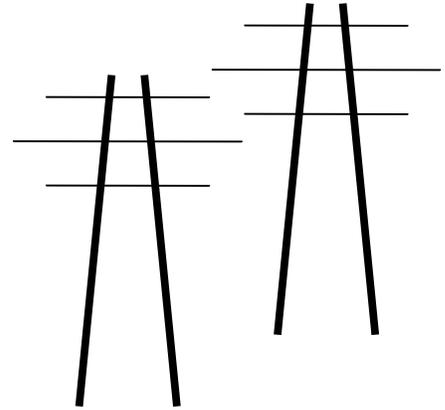


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March 5, 2010

Bill Storm
Energy Facilities Planning
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St. Paul, MN 55101

eFiled & emailed: bill.storm@state.mn.us

Burl Haar
Executive Secretary
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St. Paul, MN 55101

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RE: Comments of Carol A. Overland
Hiawatha Project DEIS

Dear Mr. Storm and Dr. Haar :

Thank you for the opportunity to comment on the DEIS for the Hiawatha transmission project.

These Comments on my own behalf, as an individual, and not representing any party. The Hiawatha Project is one I take very personally because if asked where I'm "from," I am from Phillips. I lived in Prestigious East Phillips for over 20 years, for three years just two blocks from the Sears Building, at one time on 14th Avenue just two houses from the then railroad and now Midtown Greenway, and the last ten of those years on 16th Avenue as a renter and then homeowner. My old block on 16th Avenue, from 25th to 26th Streets has an unusually high percentage of home ownership and has no boarded or vacant buildings. In these comments, I speak from my knowledge of the Phillips neighborhood then and now, and my appreciation for what it has become over time with so much hard work on the part of the community. The Hiawatha Project would be a detriment to the community's character, liveability and potential for growth and economic development.

In these comments, I adopt, as if fully related here, the Comments, if any, submitted by the Midtown Greenway Coalition, City of Minneapolis, Crew2, Inc., Hennepin County and Hennepin County Regional railroad Authority, Seward Neighborhood Group, Corcoran Neighborhood Organization, Phillips West

Neighborhood Organization, Phillips West Neighborhood Organization, Midtown Phillips Neighborhood Association, East Phillips Improvement Coalition, Longfellow Community Council, and Little Earth of United Tribes.

For the record, the online version of the DEIS has “DRAFT” diagonally across it, and as such, it is regarded in pdf format as a graphic, takes up excessive space, and is ungainly to print. My computer, which handles documents of this type daily has crashed repeatedly when trying to search or jump to specific pages. We all know this is a draft. It is not necessary and it is unreasonably cumbersome to have the “DRAFT” graphic on each page.

Below each section in **Bold and Underlined** font is to be regarded as a section of related comments, and

- each “Comment” is separated out by bullet point.

COMMENTS REGARDING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

Purpose of Transmission Line

The EIS Scoping Decision states that the EIS must address the “Purpose of the Transmission Line.” The DEIS states that:

The Project is necessary to serve the increasing electrical demands of the Applicant’s customers in the Project Area and would help tie the distribution system in south Minneapolis to the overall electrical system. The Project would increase the capacity of the electrical distribution delivery system and improve the reliability of the power supply to residences and businesses in south Minneapolis (Xcel Energy, 2009).

DEIS p. 35.

- This is the claimed purpose, which has not been proven to be fact.
- There has been no need determination regarding this project to provide a basis for this paragraph.
- This is a transmission line, but this paragraph states that it will increase capacity of the distribution delivery system. The EIS must disclose with specificity all changes within the Hiawatha Project made to the distribution delivery system that will improve it.
- The EIS must disclose with specificity how transmission to a substation will improve the distribution delivery system.
- There has been no disclosure of the incremental amount of increase in capacity of the electrical distribution delivery system – the EIS should disclose the incremental amount if increase in capacity.
- The DEIS should refer to any claims as “claimed” as in “The Applicant’s claim that the project is necessary...”

