and the May 2007 Subdivision Ordinance, the CapX 2020 Certificate of Need application (PUC Docket 06-1115) predates both Ordinances, and the CapX 2020 Hampton to LaCrosse Transmission Line Routing application (PUC Docket 09-1448) predates the February 2011 Zoning Ordinance.. This project was applied for prior to the township’s ordinances. Ex. 66, Smith Direct, and Ex. 68, Broberg Direct.

Oronoco Township’s speculative claims are not supported by the evidence in the record. Building permits have plummeted since the 2004 peak in numbers of permits and the 2006 peak in dollars. The value of permits is down to less than 10% of those peak dollars:

Year	Township Permits	Township Valuation
2010	16	\$758,064
2009	21	\$987,889
2008	31	\$2,558,102
2007	50	\$4,670,110
2006	65	\$8,281,034
2005	52	\$5,872,348
2004	69	\$6,006,854
2003	82	\$7,969,355
2002	59	\$7,678,842

2001	64	\$7,715,072
TOTALS:	509	\$52,527,660

See Ex. 87, Olmsted County Planning Dept. Building Permit Chart.

Under cross-examination, Smith admitted there was a decrease in township permits issued, “50 permits in 2007... the 31, the 21, the 16, those do appear to be significantly lower.” Smith Testimony, Tr. Vol. 2, p. 91-91.

The evidence, instead, of lack of impacts of transmission on Oronoco subdivisions is shown on the maps provided by the townships:

The Olmsted Future Land-Use map included in the Subdivision Ordinance for Oronoco Township, attached to Mr. Smith’s Direct Trestimony as Schedule 8, uses the term “Suburban Development” and “Potential Suburban.” The modified Preferred Route does not cross any area identified as Suburban Development and crosses less than a mile of the area identified as Potential Suburban at the White Bridge crossing area. It is unknown whether, or when residential development may occur in the Potential Suburban area.

Ex. 15, Hillstrom Rebuttal., p. 4, l. 14-20.

Both witnesses for Oronoco Township also materially misrepresented the status of the parcels in subdivisions they are concerned about, that are named in their testimony, and which there was testimony that the parcels were developed, built and ready for occupation was misrepresented. Smith testified that when he said “developed” he meant they were “completed, construction is completed, ready for occupancy.” After plat maps of several subdivisions were entered into the record, and he was questioned about specifics of each subdivision plat map entered, and he then agreed, contrary to his prior testimony, that there were many vacant lots in the subdivisions. Ex. 86, Plat Maps of Landings at Sandy Pointe, Zumbo Haven, and Zumbro Sound.; Testimony of Smith, Tr. Vol. 2, p. 44-81. Smith testified that in Zumbro Sound subdivision, seven units were constructed, but agreed when questioned, that it was likely that

only three homes had been built. *Id.* Broberg, when questioned about these subdivisions, also agreed there were many vacant lots. Testimony of Broberg, Tr. Vol. 2, p. 133-134. When questioned about the location of the subdivisions, Mr. Smith that the nearest one, Zumbro Haven, is about a quarter mile away from the proposed alignment, and Sandy Point, about one half mile away. *Id.*, p. 82-84. None of these subdivisions is directly affected by the transmission line as proposed.

Future development is not necessarily hindered or hampered by transmission lines, and instead, the record reflects only evidence that development is compatible with transmission lines.

Moreover, the construction of a transmission line in an area does not mean the amount of future development will be reduced. In fact, our experience has been that development occurs around and up to existing transmission facilities.

Applicants provided evidence regarding its experience with the Highway 494/694 ring with 345kV transmission in the 1960s, and more recently in Shakopee, also near an Xcel 345kV line. Ex. 15, Hillstrom Rebuttal, p. 5. In a series of photos of suburban Cottage Grove, beginning in 1970, shows that development spread to and beyond a transmission line after line was built north of existing development. Ex. 15, Hillstrom Rebuttal, p. 4-5, see also Schedule 14, p. 1.. In the 1980 photo, just ten years later, the development has moved out to the transmission line and also crossed through to the other side of it. *Id.*, p. 2. Eleven years later, the development has filled in to the northeast, also moving to and through the transmission line corridor to the other side. The final 2010 photo shows the area completely filled in, with only some open green space on the east, perhaps a school and sports fields, and wooded area to the west which may be residential. The growth in Cottage Grove has completely surrounded the transmission line.

