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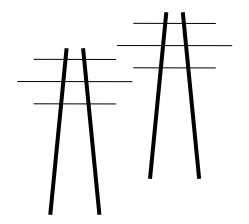
**Carol Overland** 

Attorney at Law, MN #254617

Energy Consultant—Transmission, Power Plants, Nuclear Waste overland@legalectric.org

1110 West Avenue Red Wing, Minnesota 55066 612.227.8638 P.O. Box 69 Port Penn, Delaware 19731

302.834.3466



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Ray Kirsch, Project Manager Dept. of Commerce 85 – 7<sup>th</sup> Place East, Suite 500 St. Paul, MN 55101

eFiled and emailed to raymond.kirsch@state.mn.us

RE: CETF and NoCapX 2020 DEIS Comments

ITC Midwest MN/IA 345 kV Transmission Project

PUC Dockets 12-1053 & 12-1337

Dear Mr. Kirsch:

These comments are submitted on behalf of Citizens Energy Task Force and No CapX2020. Thank you for the opportunity to comment on the DEIS for the ITC Midwest MN/IA 345 kV transmission project.

#### PROCEDURAL COMMENTS

Environmental review is to "accompany" a project permitting process. We ask that the timing of the release of the FEIS be coordinated with the hearing record, and the hearing record should be left open for at least a week after the release of the FEIS for comments on the adequacy of the FEIS, specifically that the Dept. of Commerce request this extension.

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).

This MEPA mandated accompaniment cannot occur when the Environmental Impact Statement is released after the public and evidentiary hearings have been completed and after public comment closes.

#### DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS

#### **GENERAL COMMENTS**

- CETF and No CapX2020 take no position regarding routing alternatives this project is not needed and should not be granted a routing permit.
- The EIS should have explanation of relative weights of criteria, such as characteristics where a route would be prohibited, where avoidance should be used, or where mitigation would in fact mitigate the impacts, and where some mitigation is possible but it does not offset the impacts.
- Cumulative impacts, and impacts of phased and connected actions must be considered. This project, as proposed, is part of a 17 project MVP Portfolio, two of which are in Minnesota, both in southern Minnesota. All the projects, in concert, will help export power from one part of the Midwest to another, and these impacts must be considered.
- The EIS should include an explanation of the "Buy the Farm" option, with a citation to Minn. Stat. §216E.12, Subd. 4 generally in the introduction. A bullet point reference to Buy the Farm should also be inserted in multiple areas under the "Mitigation" section, because BTF is a primary mitigation technique in areas where the line interferes with human settlement, commercial, and agricultural uses. The paragraph on p. 25 is not sufficient.
- Everywhere the DEIS uses the term "need" it should be changed to "want" or "desire."
- Define the need: The DEIS makes many statements about the "need" of this project, but it should specifically identify the "need" for this project. The best solution cannot be determined in the absence of a well-defined need. A proper utility application will include required capacity (what is the magnitude of the need?), location (where is the need?), timing (when is additional capacity required?) and the nature of the need (does it appear under normal system operations or in response to certain contingencies?). The need should be substantiated by sales agreements, demand, load flow results and load growth forecast studies. The EIS analysis should incorporate and vet the need description provided by the Applicants.

- <u>Identify potential solutions for the specific need</u>: The best solution will account for the unique characteristics of the area with the electrical need. Broadly, the affected area should be well-characterized in terms of its physical and electrical characteristics:
  - O Physical Description -- The applicant should present electrical service territory along with political/topographical maps. These maps should identify existing and planned utility facilities and load centers as well as critical outage facilities if the need is driven by contingencies. Existing land uses, endangered species, critical or protected habitats should also be clearly identified.
  - Electrical Description -- The applicant should demonstrate that it fully
    understands the nature and location of the factors driving the need for new
    infrastructure. Electrical loads in the area should be identified by customer class
    i.e., residential, commercial, industrial, agricultural, that is driving the need.
  - Forecasts -- Historical and projected customer end-use data should be presented.
     Load data identified by categories above, including Load Duration Curves,
     Hourly Load Shapes/Daily Load Curve at a minimum should be presented.
  - O Demand Side Alternatives -- The applicant should quantify existing and projected Demand Side Management (DSM) programs including saturation and penetration data, details of interruptible service and frequency and duration of interruptions. Address unique factors such as reliability and power quality requirements, reliability studies, and consumer- or customer-owned generation should be included in the application.
- The DEIS repeatedly uses the terms "wind generation" and "wind" and "enable new wind" which is inaccurate. The transmission system, and transmission operators, transmission service providers, and utilities, may not discriminate in provision of services. The transmission system must be open to all. What is present in the system is much coal.
- The EIS should clearly state that this project does not displace coal generation, it provides transmission for what generation is in the system and what generation could be built in the future.
- The EIS should clearly state that this project connects into the 345 kV system that
  extends into the Dakotas and Iowa and is connected to many megawatts of coal
  generation.
- Where the DEIS refers to safety and/or health impacts, the Department of Health should be requested to review the information and submit a comment.
- To the extent that the DEIS claims that this project would facilitate or enable wind generation, the FEIS should provide the basis for that statement and quantify it.