Connected Actions

The EIS states that:

Connected actions are defined in **Minnesota Rules, part 4410.0200, subpart 9b**, which states that “[t]wo projects are ‘connected actions’ if a responsible governmental unit determines they are related in any of the following ways: (A) one project would directly induce the other; (B) one project is a prerequisite for the other and the prerequisite project is not justified by itself; or (C) neither project is justified by itself.”

Minnesota Rules, part 4410.4400, subpart 1, states “[m]ultiple projects and multiple stages of a single project that are connected actions or phased actions must be considered in total when comparing the project or projects” in determining whether an EIS is necessary. In addition, **Minnesota Rules, part 4410.1700, subpart 9**, states, “[c]onnected actions and phased actions shall be considered a single project for the purposes of the determination of need for an EIS.”

There are no connected actions associated with the Project. The proposed Hiawatha Line Project is a stand-alone project and is neither brought about by another project nor interdependent with another project.

- The rules governing an EIS for high voltage transmission lines states that the rules cited by MOES are not applicable:

7850.2900, Subp. 12. Environmental review requirements.

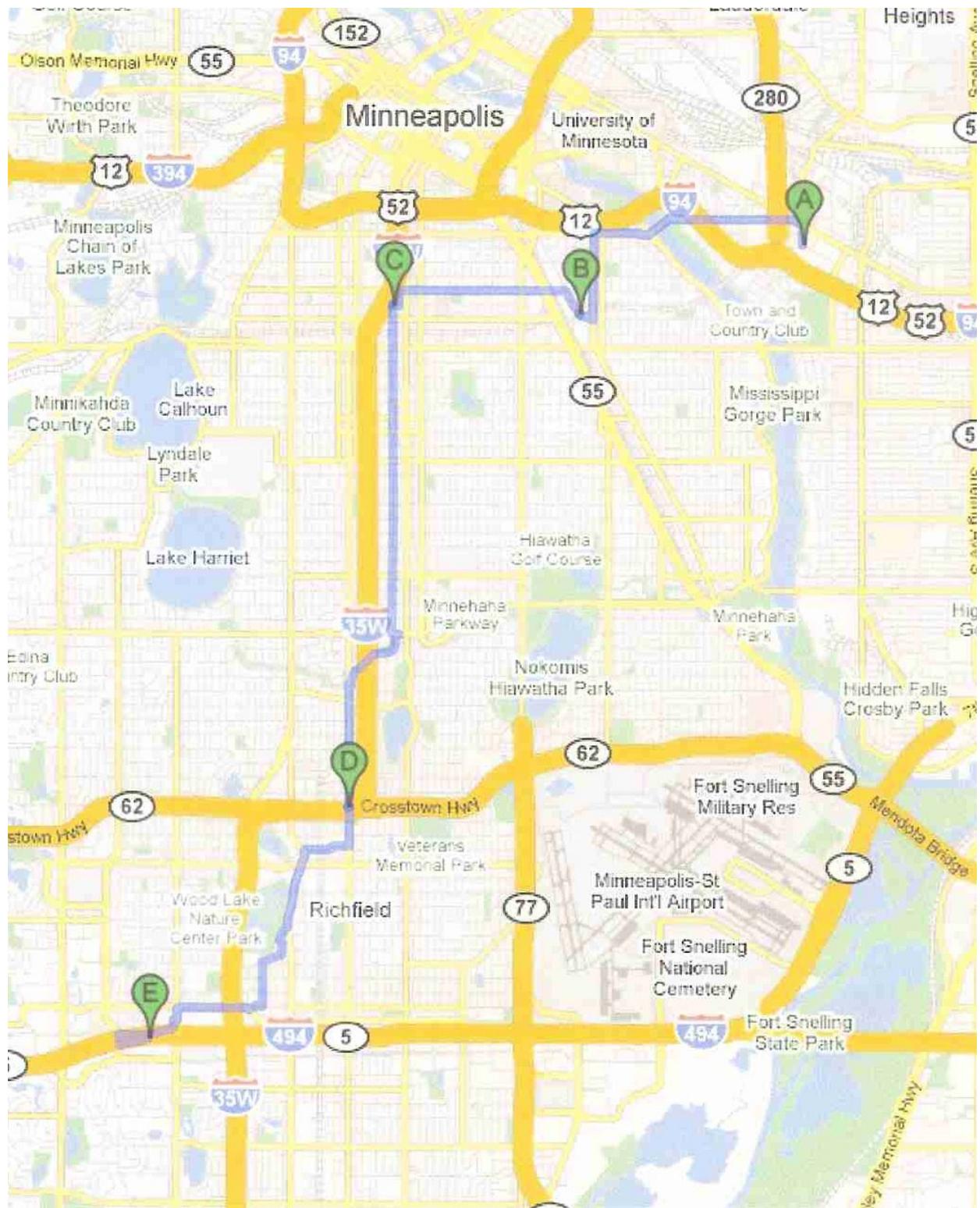
The requirements of **chapter 4410** and parts [7849.1000](#) to [7849.2100](#) do not apply to the preparation or consideration of an environmental impact statement for a large electric power generating plant or high voltage transmission line except as provided in parts [7850.1000](#) to [7850.5600](#).