Zumbrota presents a similar scenario. When the Prairie Island line was run through Zumbrota, the line was away from the development, and development moved to the line. A member of the public demonstrated this with a 1975 photo, which is easily compared with the current sheet maps show development at the line. Testimony of Wheatley, Tr. Public Hearing Cannon Falls 6:30, p. 65-67.

Another example of Oronoco Township's misstatements is its claim that Lake Zumbro is the only lake in Olmsted County, when in fact there are 16, 17 including the former Lake Shady.²¹

In addressing "human settlement," Broberg focuses on "parcels," which is not a criteria of routing, and the discussion doesn't address the humans. This is a case of Wabasha County's land-use policy that consciously and deliberately promotes preservation versus Olmsted County and Oronoco Township's land-use policy that consciously and deliberately promotes development. Ex. 40, NRG Rebuttal, Attachment J, Wabasha County Comprehensive Plan; Testimony of Broberg, Vol. 2, p. 146; Ex. 66, Smith Direct, Oronoco Twp. Comprehensive Plan.. The Township want to develop its own area, which it encourages in its land-use plans, but in doing so, the township doesn't take responsibility for development by hosting infrastructure. This is an attempt, through land-use policy, shirk the burdens of development, and to denigrate the neighboring land by deflecting infrastructure over to the Alternate North Route. Wabasha County is taking active measures to maintain the land-use and culture of the area, and utility infrastructure is not compatible with land preservation.

As Mr. Broberg did with "parcels," Mr. Smith has expanded criteria to include not only residences but "structures." This is criteria recognized under the Power Plant Siting Act. Minn.

²¹ ²¹ See Ex. 40, NRG Surrebuttal, p. 6, fn. 1: DNR's "Lake Finder" for Olmsted County, available at: <http://www.dnr.state.mn.us/lakefind/index.html>

Stat. §216E.03; Minn. R. 78_____. For example, the Applicants removed one unit from the house count because it was classified as a storage building. Ex. __, Hillsrom Direct, Schedule 8, Revised, p. 4 of 12.

A similar speculative assertion made by potentially affected parties was considered by the Commission in routing the CapX 2020 Brookings-Hampton transmission line proceeding, where the Commission found:

Further, comments that the Belle Plaine crossing might negatively affect future growth in the area are speculative at best. Population growth and economic development fluctuate in response to multiple factors, and there is no evidence in the record on the probable effect of this or other transmission lines on community growth. In fact, the only record evidence on Belle Blaine growth issues shows recent declines from projected growth rates, which bear no relationship to the proposed transmission line.

Commission Order, Brookings-Hampton 08-1474 (____, 2011).

Speculation is not sufficient. Routing of transmission lines is based on what exists at the time of the application.

VIII. ENVIRONMENTAL REVIEW DOES NOT COMPLY WITH THE MINNESOTA ENVIRONMENTAL POLICY ACT

The environmental review of the CapX 2020 project is fundamentally flawed because it does not comply with the mandates of the Minnesota Environmental Policy Act (“MEPA”) in that the Final Environmental Impact Statement and Comments does not accompany the proposal through the administrative process. Additionally, in this case, the state’s Dept. of Commerce has refused to follow state rules and work with the United States Dept. of Agriculture’s Rural Utilities Service on environmental review.

A. THE FEIS HAS NOT ACCOMPANIED THE PROJECT THROUGH THE ADMINISTRATIVE PROCESS AS MEPA REQUIRES

This docket is a transmission routing proceeding under the Power Plant Siting Act, Minn. Stat. Ch. 216E. The Minnesota Environmental Policy Act (MEPA) specifies that the “final

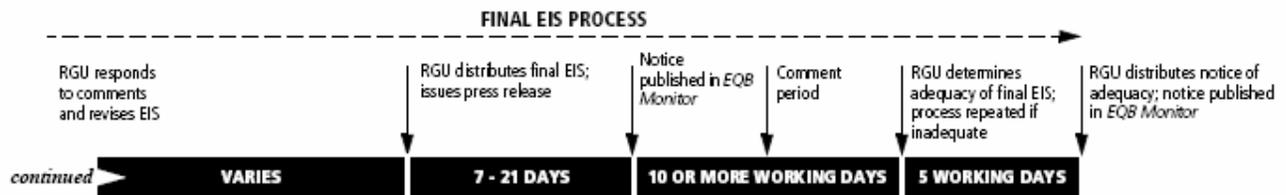
detailed environmental impact statement... shall accompany the proposal through an administrative review process.”

