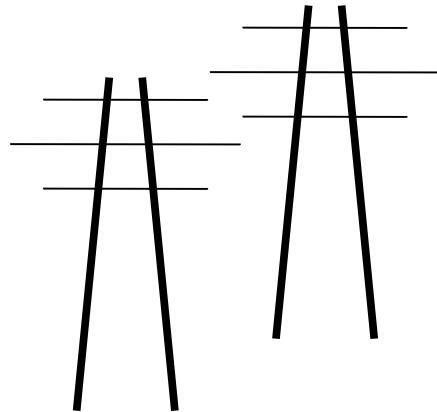


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April 29, 2011

Burl Haar
Executive Secretary
Public Utilities Commission
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RE: Reply Comments of Carol A. Overland
Hiawatha Project – MN PUC Docket 10-694

Dear Dr. Haar and Dr. Rakow (and eFiling list):

Thank you for the opportunity to submit Reply Comments on the Hiawatha transmission project.

1. The only “Comments” filed in this docket are those of MOES, a disturbing development in a strongly contested transmission proceeding. I can only wonder what agreement has occurred to result in this dearth of concern.
2. The MOES “Comments” are not comments, but a recommendation, and a premature recommendation at the outset rather than Comments with analysis holding off recommendation until the record has something of substance beyond the Application. This is inappropriate, and an abuse of the informal system.
3. In the application, Xcel Energy grossly misrepresents demand, the misrepresentation going to blatant and demonstrable lie on p. 8, where it is stated that:

Indeed, at 5 p.m. on July 27, 2010, a hot 90 plus degree humid day, Xcel Energy set a demand record in its Upper Midwest service territory of 9,132 MW.

This statement is false, based on Xcel Energy's OWN filings with the Security Exchange Commission...or are those SEC filing false? Doubtful...

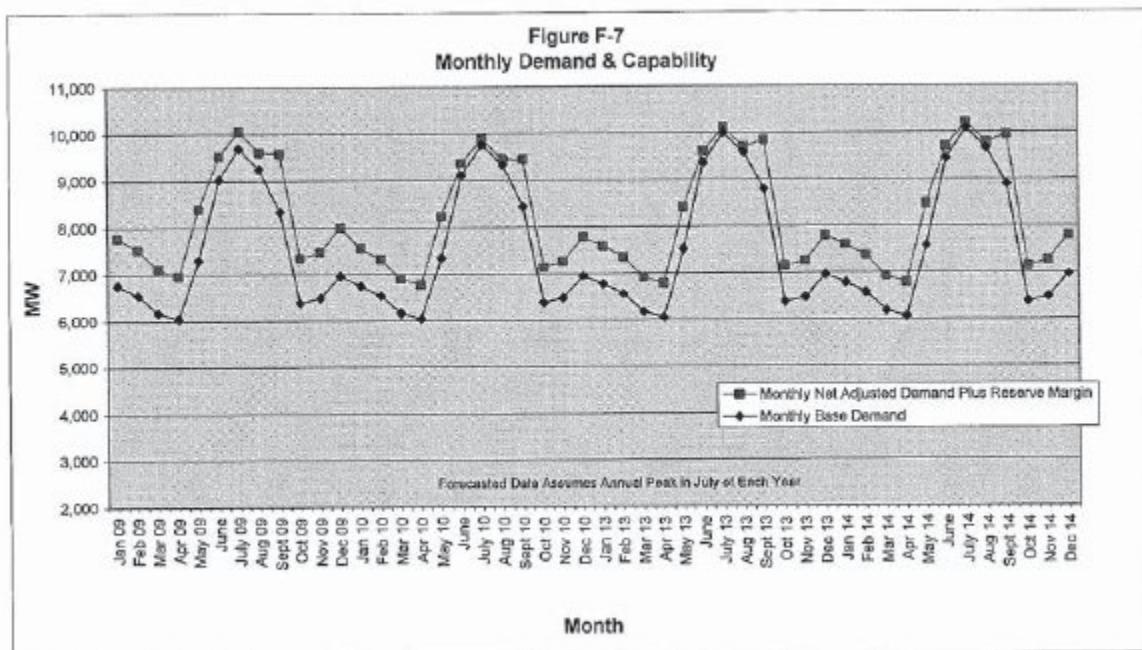
The SEC filings of Xcel Energy regarding peak demand taken from the publicly available SEC filings reveals:

YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
PEAK	7,936	8,259	8,344	8,868	8,665	9,212	9,859	9,427	8,697	8,615	9,131

The peak this last year is below that of 2005... this is NOT a record peak demand.

4. Xcel Energy, under the statutes and rules, is required to present truthful information, and has not, and should be sanctioned.
5. The peak demand decrease, significant, and over an extended period of time, is also reflected in the recent filings of Xcel Energy, where a new "demand" chart was submitted to replace the original one. The original one:

Appendix B.22: Monthly Demand and Capability

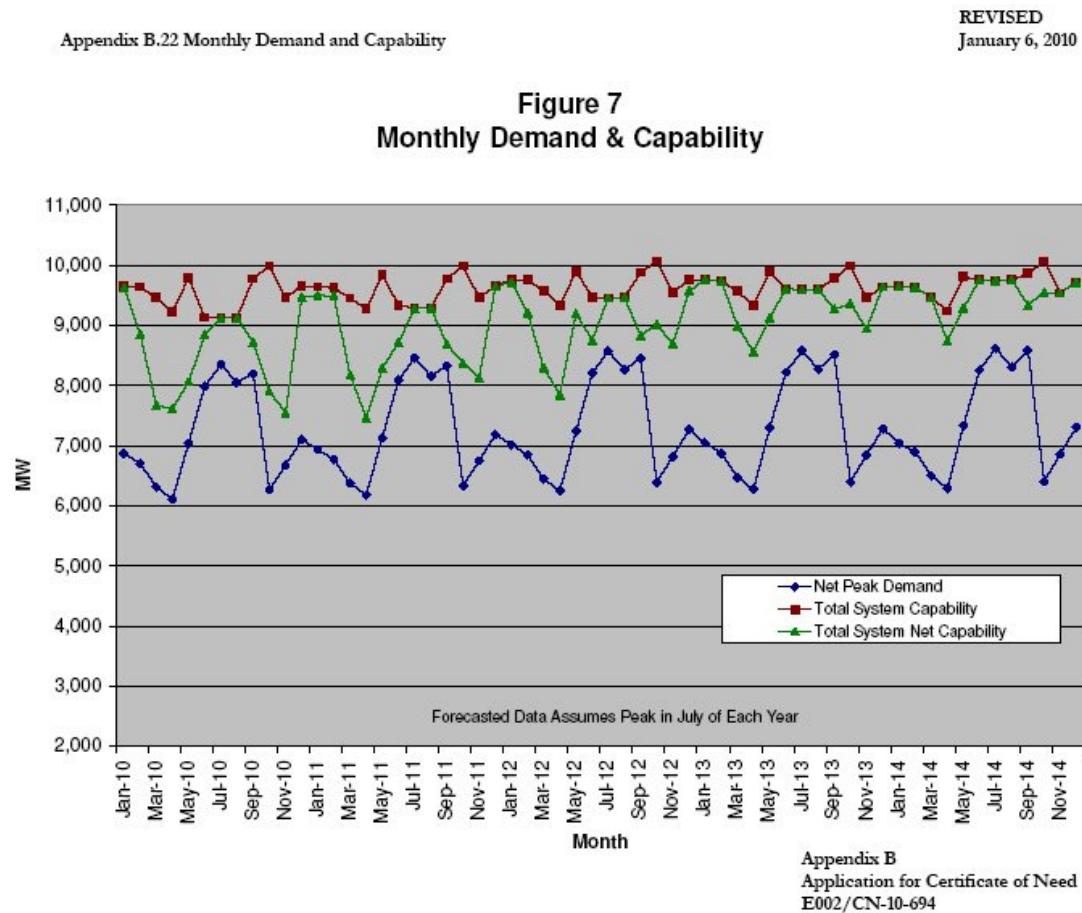


The Monthly Net Adjusted Demand includes a 1.1% DSM Adjustment, a Load Relief Adjustment, and a 15% Reserve Margin.