Minn. R. 7850, Subp. 12 (emphasis added).

- The scope requires that connected actions be addressed. Scope, p. 2.

There ARE connected actions which must be addressed to conform with the Scope as issued, of which the Hiawatha Project as applied for is just a small part.

- The first set of connected actions, covering a distance of 13.7 miles, are:
 - A new substation near Hwy. 280 (A on map below);
 - A 345kV line from the new 280 substation to the Hiawatha Substation (A to B on map below);
 - The “Hiawatha Project” as applied for (B to C on map below);
 - Oakland Substation to new Highway 62 substation near Hwy 62 and Nicollet (C to D on map below);
 - Hwy 62 substation to new Penn Lake substation near I-494 and Sheridan Avenue (D to E on map below)



The second set of connected actions, covering a distance of 12.3 miles are:

- A new substation near Hwy. 280 (A on map below);
- A 345kV line from the new 280 substation to the Hiawatha Substation (A to B on map below);
- The “Hiawatha Project” as applied for (B to C on map below);
- Oakland Substation to new Highway 62 substation near Hwy 62 and Nicollet (C to D on map below);
- Hwy. 62 substation to the existing Wilson Substation near I-494 and Wentworth.



- Both of the above connected actions require a Certificate of Need as they are over 10 miles. Minn. Stat. 216B.243.
- The section on both maps, from points A to B, the Hwy. 280 substation and the 345kV line from that substation to the new Hiawatha substation was disclosed by an Xcel engineer at the July 24, 2008 NM-SPG meeting:

7.1.4. South Minneapolis

Mr. Standing, XCEL, presented the South Minneapolis Electric Reliability Project (SMERP) study. Mr. Standing stated 4 options were studied. The preferred option includes a new 345 kV line in-service in approximately 2013-2020 from the New Hwy 280 345/115 kV substation to the New Hiawatha substation.

Exhibit __ - NM-SPG Meeting Minutes, July 24, 2008.

- The sections from points C to D on both maps above, from Oakland to a new substation near Hwy. 62 and Nicollet Avenue, and points D and E for both, one from Hwy. 62 to a new Penn Lake substation near 494 and Sheridan, and the other from Hwy. 62 to the existing Wilson substation at 494 and Nicollet were disclosed in the 2007 Biennial Transmission Plan:

Alternatives. Initial investigation and scoping discussions have led to the development of three potential alternatives:

(1) Construct a new 115 kV line from a new Hiawatha Substation along Highway 55 to a new Oakland Substation near Lake Street and I-35W. The line would then continue south to a new Highway 62 Substation near Highway 62 and Nicollet Avenue. The line would continue to its final termination at a new Penn Lake Substation near I-494 and Sheridan Avenue.