*Prior to the preparation of a final environmental impact statement, the governmental unit responsible for the statement shall consult with and request the comments of every governmental office which has jurisdiction by law or special expertise with respect to any environmental effect involved. Copies of the drafts of such statements and the comments and views of the appropriate offices shall be made available to the public. **The final detailed environmental impact statement and the comments received thereon shall precede final decisions on the proposed action and shall accompany the proposal through an administrative review process.***

Minn. Stat. §116D.04, Subd. 6a. Comments (emphasis added).

Environmental review under the Power Plant Siting Act must meet the requirements of MEPA.

Generally, when a Final Environmental Impact Statement is issued, there is notice and a comment period prior to a determination of adequacy:



Ex. D, p. 11, Guide to Minnesota Environmental Review (selected); see also Minn. R. 4410.2800. The PPSA rules are silent on this step in the process, neither permissive nor prohibitive. See e.g., Minn. R. 7849.1800, Environmental Report to Accompany Project (mirroring MEPA language) but c.f. Minn. R. 7850.1200. MEPA, on the other hand, is clear in its statement that “[t]he final detailed environmental impact statement and the comments received thereon shall ... accompany the proposal through an administrative review process.”

The coordination of environmental review with the permitting review has not been occurring in the CapX 2020 routing dockets, the FIES has not accompanied the proposal through an administrative review process. This MEPA mandated accompaniment cannot and does not

occur when the Environmental Impact Statement is released after the public and evidentiary hearings have been completed and after public comment closes. NoCapX and U-CAN have repeatedly raised this in the CapX routing dockets, including this one, where the Prehearing Order stated:

The Administrative Law Judge has not included a deadline for submission of public comment on the final EIS, as advocated by No Capx 2020 and U-CSN. The EIS process is conducted by the Commissioner of the Department of Commerce, independently of the route permitting process. And although a ten-day comment period is required under 4410.2800, subp. 2, that rule chapter is not applicable to the preparation or consideration of an EIS for a high-voltage transmission line except as provided in Minn. R. 7850.1000 to 7850.5600. See Minn. R. 7850.2500, subp. 12.

Fn. 5, p. 3, First Prehearing Order. However, Minn. R. 7850.2500, subp. 12 does not relieve us of the mandate of MEPA:

The final detailed environmental impact statement and the comments received thereon shall precede final decisions on the proposed action and shall accompany the proposal through an administrative review process.

The purpose of environmental review is to inform the routing record, and to inform the record – **the final EIS and comments on it must accompany the proposal through the process**, not drop in after the process is over.

B. COMMERCE HAS REFUSED TO WORK JOINTLY WITH USDA'S RURAL UTILITIES SERVICE ON THE EIS

Minnesota environmental rules anticipate the state and federal governments would work together on environmental review. Minn. R. 4410.3900. This has not happened in this case, several motions have been filed by NoCapX 2020 and U-CAN requesting this joint review, and it has not occurred. Because there has not been a joint effort and cooperation, the environmental review is not adequate.

IX. CONCLUSION

For these reasons, upon this analysis of the routes, using the statutory and rule-based criteria, NoCapX, U-CAN and NRG have several recommendations:

- For Segment 1, NoCapX recommends the routes that begin at Hampton, proceeding along the Preferred Route and then head southward through Dakota County's Lake Byllesby Park, a fitting tribute to Byllesby, the first CEO of Northern States Power, and south and east back to the Preferred Route.
- For Segment 2, NoCapX, U-CAN and NRG wish to avoid utilization of 2C3-003 and 2C3-004;
- For Segment 3, NoCapX, U-CAN and NRG support use of the Modified Preferred Route utilizing segments 3-P and 3P-002. NRG has found that although all routes inherently have a significant impact, the Segment 3 Alternate Route 3A has the greatest impacts across the spectrum of criteria. NoCapX, U-CAN and NRG support selection of a route utilizing the Modified Preferred Route and its "scoping alternative" routes because they have more limited impacts than the other options presented for consideration.