- To the extent that the DEIS claims that this project would allow wind to displace coal, it should identify what coal generation would be displaced and the basis for that claim.
- To the extent that the DEIS states that this project would lower costs, it should state what costs would be lowered and who would pay these lower costs, what customers, what ratepayers, in what location, what hub (who benefits).
- The FEIS should be neutral and not specify "wind generation" because the transmission system is operationally neutral.
- The EIS should include information on benefactors of the claimed reduced congestion costs.
- The EIS should note that according to ICF's Independent Assessment of Midwest ISO Operational Benefits, "benefits" are correlated with increased use of coal generation:

RTO operational benefits are largely associated with the improved ability to displace gas generation with coal generation, more efficient use of coal generation, and better use of import potential.

Attached, p. 14, Independent Assessment of Midwest ISO Operational Benefits, ICF (2007); online: <a href="http://nocapx2020.info/wp-content/uploads/2008/08/icf\_miso-benefits-analysis\_final\_02282007.pdf">http://nocapx2020.info/wp-content/uploads/2008/08/icf\_miso-benefits-analysis\_final\_02282007.pdf</a>

- The EIS should describe "need" with sufficient detail to be meaningful. The way "need" is used in the DEIS, there are no alternatives that would meet that "want" other than stuffing money in their corporate pockets.
- The DEIS often uses the term "citizens" where a more correct term would be "people" or "humans."
- The EIS should state the capacity of the project as proposed, and of alternatives, including the configuration, voltage, amps and MVA rating.
- The EIS should consider externalities, such as the cost and impacts of continued and/or increased use of coal generation.
- The EIS should consider cost and impacts of line loss and need for increased reactive power inherent in long distance transmission.
- The EIS should include a spreadsheet of FAA listed public and private airports in the project area. The FAA lists airports by county. Airports are frequently left out of environmental review, and comments at EIS meetings reflect that this may well be the case with this EIS.

#### EIS COMMENTS SPECIFIC TO SECTIONS

#### COSTS - §1.1; 3.7.2; 3.9

- The DEIS cost benefit balance is skewed. Balance must be symmetrical, where costs are considered and weighed against benefits.
- Benefits attributed to this project are benefits of MVP 3 (not just this part of MVP3); MVP 3 and 4; MVP 3, 4 and 5; and all 17 MVP projects. These "benefits" must be separated out, and the costs must be balanced against these benefits. For example, the cost part of this balance must include separate analysis of the full costs of MVP 3, MVP 3 and 4, MVP 3, 4 and 5, and all 17 MVP projects; and the cost allocation attributable to Minnesota of MVP 3; MVP 3 and 4; MVP 3, 4 and 5; and all 17 MVP projects. The benefits part of this balance must include the full "benefits" of MVP 3, MVP 3 and 4, MVP 3, 4 and 5, and all 17 MVP projects; and the "benefits" to be realized by Minnesota of MVP 3; MVP 3 and 4; MVP 3, 4 and 5; and all 17 MVP projects.
- Where all 17 MVP projects must be built to realize the benefits, where modeling for benefits is modeling of all 17 MVP projects, consideration of just a part of the MVP Portfolio is inaccurate.
- In the cost/benefit analysis, each utility's share in the cost apportionment scheme must be clearly presented, and each utility's share in the benefits scheme must be presented.