For the forecasted years Load Relief is forecasted for June, July and August only.

The Monthly Base Demand includes a 1.1% DSM Adjustment, but no Load Relief and no Reserve Margin.

And the replacement, revised January 6, 2010 but filed much later:



6. The SEC filings are readily available on the web for the world to see:

<http://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0000072903&type=10-k&dateb=&owner=exclude&count=40>

7. The Commission must address distribution solutions, as upgrades have been made between 2001 and 2008, as stated in its application, based on the studies supplied by Xcel Energy that affect the type and timing of appropriate responses to Xcel Energy's grossly overstated need. Obvious improvements, apparent with a drive-by, are the large additions to the substation at Hwy 280 and East Hennepin, at 494 and Nicollet, and likely others in the area.
8. Xcel has laid out a distribution problem that requires a distribution solution, not a transmission solution. A transmission solution will not address the old and inadequate distribution system that is between any transmission line and substation and Xcel's customers complaining of power quality problems.

9. Prior reports, including the 2007 Biennial Transmission Study, reveal increased capacity at the Aldrich substation, that the connection between the St. Louis Park substation and the Aldrich Substation has been upgraded, providing more capacity at these substations, and a “second phase of the plan – reconductoring the line to a higher capacity – will be further investigated when system planning studies demonstrate a need. With this upgrade, and another planned, why would Xcel propose a transmission line extending into the Aldrich substation?
10. Xcel repeatedly states that this project is needed, but is overbuilding for the need, overstated as it is.

Xcel’s stated specs of the line, 115kV with a 795kcmil single conductor, and other 115kV lines’ ratings show that the line could handle much more. When questioned at the Routing docket Public Hearing regarding the ratings of the line and amperage, Jason Standing testified that there would be more in the lines than the 140MVA for the Aldrich substation or the 150MVA of the Hiawatha substation. Transcript, Public Hearing, Standing questioned by Overland. The St. Louis Park-Aldrich upgrade at 115kV was to 310 MVA. See 2007 Biennial Transmission Report, §7.5.2. This 310 MVA rating is consistent with specs utilized in other proceedings. In the SW Minnesota 345kV proceeding (01-1958), Xcel provided a chart in its Application that showed the ratings of various configurations of lines, including a 115kV line with a 795kcmil single conductor, which on that chart also has a rating of 310 MVA for a single circuit. A double circuit line has essentially twice the potential capacity. See attached Computation of SAC Overhead Conductor Ampacities (from Xcel’s SW Minnesota 345kV Application, Appendix 7, PUC Docket 01-1958). Xcel’s claimed need of 55MW or stated provision of 120MW of capacity could be served with a 69kV line. Id. The size and type of this project, as proposed does not comport with Xcel’s stated need. This line is sized and is of a type for something much larger.

If the line is so much larger than what is claimed to be needed, then what is the need driving the Hiawatha Project?

11. The purpose of the line is also misleading. This is a radial line, with both circuits on the same structures, subject to a single event contingency. which in terms of reliability, provides no benefit. As noted by Larry Schedin:

...tornado damage to the proposed 115kV double circuit lines as well as damage to the distribution system would not allow switching the distribution customers to alternate feeders thereby leaving critical Midtown area customers without electric service for unacceptable time periods.

Schedin Routing Docket Surrebuttal, p. 2. This inexplicable use of a double circuit radial line does not provide reliability benefits, the reliability benefits that would be provided by a connected circuit or undergrounded radial line.