(2) Similar to Option 1, but the final 115 kV line would stretch from Highway 62 Substation to the existing Wilson Substation near I-494 and Wentworth Avenue.

(3) Construct two smaller 115 kV loops with new 115 kV lines running from Hiawatha to Oakland to Elliot Park and a second loop from Penn Lake to Highway 62 to Wilson.

2007 Biennial Transmission Plan, section 7.5.¹

- The DEIS should include a current photo of the Wilson substation, graphically displaying the recent improvements, with shiny new stations constructed for expansion waiting and available for the next incoming transmission line.

Proximity to DOT controlled highways

¹ Available online at: http://www.minnelectrans.com/images/2007_Biennial_Report/Part%20I%20-%20Section%207-5.pdf

The Hiawatha Project is proposed near two major thoroughfares, I-35W and Hwy. 55.

- MnDOT's Policy of Utility Accommodation must be considered when weighing siting and constructability issues near DOT Rights of Way. This could affect plans for substations near Interstate 35 and/or Highway 55/Hiawatha Avenue.
- Specifically identify areas where planned route is not feasible due to DOT considerations.
- Remove infeasible routes from consideration.

Undergrounding

- The scope of the EIS states that “[p]olicy issues surrounding whether utilities, ratepayers or local-government should be liable for the cost to underground conductors” is an issue outside the scope of the EIS. Scope, p. 5. The third paragraph of p. 52 and p. 53 through the top half of p. 60 should be stricken. These issues can and should be fully addressed within the contested case.
- The Facilities Surcharge Rider is not the appropriate vehicle to address cost recovery for Public Utilities Commission ordered undergrounding. The Facilities Surcharge Rider is for distribution undergrounding requested by a City, and in that case, costs of undergrounding would be allocated to the customers within that city, or apportioned between cities if more than one is involved. Here, the Dept. is inappropriately comparing and considering various cost recovery mechanisms, but there is no basis on law for its allocations to other than the full city of Minneapolis IF and only IF the city requests undergrounding. There is no mechanism for cost allocation for Public Utilities Commission undergrounding.
- The Facilities Surcharge Rider is not the appropriate vehicle for allocating costs of undergrounding transmission as it is for distribution lines, not transmission. See PUC Docket E002/M-99-799. As then NSP stated:

The Oakdale Decision requires NSP to place distribution facilities underground without a CAIC (contribution in aid of construction) payment from a city if the city so requires the undergrounding under a police power ordinance.

Exhibit B - Petition of Northern States Power Company for Approval of a City Requested Facilities Surcharge Rider, June 7, 1999.² Transmission, by its nature, has a geographically broader impact and benefits, than distribution. The Facilities Surcharge Rider was developed in response to a Commission investigation of distribution outages after intense storms.

² Available online:

<https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=eDocketsResult&userType=public#{4F2233FF-98DD-472B-A39B-504B172898F7}>