#### Cost analysis must not be skewed

- Because the "route" in question is roughly ½ of MVP 3, and an even smaller part of the MVP Portfolio, costs as presented, and the cost allocation scheme, are skewed. Undergrounding part of the route, if considered as mitigation, would have a much higher percentage of cost for just that portion than if the cost of underground were considered against the cost of the entire route. This skewing must be avoided in the EIS.
- The cost of the Huntley Substation includes expansion capacity. The need for, cost, and identification of additional space and equipment should be specified.
- Table 3-4 should show the per mile breakdown of costs. Comparing §1.1 with Table 3-4, it looks to be over \$2 million/mile, not including substations, and including substations, nearly \$3 million/mile.

## Cost information and analysis must be thorough – cost must not be primary driver

Often cost considerations are the primary driver. The proper focus of the EIS is to determine environmental impacts.

- Cost considerations should not be the primary driver in any environmental analysis. See MERA, Minn. Stat. Ch. 116B.04 (Economic considerations alone shall not constitute a defense hereunder.).
- The EIS should make best efforts to quantify those aspects associated with the environment, such as preservation of natural land, wildlife habitat, migratory corridors, avoidance of increased mercury levels in waters, scenic viewsheds, etc. There is much information available on quantification of these factors.
- Cost analysis must provide enough information to determine why one option would cost more than another, other than apparent length.
- Other considerations add to cost, for example, turning corners requires more robust structures and hence, higher cost. Structures capable of double circuiting are more expensive. Foundations in sandy soil or wetlands could require additional engineering and materials, and cost more. Structures for large spans must also be more robust and cost more. These considerations must be addressed, the cost estimates must be itemized, etc., in sufficient detail to compare costs of the various alternatives.
- Analysis of project costs must also include costs such as the cost of loss of any funding due to construction of the project, costs of mitigation, etc.
- Costs of mitigation must be addressed up front to determine adequacy, if not, impacts may be left unmitigated and who will pick up the tab?

### **Route Permit Decision §2.2.3**

• The DEIS states that:

If issued a route permit by the Commission, ITCM may exercise the power of eminent domain to acquire land for this project.

The EIS should provide a citation for this statement.

#### **List of Potential Permits and Approvals Table 2-1**

• The EIS should state specifically whether an eagle take permit is necessary.

#### **Electric Safety Codes §2.4**

• The EIS should provide links to relevant parts of NESC, particularly clearances, wherever NESC is referenced.

### **Proposed Project §3.1**

• The EIS should include in the description of the project a statement of its connection to MVP 3, the 17 project MVP Portfolio, and the relative costs of each.

#### **Double-Circuit Structures §3.3.4**

• The EIS should state that where the structures would be capable of carrying another line, it could be a line of virtually any voltage, not necessarily a 161 kV line.

#### **Associated Facilities §3.4**

• The EIS should describe the purpose for each substation and whether interconnection opportunities are present for local generation, i.e., at the Lakefield Junction sub, whether it is solely a tie to the Split Rock-Lakefield Jct line, and for both Lakefield Jct. and Huntley, whether there is additional incoming electricity from sources other than the 345 kV line (supported by powerflow diagrams).

## Route Width, Right-of-Way and Anticipated Alignment §3.5

- The EIS should provide citation for statement that "[t]he ROW is that specific area required for the safe construction and operation of the transmission line."
- To the last full paragraph on p.15, the EIS should add that Applicants may seek to condemn land for an easement through power of eminent domain, and provide citation to Applicant's authority to invoke power of eminent domain.
- The EIS should include a reminder of Minnesota's policy of corridor non-proliferation, and that where there is a corridor, additional/future transmission projects may utilize this corridor.

#### Right-of-Way §3.5.2

• The EIS should clearly state in the narrative section that additional right-of-way will need to be acquired, i.e., where the existing easement is 150 feet, an additional 50 feet of ROW will need to be acquired, and on maps, identify areas where additional easement would be needed.

### **Route Alternatives and Route Variations §3.6**

• The EIS states that "This EIS does not discuss all possible routing options." The Commission may not select a route that is not analyzed in the EIS – this should be stated, and it is not up to the public to provide this analysis or provoke its creation. All options going forward to the Commission must be reviewed in the EIS.

#### **Transmission Lines §3.7**

• The DEIS' first paragraph of this section describes conductors. The EIS should describe with specificity this conductor, as it is different from that typically used by Xcel Energy for 345 kV lines, and is a very high capacity conductor.