Findings of Fact must identify need for this project, or lack thereof, with specificity.

12. The Commission must consider all phased and connected actions proposed for this area and joined with this project, or of which this project is a part. Xcel Energy's expressions of denial of any connected projects should not be blindly accepted.

In its studies, in the Transmission Plan, and in its Routing Application for the Hiawatha Project, Xcel states clearly enough what it is planning:

In addition, the proposed Hiawatha Substation could be expanded in the future to accommodate additional transmission facilities, potentially a 345 kV line, if necessary to meet community load-serving needs.

Routing Application, p. 17.

That is in agreement with their stated plans at the MAPP transmission planning group in July of 2008 and the South Minneapolis Electric Reliability Project study by Xcel's witness:

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 E, DRAFT NM-SPG Meeting Minutes, July 24, 2008.

The Preferred Plan is the Hiawatha345 Option, which adds the following facilities:

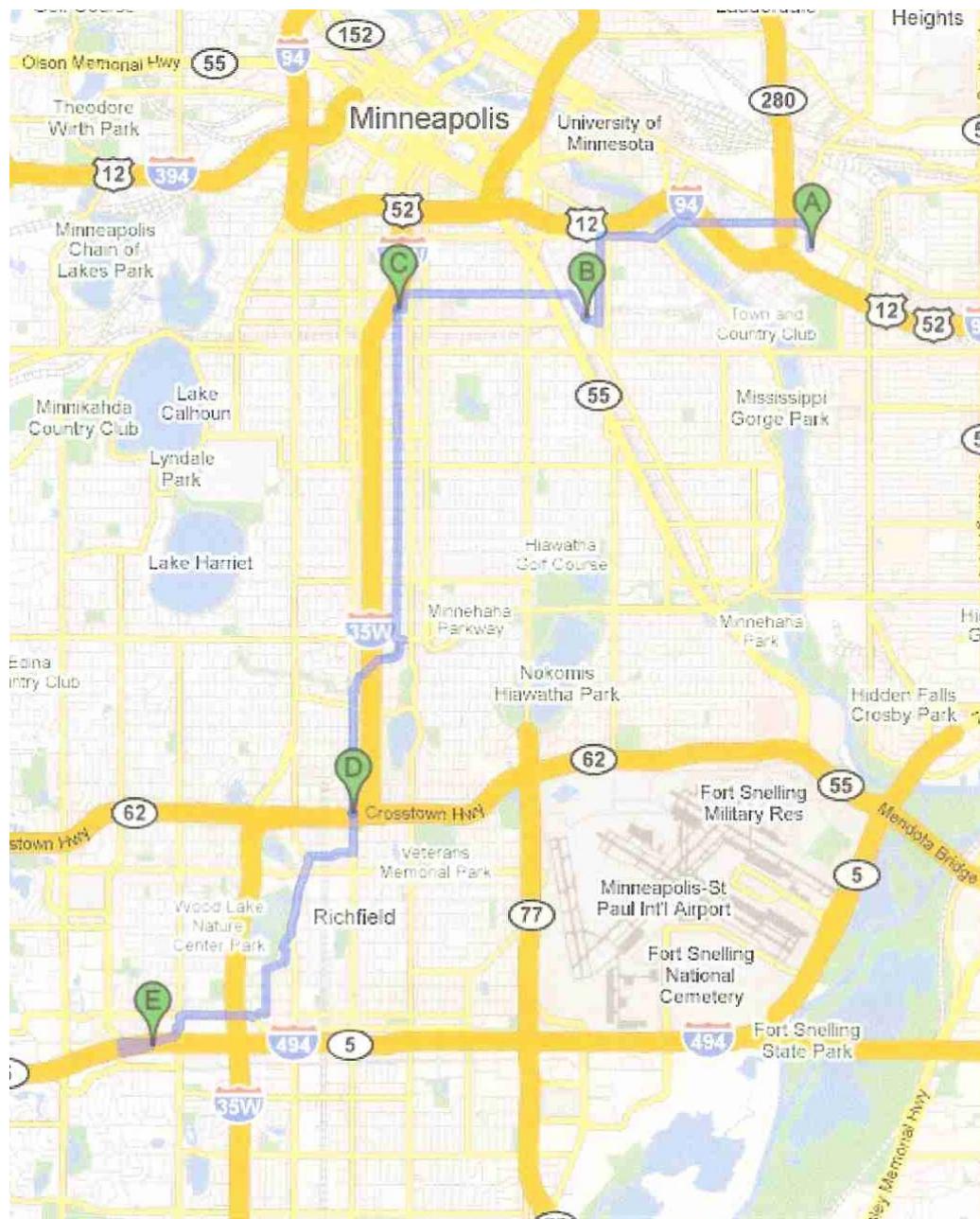
- In 2010 add a new Hiawatha I 15 kV distribution substation on the Elliot Park-Southtown 115 kV line. A new Midtown 115 kV substation with a new double-circuit 115 kV line to the Hiawatha substation.
- In 2013 add a new Cleveland 3451115 kV substation that taps the 345 kV line from Terminal to Kohlman Lake. A new 115 kV line from the Cleveland to the Lexington substation. Upgrade the two 448 MVA transformers at Red Rock to two 672 MVA transformers.
- In 2014 add a new 1 15 kV Crosstown distribution substation and add a double-circuit 115kV line to the Wilson substation. Upgrade the two 448 MVA transformers at Parkers Lake to two 672 MVA transformers. Upgrade the two 448 MVA transformers at Eden Prairie to two 672MVA transformers.
- In 2016 add the second distribution transformers at Crosstown and Midtown.
- In 2011 add the second distribution transformer at Hiawatha.
- In 2018 reconductor the 115 kV line from Afton-Red Rock.