Specifically, of the Modified Preferred Route and its "scoping alternative" routes, NRG recommends, beginning with DEIS Sheet MR1:

- Sheet MR1: Using the Modified Preferred Route from the Preferred North Rochester Substation, heading east on 3P across Hwy. 52, and running south along Hwy. 52 on the east side, utilizing corridor, to avoid the wetlands on the west side; and then consolidating the Preferred 345kV and 161kV in one corridor, heading east from Hwy. 52 along the Modified Preferred on 500th Street. Ex. 2, Hillstrom Direct p. 11, Schedule 2 and Schedule 15. NRG requests avoidance of the Alternate substation, to the north of the Preferred substation.

- Sheet MR2: Continuing east, at Co. Rd. 11, the Modified Route continues as it turns south for one half mile. This consolidation would place the 345kV and 161kV structures adjacent to each other along 500th Street and one half mile south on County Road 11.”
Ex. 2, Hillstrom Direct, p. 11.
- Sheet Map MR4: One half mile south on County Road 11, the 161kV continues south and the 345kV heads east cross country through the middle of Section 27, incorporating Route Alternative 3P-0002 following half section lines, through Section 26. Ex. 2, Hillstrom Direct, p. 12. Turning south, following 230th Avenue for approximately ¼ mile, then turning east, joining the original Preferred Route, approximately ¾ mile then south following field/lines and cross country to Ash Road. Id., DEIS p. 142.
- Sheet Map MR5: Follow Modified Preferred Route south and then southeast on Ash Road;
- Sheet Map MR6: Following the Modified Preferred Route to the southeast then on the southwest side of County Road 18, then heading due east cross-country going past County Road 27/Power Dam Road NW and then south paralleling County Road 27/Power Dam Road NW for ½ mile, then east, avoiding populations and the dairy farm along White Bridge Road, following field lines/cross country for 2.2 miles;
- Sheet Map MR 10: Then jogging northeast crossing White Bridge Road and then east crossing the Zumbro River for for .32 miles and then northeast cross country for .22 miles then due east following field lines/cross-country for 3.7 miles.
- Sheet Map MR11, 12, 13, 14, 15, 16... In section 12, a breakpoint provides a nearly straight-south routing opportunity for the Chester 161kV line. Any northern route would be longer, less direct, and more costly.

- Parallel Hwy. 42 Ex. 2, Hillstrom Direct, p. 13, l. 14-21, see also Ex. 4, Schedule 2.

These route segment options have been identified as having the least impacts.

We ask that the Commission find the Modified Preferred route to be the route most consistent with Minnesota's policy of non-proliferation of routes, and that is the route with fewer impacts and impacts that are compensable. The 3A North Route would also be less suitable for future transmission expansion, and transmission expansion is planned in the area. Compliance with the Minnesota non-proliferation policy results in fewer miles of new transmission line leading to reduced cost, less fragmentation, and less miles of new corridor would be blazed by utilizing the combined 345kv and 161 kv from the Alternate North Rochester substation to the southern locations of the Rochester Northern Hills substation, and on to the Chester substation. Applicants have requested the Chester expansion be included in the EIS for this project. Both of these substations are located in and near Rochester, where the need for electricity has been cited, and the Chester line is to be routed south to the substation, utilization of the same corridor for both lines places the burden on the communities upon which "need" for this transmission line is based.²²

NoCapX 2020, U-CAN, and the North Route Group also request that if a route is chosen, that in the interests of protection of the public, the right-of-way be of sufficient width to reduce potential magnetic field exposure to 2 mG or less at the edge of the right-of-way.

NoCapX 2020 and U-CAN also request that the environmental review be found inadequate, in violation of MERA because the FEIS did not accompany the proposal through administrative review, and because the Dept. of Commerce has steadfastly refused to cooperate and work in coordination with the USDA's Rural Utility Service in their ongoing federal

²² See Certificate of Need, MPUC Docket 06-1115.

Environmental Impact Statement, the Commissioner would not direct cooperation between his agency and RUS, and because the ALJ would not Order cooperation and coordination with RUS.



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