The EIS should identify how many fiber optic strands are within the shield wire, how
many are for transmission line control, whether there is excess capacity, whether the
fiber optic cable will be leased out to third parties, revenue produced and if it is
considered in capital cost and operational cost estimates, and whether leased capacity is
available for internet service to rural communities.

#### **Undergrounding**, §3.7.2

Many aspects of undergrounding are not adequately explored.

- The EIS section on undergrounding should set out specific areas where it could be used
  to mitigate significant impacts, i.e., under lakes, through populated areas built up near
  existing corridor. Underground lines may be viable independent of significant
  aboveground constraints.
- The EIS should contain a full analysis of underground options, including location, configurations and cost should be included in the EIS. If there are other non-aerial options that are not underground, such as running along a bridge crossing, these should be analyzed as well.
- Where undergrounding routes are different than an underground version of an above-ground route, location should be considered. There may be feasible underground options at different locations where an above-ground route is not constructible.
- Applicants and regulatory agencies often state that they cannot underground higher
  voltage lines, but this is not true. Applicants could, they just do not want to
  underground, and will underground if ordered or if an agreement is reached, such as was
  done on the Chisago Project and the Hiawatha project. The prior undergrounding
  experience of applicants and other utility or other transmission providers should be
  incorporated into the EIS.
- A report released February 24, 2010, sheds light on undergrounding, where undergrounding was found to be feasible and not as expensive as previously thought. This report, from the Alberta Electric Service Operator is available online<sup>1</sup>, and the findings of this report regarding undergrounding of high voltage transmission must be incorporated into the EIS. See Technical Report by CCI: Feasibility Study for 500 kV AC Underground Cables for Use in the Edmonton Region of Alberta [Posted: February 24, 2010]. Underground was also considered for part of the Mid-Atlantic Power Pathway, a 500kV transmission line. MAPP has since suspended by PEPCO, the project promoter. Connecticut requires undergrounding of transmission lines. In Minnesota, the Chisago (in part) and Hiawatha projects have been undergrounded.

<sup>1</sup> The iterations and comments and the full report are available on the AESO Feasibility Study for 50kV Underground Cables page: <a href="http://www.aeso.ca/transmission/20001.html">http://www.aeso.ca/transmission/20001.html</a>

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- Costs of underground should be more specific, with estimates for a range of different situations, i.e., urban setting, prairie, wetland, rocky bluff.
- When comparing cost of undergrounding, identify party paying that cost, whether ratepayers in state, ratepayers of specific utilities, and/or the utilities subject to MVP cost allocation.
- Underground lines still generate electric and magnetic fields, but the DEIS is vague about EMF levels. Specifics should be disclosed in this narrative, with a wide range of amp/current levels, to equitably compare impacts of EMF between underground and above ground.

#### Lake Crossings §3.7.3

• The DEIS should evaluate underground lake crossings.

#### **Construction Process §3.8.4**

• The EIS should address construction practices, including traffic interruptions and diversions, use of helicopters, and implosive devices to connect pieces of conductor.

#### Abandonment and Decommissioning, §3.8.7

- The EIS should address the efficacy of partial removal of transmission foundations, and consider the potential for and impacts of concrete leachate and/or wooden pole treatments contaminating ground and/or surface waters.
- The EIS should address the impact on agriculture or other land uses of a foundation removed only 5 feet below the surface.
- The EIS should question the suggested practice of pushing over a pole if the pole cannot be cut. If it can be installed, it can be removed.

## Right of Way Acquisition, §3.8.1, 2 and 3.

- RoW acquisition costs vary widely and should be addressed. §3.8
- The EIS erroneously presumes that a private transmission-only corporation has the power of eminent domain. This must be corrected.
- ITC Midwest, as a private transmission-only company, will likely have to pay market rate for any easement expansion. Increased acquisition costs for a transmission-only company should be identified.
- Right of way access and equipment staging areas require access agreements, and may also require easements and compensation.

- Routing areas with increased easement should be specified, on maps and with legal descriptions, disclosing right of way that needs to be acquired.
- Valuation process of parkland, prime ag land, and other high value parcels, should be discussed.
- Evaluation of right of way width should be addressed, and state and federal standards or recommendations should be disclosed and cited.
- Factors considered in state or federal standards regarding right of way width should be disclosed and analyzed.