- In 2020, add a new 345 kV line from the Cleveland substation to the Hiawatha substation. Add a new 3451115 kV. 448 MVA transformer at Hiawatha.

Routing docket, Exhibit F, p. 4, South Minneapolis Electric Reliability Project, prepared by Jason Standing, July 18, 2008.

The claimed purpose is quite different than what the specifics of the application reveal. There has been no need determination regarding this project to provide thorough review of Xcel's need claim. And although Xcel's need claim is a distribution deficiency, the "solution" is a several times larger than "needed" transmission line.

CONNECTED ACTIONS – WHAT DOES IT LOOK LIKE?



This is but a small part of a much larger project: The first set of connected actions, covering a distance of 13.7 miles:

- A new substation near Hwy. 280 (A on map above);
- A 345kV line from the new 280 substation to the Hiawatha Substation (A to B on map);
- The “Hiawatha Project” as applied for (B to C on map);
- Oakland Substation to new Highway 62 substation near Hwy 62 and Nicollet (C to D on map);
- Hwy 62 substation to new Penn Lake substation near I-494 and Sheridan Avenue (D to E).

The other option of Xcel proposed connected actions, covering 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 Nicollet, recently expanded.



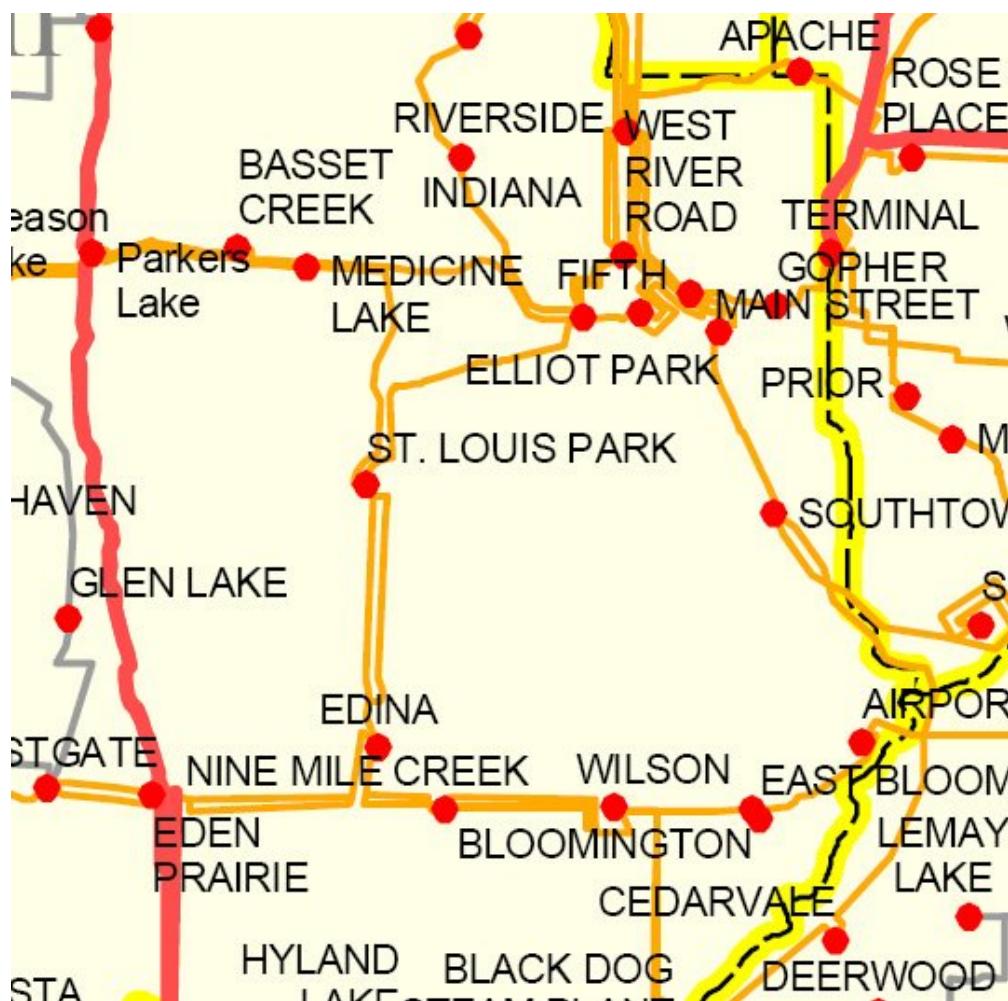
Both of the above connected actions require a Certificate of Need as they are over 10 miles. Minn. Stat. 216B.243. Both are to be considered in environmental review. Exhibit G, Scoping Decision.

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 Xcel engineer Jason Standing 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 F - NM-SPG Meeting Minutes, July 24, 2008. South Minneapolis has a large section with no substations or transmission:



The sections from points C to D on the maps above on pages 11 and 12, 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 (selected).¹

The Wilson substation, at the south central border of the “Study Area,” has been recently upgraded, constructed for expansion waiting and available for the next incoming transmission line. See Public Hearing Testimony of Xcel’s Scott Zima.

13. The electromagnetic fields are grossly underestimated in this Certificate of Need application, 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. Often levels are used for years prior, PRIOR, to the inservice date of the project. The EMF levels should be calculated for a number of situations including varying dates and loading levels, from near zero to near thermal-limits of conductor. These calculations of expected loading and peak using the conductor specifications have been provided in an Affidavit by Bruce McKay, P.E., and these levels must be considered in the Environmental Report.
14. The magnetic field estimates provided by Xcel in Table 41 in the Certificate of Need application presumes amperage levels that are so low as to be laughable – **230 and 138 amps.**

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

Figure 41: Calculated Magnetic Flux Density (milligauss) for Proposed 115 kV Transmission Line Designs (1 meter or 3.28 feet above ground)