- Xcel/NSP have/are undergrounding transmission lines. Xcel long ago entered into an agreement with the City of St. Croix Falls and City of Taylors Falls to underground through those cities. Exhibit C - Agreement between NSP/Taylors Falls/St. Croix Falls.
- Agreements between parties can and have been made regarding treatment of costs of undergrounding. Id.
- Costs of undergrounding are not nearly specific enough, and should address
- The burying of lines between substations should not be considered non-standard. It is consistent with the environmental policies of the State of Minnesota to treat undergrounding as a standard application. See Exhibit D - Chisago County Resolution No. 001018-5.
- The costs of undergrounding should be considered in a full cost/benefit analysis of this project.
- The flip side, the benefits of undergrounding, such as protection of the public health and safety, aesthetics, viewshed, land-use impacts, economic development potential, preservation of property values, are benefits that must also be weighed in this cost/benefit analysis against the cost of undergrounding. See Exhibit E - Comment of Power Line Task Force, Docket E002/M-99-799.
- The cost estimates, both project cost estimates and undergrounding cost estimates, do not provide sufficient detail to analyze. Itemized cost estimates should be included in the EIS.
- A full and detailed analysis of underground options, including location, configurations and cost, for all proposed alternatives should be included in the EIS.
- A full analysis of underground options, including location, configurations and cost, should be considered for all densely populated areas. If there are other non-aerial options that are not underground, these should be analyzed as well.
- Applicants repeatedly state that they do not underground lines. This is false. Applicants could, but as a matter of policy, they do not want to underground. Applicants will put lines underground if ordered or if an agreement is reached, such as that in the Chisago Transmission Project docket. The prior undergrounding experience of applicants should be incorporated into the EIS:
 - Undergrounding of the Chisago Project through Taylors Falls and St. Croix Falls, including down the bluff from Taylors Falls to the river;
 - Failure to underground through the City of Lindstrom;
 - Failure to underground through the cities of South St. Paul, Mendota Heights, and Sunfish Lake;
 - Other Xcel/NSP examples as available.

- A recent 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 online³, and the findings of this report regarding undergrounding of high voltage transmission must be incorporated into the EIS. See e.g., p. 28-32 and Table 45, §12.2, [Technical Report by CCI: Feasibility Study for 500 kV AC Underground Cables for Use in the Edmonton Region of Alberta](#) [Posted: February 24, 2010]. The findings of this report should be analyzed, separately and with the Hiawatha Project as proposed.
- Underground was also considered for part of the Mid-Atlantic Power Pathway, a 500kV transmission line, since suspended by PEPCO, the project promoter. The ability and begrudging willingness to underground this part of the MAPP line should be considered.
- In the narrative, the narrative regarding EMF states that underground lines still generate electric fields. Specifics should be disclosed in this narrative, because the amount detectable above ground is nominal compared to above ground.

Impacts analysis is skewed

- Because the “route” in question is a short line, a review of impacts is skewed if compared to a longer line.
- Because the “route” in question is short, costs are skewed.
- Undergrounding all or part of the route, if considered as mitigation, would have a much higher percentage of cost for this project than for a larger. Undergrounding should be weighed using costs of just the Hiawatha Project (B-C above) and of the entire connected lines envisioned (A-E above)

Impacts analysis is not sufficient

Generally, the impacts analysis is not sufficient and impossible to compare the various alternatives.

- There is not sufficient quantification to compare impacts.
- Impacts are not sufficiently specific to identify.
- Impacts should individually be labeled as temporary and/or permanent and weighted accordingly.
- 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?
- RoW acquisition costs vary widely and should be addressed.