#### Electromagnetic field – charts in EIS are way off -- §3.7.2 and §5.3

- The DEIS appears to accept utility information without vetting. Accepting utility information without independent verification and independent calculation based on conductor specifications is insufficient all utility claims as to current levels, amperage and MVA, must be independently verified.
- Magnetic fields should be calculated for:
  - o Utility stated "peak" of 3,000 amps;
  - o Thermal limits of ??? amps;
  - o A range of amperage values in between.
- Magnetic fields should be calculated for a range of distances:
  - Under center line;
  - o 25, 50, 75, 100, 125, 150, 200, 250, and 300 feet from the centerline;
  - o Identification of distance at which mG level falls to 2 mG.
- Magnetic field levels must be calculated for a year that the project is projected to be
  operational, and five and ten years out, because this project is part of a 17 MVP project
  interconnecting for export and use of the line will increase as more MVP projects are in
  service.
- Raymond Kirsch, Commerce Environmental Review Manager, and John Wachtler, Barr Engineering, have been provided with a magnetic field calculation spreadsheet, and a discussion was had previously about calculation of magnetic fields with John Wachtler, and both are on notice that there is a simplified spreadsheet method of calculation of magnetic fields. An Excel version will be filed in eDockets.

### **Alternatives § 4.0**

• The EIS should clarify that the alternatives presented in this section are "system" alternatives.

## Need for the Project §4.1

- The EIS must define the need, as above. The EIS should specifically identify the "need" for this project. The best solution can not be determined in the absence of a well-defined need. A proper utility application will include required capacity (the magnitude of the need), timing (when is additional capacity required?) and the nature of the need (does it appear under normal system operations or in response to certain contingencies?). The need should be substantiated by load flow results and load growth forecast studies. The EIS analysis should incorporate and vet the need description.
- The alternatives analysis should identify potential solutions for the specific need. In this application, and EIS, the only "solution" reviewed is transmission, which makes sense because this is a transmission only company wanting to make profits from building transmission and providing transmission service. To a hammer, everything looks like a nail. The best solution will account for the unique characteristics of the area with the electrical need. Broadly, the affected area should be well-characterized in terms of its physical and electrical characteristics:
  - Physical Description -- The applicant should present electrical service territory along with political/topographical maps ITC is not a utility and has no service territory. These maps should identify existing and planned utility facilities and load centers as well as critical outage facilities if the need is driven by contingencies. Existing land use, endangered species, critical or protected habitats should also be clearly identified
  - o *Electrical Description* -- The applicant should demonstrate that it fully understands the nature and location of the factors driving the need for new infrastructure. Electrical loads in the area should be identified by customer class i.e., residential, commercial, industrial, agricultural. The applicant should also identify who would be affected by the identified need, who pays, who benefits.
  - Forecasts -- Historical and projected customer end-use data should be presented.
     Load data identified by categories above, including Load Duration Curves,
     Hourly Load Shapes/Daily Load Curve at a minimum should be presented.
  - Demand Side Alternatives -- The applicant should quantify existing and projected Demand Side Management (DSM) programs including saturation and penetration data, details of interruptible service and frequency and duration of interruptions. Address unique factors such as reliability and power quality requirements, reliability studies, and consumer- or customer-owned generation should be included in the application.
- Claims of "regional reliability," "capacity to support additional generation" and "reduced congestion and lower costs" are all economic issues.
- The EIS states that:

ITCM notes that the need for its project has been substantiated by its own studies and by those of MISO.

The EIS should clearly state that ITCM and MISO are in the transmission business, interested in building transmission, expanding the transmission system, and in selling transmission services.

- The EIS should state in references to PROMOD modeling that PROMOD is <u>economic</u> modeling.
- The EIS claims that "there is not enough room, so to speak, for this power on existing lines." The EIS should explain that were coal plants in the Dakotas or Iowa to be shut down, there would be "room, so to speak" for adding wind generation on these lines.
- The EIS should demonstrate that individual and viable combinations of alternatives were evaluated, not just each option by itself. All individual and grouped alternatives should be well characterized in terms of cost, construction lead time, environmental impact, risk mitigation, operating costs, etc. and analyzed with respect to the need previously defined.