Route	Structure Type	System Condition	Current (Amps)	Distance to Proposed Centerline											
				-200°	-100°	-75°	-50°	-25°	0°	25°	50°	75°	100°	200°	
B & C	Horizontal Post 115kV Single Circuit	Peak	230	0.67	2.24	3.50	6.07	12.11	26.16	26.25	12.18	6.10	3.51	0.86	
		Average	138	0.42	1.41	2.20	3.82	7.63	16.49	16.54	7.68	3.84	2.21	0.54	
A	Davit Arm, 115kV/115kV Steel Pole Double Circuit	Peak	230	0.22	1.49	3.13	7.86	23.03	38.44	22.77	7.73	3.05	1.44	0.21	
		Average	138	0.13	0.90	1.79	4.73	13.82	23.06	13.66	4.64	1.72	0.87	0.13	
A & D (3000 kemil)	Transmission Duct Bank 115kV/115kV Under ground Double Circuit	Peak	230	0.00	0.01	0.03	0.11	0.84	13.08	0.85	0.11	0.03	0.01	0.00	
		Average	138	0.00	0.01	0.02	0.07	0.51	7.85	0.51	0.07	0.02	0.01	0.00	
A & D (1250 kemil)	Transmission Duct Bank 115kV/115kV Under ground Double Circuit	Peak	230	0.00	0.01	0.02	0.05	0.37	19.67	0.37	0.05	0.01	0.01	0.00	
		Average	138	0.00	0.00	0.01	0.03	0.22	11.80	0.22	0.03	0.01	0.00	0.00	

The Environmental Report must reflect a range of magnetic field levels comporting with those in the Scoping Comment Affidavit of Bruce McKay:

STEP 4 THIS TABLE CONTAINS DATA SCALED FROM THE TABLE ABOVE USING CURRENTS CALCULATED IN STEP 3															
Figure 41: CALCULATED MAGNETIC FLUX DESNITY (MILLIGAUSS) FOR PROPOSED 115KV TRANSMISSION LINE DESIGNS (1 METER OR 3.28 FEET ABOVE GROUND)															
Route	Structure Type	System Condition	Current (Amps)	Distance to Proposed Centerline											
				-200'	-100'	-75°	-50°	-25°	0°	25°	50°	75°	100°	200°	
B & C	Horizontal Post 115kV Single Circuit	Peak	965.07	2.81	9.40	14.69	25.47	50.81	109.77	110.14	51.11	25.60	14.73	3.61	
		Average	723.80	2.20	7.40	11.54	20.04	40.02	86.49	86.75	40.28	20.14	11.59	2.83	
A	Davit Arm, 115kV/115kV Steel Pole Double Circuit	Peak	1930.13	1.85	12.50	26.27	66.13	193.27	322.58	191.08	64.87	25.60	12.08	1.76	
		Average	1447.60	1.36	9.44	18.78	49.62	144.97	241.90	143.29	48.67	18.04	9.13	1.36	

CONCLUSION

The MOES Comment is instead a Recommendation, and is premature. MOES has not done any independent investigation and is relying on grossly outdated data from 2006 for its conclusions.

The Hiawatha Project is not needed for any of the reasons Applicants claim, and it readily fits into the larger plan laid out by Xcel in previous reports, stretching from an interconnection to the 345kV metro ring, down into the city, and through the heart of South Minneapolis to connect to the 345kV ring in Bloomington.

It is not feasible to build it above ground. Land acquisition with sufficiently protective easements is formidable, impossible, because the buildings are built close together and are not far from the streets. Public health and safety would be put at risk if these lines were built above

ground in this densely populated area due to the impacts of EMF and noise and lighting that would make this project a most unwelcome neighbor.

If this project does go forward, it should do so only with sufficient protections to the people in the community, assured by undergrounding and apportionment of the cost of undergrounding of transmission to the entire Xcel ratebase.

Thank you for the opportunity to submit this Reply Comment.

Very truly yours,



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