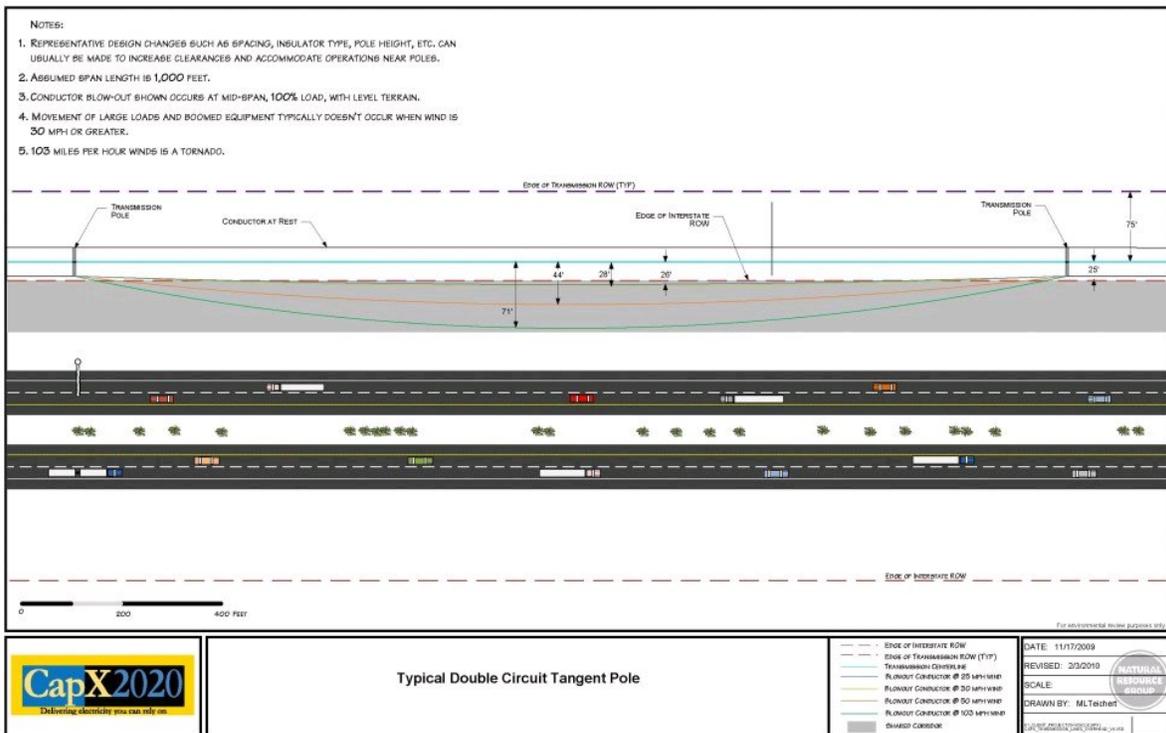
³ The iterations and comments and the full report are available on the AESO Feasibility Study for 50kV Underground Cables page: <http://www.aeso.ca/transmission/20001.html>

- Railroad RoW use is sometimes leased. Any lease cost for easements should be disclosed and factored in.
- Buy the Farm applies to residential and business property if easements are necessary.
- A Buy the Farm estimate should be included in cost.

Conductor Blowout

- In other dockets, conductor blowout of above-ground transmission conductors is a factor for easement acquisition and in DOT corridor sharing. This project is through a tightly compacted business and residential community. A birds-eye blowout diagram, such as the one provided in Poorkers CapX Post-Hearing packet should be included in the EIS. (However, the birds-eye blowout diagram was inaccurately drawn and measurements were from the centerline, not the connecting point of the conductor, and this should be corrected.)
- Conductor blowout is also a factor in public health and safety consideration. The EIS should include a blowout drawing for the entire length of all aerial alternatives, such as the one below from the CapX Brookings docket.⁴

Attachment 4 – Birds Eye View of Blowout Near MinDOK ROW
Page 1 of 1



Interested parties

⁴ Available online at: <http://nocapx2020.info/wp-content/uploads/2010/02/attachment4-full.pdf>

- The financial and ownership interests that Wells Fargo has in Xcel Energy should be disclosed and analyzed in the EIS. Wells Fargo is both an Intervenor in this proceeding and owner of significant stock in Xcel Energy, per recent SEC filings. A search of Xcel's SEC filings at www.sec.gov will reveal this interest.