#### **No-Build Alternative §4.2**

- The EIS should quantify the excess generating capacity, essentially reflected in the capacity of this project.
- The EIS should consider the "no-build alternative" of shutting down coal plants equal to the excess capacity to free up room on the transmission system "for wind."
- The EIS should consider the "no-build alternative" of shutting down coal plants equal to the MN/IA 345 kV transmission project's capacity to free up room on the transmission system "for wind."
- The DEIS improperly states that "The no-build alternative would not meet the need for the project." This is due to two false presumptions:
  - 1. That this project is to provide an outlet for wind generation and that could adversely affect Minnesota's ability to meet mandated renewable energy goals. Minnesota is well on its way to meet its goals and there is no demonstration in the Application that we are in any danger of not meeting those goals. Other states are well on their way, as evidenced by Illinois recent statements that they have plenty of wind on line and in development. This error must be corrected.
  - 2. That No-Build would not address heaving loading on the 161 kV system. It would have no effect. A no-build with decreased coal generation would address it in a positive way. This error must be corrected.

- The EIS falsely states that not building this project would reduce reliability, however, there is no support provided for this statement. The SPS in the area is not used, not needed, at this time, and there is no demonstration of "overloads."
- The EIS falsely states that this would adversely affect wind farm development, yet as above, Minnesota is well on its way to meet its goals and there is no demonstration in the Application that we are in any danger of not meeting those goals.
- The EIS should reflect other states efforts in renewable development and progress to their own RES goals.
- The EIS should reflect that this project is premised on economic desire for a market for surplus generation, and should provide supporting documentation of the existence, location, and receptivity of this market for surplus generation, renewable or otherwise.

#### **Demand Side Management §4.3**

- The DEIS should not exempt ITC MIDWEST from consideration of DSM in environmental review. The EIS should examine the need claim and determine whether DSM could meet the "need" for the electricity.
- The DEIS confirms the problem of surplus generation when it states:

This is because decreased electricity use within the project area would result in even more surplus generation that must be exported to regional load centers over the existing transmission system.

This statement discloses the surplus generation, and discloses the purpose of this project, to export to regional load centers.

#### Purchased Power §4.4

• The DEIS states "the need for the project is of a transmission nature, not generation." This exposes the "want" and not the "need." "Purchased power would still have to be delivered along an inadequate electrical transmission system" is presuming a location for the recipient of the purchases power. Power could easily be generated and purchased at the far end of the line, and should not be dismissed as an alternative. This is economic "need," and purchased power would satisfy any "need" at the other end of the line.

#### Transmission Line of a Different Size §4.5

• This DEIS section addresses only voltage and different endpoints. The EIS should also address different capacities, and different transmission conductor configurations that would produce different capacities.

- The EIS should address whether this conductor configuration and size are appropriate to connect into the Xcel standard configuration of 345 kV line with bundled 954 ACSS conductor, single and/or double circuited. Using differently rated lines could cause increased substation costs.
- The EIS should document different substation costs for different size transmission liens.

#### **Projects with Different Voltages §4.5.1**

- The EIS should have a chart with the range of voltage and conductor options, such as Exhibit 35, Application Appendix 7, SW MN 345 kV Transmission Project, PUC docket 01-1958, attached. <a href="http://nocapx2020.info/wp-content/uploads/2010/03/attachmentc-ex-35-app-7-conductor-spec.pdf">http://nocapx2020.info/wp-content/uploads/2010/03/attachmentc-ex-35-app-7-conductor-spec.pdf</a>
- The DEIS attaches too much meaning to "voltage." EIS should note that voltages do not determine capacity, or rating, of a transmission line. Voltage is one factor, the others being amperage and the conductor specifications.

#### **Upgrading Existing 161 kV Facilities § 4.5.2**

- The dEIS states that a 161 kV alternative couldn't span natural resources, and a 345 kV could, when there is now an existing 161 kV line spanning that natural resource. This makes no sense clarify.
- The DEIS states that a 161 kV upgrade "would have less transmission capacity" but it's not been clearly stated what the capacity of the line proposed will be, what capacity is desired. The EIS must clearly, in many places as appropriate, state the capacity of the project as proposed.
- The DEIS concludes this section stating that:

... ITCM's analysis indicates that it is less effective than a 345 kV line at meeting the need for the project.

The EIS should provide the STATE'S analysis, not parrot the Applicants.

#### **Projects with Different Endpoints §4.5.3**

• This is a rather bizarre concept that should be eliminated from the EIS -- it seems like an exercise in drawing random lines on a map.

#### **Generation Rather than Transmission §4.6**

• The EIS should be corrected to reflect the fact that generation rather than transmission would meet the need – there is no requirement that generation be in any particular location, and generation at the receiving end would logically meet any "need." It

wouldn't meet the Applicant's want, but that is not what is at issue in this proceeding, it is "need."

• The premises in this DEIS section are false, first, that to satisfy the claimed "need" we'd have to build generation here to ship elsewhere; second, it presumes "elsewhere" wants it, and third, it accepts ITC Midwest's business model and "want" as need.

## **Human Settlements, §5.1**

- The DEIS "desktop survey" is inadequate. Commerce must do an on-the-ground survey of the full route and route alternatives to assure representations of human settlement by Applicant and EIS are accurate, i.e., homes are shown properly; buildings are visible; residents, churches, schools, etc., are shown and not characterized as "outbuildings," etc.
- Identify areas where routes and alignments should "avoid residences, businesses and other places where citizens congregate."
- Explain types of structures and situations where "use of structures which are, to the extent possible, harmonious with human settlements and activities," and identify where this is possible on routes analyzed in the EIS.
- A bullet point reference to Buy the Farm, Minn. Stat. §216B.12, Subd. 4, should also be inserted in multiple areas under the "Mitigation" section.

## Aesthetics, §5.1.1

- It would be useful to address the "degree of impacts" more specifically, i.e., a chart with distances from homes showing proximity; presence "or absence" of shielding terrain and vegetation, because in this area it's mostly absent; what expansion of the present RoW would mean for those living along it (comments heard at meetings that if it were expanded, it would come too close to homes, barns, etc.).
- A bullet point reference to Buy the Farm, Minn. Stat. §216B.12, Subd. 4, should also be inserted in multiple areas under the "Mitigation" section.

#### Displacement, §5.1.2

- The EIS should have a chart regarding displacements, and impact of expansion of right of way on those near the easement.
- A bullet point reference to Buy the Farm, Minn. Stat. §216B.12, Subd. 4, should also be inserted in multiple areas under the "Mitigation" section.

#### Noise, §5.1.3

- The DEIS has a section on construction noise, but does not address specifically the noise level impacts of construction noise impacts such as helicopters and conductor seam explosions.
- Noise associated with HVTL operation, specifically corona related. Corona ionization is ultra violet, a known carcinogen. See attached.
- Low frequency noise is not covered by the Minnesota Rules, and low frequency noise levels should be disclosed.
- The noise created by the explosions used to join lines is implusive noise, which is also not covered by the Minnesota Rules, and the impulsive noise levels should be disclosed.
- The DEIS recommends "prudent routing to avoid areas where residents in the project area live, work and congregate." What this means in practice should be stated in the FEIS, such as "prudent routing to avoid areas where residents in the project area live, work and congregate means that the transmission line should be \_\_\_\_\_(distance) away."

## Corona, Ozone and UV information – Noise and Electronic Interference, §5.1.3 & 6, 5.3

- The EIS should contain information regarding increased ozone levels due to corona, and also due to increased emissions from coal plants on the western end of the line that will contribute significantly to ozone levels.
- The EIS should contain information on the health impacts of corona, ozone, and Ultra Violet, including a comment from the Dept. of Health.

#### Noise §5.1.3

- The noise of the line and substations should be considered in foggy, misty and rainy conditions when transmission lines are noisier.
- Establish specifications for all transmission conductors, substation equipment, including transformers, switching gear, etc.
- Perform noise modeling based on equipment specifications.
- Include chart with substation noise modeling in the FEIS.
- Address substation mitigation techniques, including but not limited to a contained building, underground building, walls, berms and evergreen plantings.
- Construction noise should be more broadly addressed, such as helicopters and explosions.

## **Property Values §5.1.4**

The EIS should contain:

- A range of property valuation and devaluation scenarios;
- Socioeconomic discussion should address impacts of devaluation to government and individual landowners;
- Socioeconomic discussion should address impacts of devaluation to tax base of local governments;
- Costs above should be addressed in the project cost section of the EIS.
- A bullet point reference to Buy the Farm, Minn. Stat. §216B.12, Subd. 4, should also be inserted in multiple areas under the "Mitigation" section.

## **Substation lighting §5.1.1 and 5.1.5**

- Light, particularly in a park, is pollution. Frequently substations are lit up like an intergalactic space station or refinery. The EIS should include information about substation or other lighting for this project and determine whether there is an impact on the park and its visitors.
- The EIS must include a lighting plan and an analysis of lighting impacts.