Electromagnetic field – the charts in the DEIS are way off

- Electromagnetic fields are grossly underestimated in this EIS, as they were in the Brookings EIS and the Monticello EIS.
- It is not stated what year load levels were assumed for the modeling in Table 8.
- Table 8 presumes amperage levels that are so low as to be laughable – **230 and 138 amps.**
- MOES SHOULD CONSIDER ITSELF ON NOTICE THAT THE AMPERAGE VALUES PROVIDED BY APPLICANTS REQUIRE INDEPENDENT VERIFICATION AND REVIEW AND THE MODELING MUST BE PERFORMED AGAIN. See attached Exhibit F, from the SW MN 345kV project.
- Load levels (current/amperage) must be considered within a range from low to medium to the thermal limits of the conductors.
- Refer to attached Exhibit F. The lines are double circuited or single circuited 115kV 795kcmil ACSS twin-bundled conductor, with thermal limit amperage range from Attachment F's 1556-1569 amps (single circuit), or 3113-3138 amps (double circuit).
- Magnetic fields are based on current/amps. Magnetic fields calculations, modeling estimates, must be based a range of assumptions, including:
 - 138 amps (as in DEIS)
 - 230 amps (as in DEIS)
 - 750 amps (roughly 1/2 thermal limits for single circuit)
 - 1500 amps (less than thermal limits for single circuit, less than half of thermal limits for double circuit)
 - 2250 amps (mid level for double circuit)
 - 3000 amps (approaching thermal limits for double circuit)
- Accepting utility information without independent verification is inadequate.
- Production of EMF chart in EIS without independent calculation based on conductor specifications is inadequate.
- Dislose amperage range for the year project will be operational, and five years out, and if full A-E project scenario, as above, is built out.
- Recalculate magnetic field levels for a year that the project will be operational, and five years out, i.e., 2014 and 2019.
- EMF emissions for high and low profile substations must be calculated.

Noise

- The substation noise section, p. 345, does not address substation noise with any specificity, nor does the application. In the Arrowhead transmission project, a 345kV line, the substation was found to have potential to be “annoying” and although levels were modeled and expected to be just under the MPCA guidelines, mitigation was ordered in the Exemption Order.

- Establish specifications for all substation equipment, including transformers, switching gear, etc.
- Perform noise modeling based on equipment specifications
- EIS should include chart with substation noise modeling in the FEIS
- EIS should address substation mitigation techniques, including but not limited to a contained building, walls, berms and evergreen plantings.
- “Landscaping” must be specified.

Substations

- The DEIS addresses substations, but contains insufficient equipment regarding equipment to determine the purpose and capacity limitations.
- EIS should include itemized identification of transformers and other substation equipment, including MVA ratings.
- EIS should include line drawings of substations.
- EIS should include powerflows showing inputs and outputs of substations.
- EIS should include impact of profile on noise emitted by substation.

Substation lighting

- Light can be legally regarded as pollution. Frequently substations are lit up like a spacestation or refinery. The EIS must include information about substation and other lighting for this project.
- The EIS must include a substation lighting plan and an analysis of lighting impacts.

Property Values

- The EIS should contain an analysis and conclusions based on a range of reports:
 - .Do high voltage electric transmission lines affect property value, Hamilton & Schwann (1995)
 - Priestley, Thomas, and Gary Evans. 1990. Perceptions of Transmission Lines in Residential Neighborhoods: Results of a Case Study in Vallejo, California. Study prepared for the Southern California Edison Company
 - Rhodeside and Harwell, Inc. 1988. Perceptions of Power Lines. Residents' Attitudes. Report prepared for Virginia Power Company, Richmond, Virginia.
 - An Analysis of the Impact of High Voltage Electric Transmission Lines on Residential Property Values in Orange County, New York. Storrs: Real Estate Counseling Group of Connecticut.
 - Hamilton, S. W., and Cameron Carruthers. 1993. The Effects of Transmission Lines on Property Values in Residential Areas. University of British Columbia.

See also Exhibit F, **The Effects of Overhead Transmission Lines on Property Values: A Review and Analysis of the Literature** Edison Institute (1992)

- A range of property devaluation scenarios
- Socioeconomic discussion should address impacts of devaluation to 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.

Impingement of future development

A transmission line can be a barrier to development. The EIS should include:

- Examine the Comprehensive Plans of affected counties, cities and townships
- Identify areas within expansion zones of cities, using maps to show impacts.
- Address impacts on existing and planned development plans
- Address costs of impingement of future development and include in cost section of EIS

Thank you for the opportunity to submit this Comment.

Very truly yours,



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