# <u>Federal and state DOT policy on utility accommodation must be considered – this has been an issue in previous transmission constructability and routing §5.2.1.</u>

- Federal policy or policies regarding Utility Accommodation and statutory restrictions on sharing of Rights of Way must be disclosed and addressed.
- Specifically identify areas where planned route is not feasible due to easement considerations, i.e., fall distance, land not available, access roads not available.
- If analysis concludes that routes are infeasible, this should be clearly stated, and then remove infeasible route options from consideration.
- If aerial routes are infeasible, this should be clearly stated, and then aerial routes should be removed from consideration.

#### **Conductor Blowout §5.2.1**

• Conductor blowout is a factor in corridor sharing with MnDOT that was not adequately addressed in the DEIS. Blowout is the distance the conductor cables can blow away from the centerline in wind. For the majority of the length of this project, the right of

way is 150 feet, with just 75 feet on each side of the centerline. This means that in extreme winds, the conductor could extend beyond the edge of the right of way.<sup>2</sup>

• The MnDOT and birdseye blowout diagram should be presented in the EIS.<sup>3</sup>

#### **Airports §5.2.4**

The EIS should include a spreadsheet of FAA listed public and private airports in the
project area. The FAA lists airports by county. Airports are frequently left out of
environmental review, and comments at EIS meetings reflect that this may well be the
case with this EIS.

## **Electromagnetic fields §5.3**

- The DEIS should address the full spectrum of Hz inherent in transmission, and not limit consideration to 60 hZ. Levels such as RV, microwave, and UV must be considered. See attached UV articles.
- The DEIS' acceptance of utility information without independent verification and independent calculation based on conductor specifications is insufficient all utility claims as to current levels, amperage and MVA, must be independently verified.
- Electric fields should be calculated for a range of current potential.
- Magnetic fields should be calculated for:
  - o Utility stated "peak" of 3,000 amps;
  - o Thermal limits of ??? amps;
  - o A range of amperage values in between.
- Magnetic fields should be calculated for a range of distances:
  - Under center line;
  - o 25, 50, 75, 100, 125, 150, 200, 250, and 300 feet from the centerline;
  - o Identification of distance at which mG level falls to 2 mG.
- Magnetic field levels must be calculated for a year that the project is projected to be operational, and ten years out, because this project is part of a 17 MVP project for export and use of the line will increase as more MVP projects are in service.
- Raymond Kirsch, Commerce Environmental Review Manager, and John Wachtler, Barr Engineering, have been provided with a magnetic field calculation spreadsheet, and a discussion was had previously about calculation of magnetic fields with John Wachtler, and a spreadsheet for this calculation is being eFiled with this comment.

<sup>&</sup>lt;sup>2</sup> Blowout chart of Exhibit available online: <a href="http://nocapx2020.info/wp-content/uploads/2010/02/blowout.pdf">http://nocapx2020.info/wp-content/uploads/2010/02/blowout.pdf</a>

<sup>&</sup>lt;sup>3</sup> A "Birds Eye" blowout chart can be found online: <a href="http://nocapx2020.info/wp-content/uploads/2010/02/attachment4-full.pdf">http://nocapx2020.info/wp-content/uploads/2010/02/attachment4-full.pdf</a>

#### **Relative Merits of Routing Options §7**

CETF and No CapX2020 take no position regarding relative merits of routing options.

This concludes the DEIS Comments of CETF and No CapX2020 at this time, but additional comments may be filed separately before today's deadline.

Again, we request that the environmental review for this project comply with MEPA, Minn. Stat. §116D.04. We specifically ask that the Dept. of Commerce coordinate the timing of the release of the FEIS with the hearing record, and that Commerce request that the hearing record should be left open for at least a week after the release of the FEIS for comments on the adequacy of the FEIS.

Thank you for the opportunity to submit this Comment.

Very truly yours,

Carol A. Overland

Attorney for Citizens Energy Task Force and No CapX2020

cc: CETF and No CapX2020 (eFiled and emailed to Ray Kirsch, Commerce)

Enclosed, eFiled separately:

ICF – Independent Assessment of Midwest ISO Operational Benefits, February 29, 2007

Corona and Ultra Violet Exhibits

Advulgul

Calculated Magnetic Field Chart

ACSR and ACSS Conductor Specs and Rating