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**Northern States Power Company d/b/a Xcel Energy**  
**03-73-TR-XCEL**

**IN THE MATTER OF XCEL ENERGY’S APPLICATION TO THE  
MINNESOTA ENVIRONMENTAL QUALITY BOARD FOR ROUTE  
PERMITS, SPLIT ROCK SUBSTATION TO NOBLES COUNTY  
SUBSTATION TO LAKEFIELD JUNCTION SUBSTATION 345 KV  
TRANSMISSION LINE AND THE NOBLES COUNTY SUBSTATION TO  
CHANARAMBIE SUBSTATION 115 KV TRANSMISSION LINE AND THE  
NOBLES COUNTY SUBSTATION**

**Direct Testimony**  
**Of**  
**Pamela J. Rasmussen**  
Team Lead, Siting and Permitting  
(Xcel Energy Services Inc.)  
February 14, 2005



1 **Q. What is the purpose of your testimony?**

2 A. My testimony is intended to support Xcel Energy's application to the MEQB for a route  
3 permit to construct a new 345 kV transmission line from Lakefield Junction Substation to  
4 the Split Rock Substation, a new Nobles County Substation and a new 115 kV  
5 transmission line from the Chanarambie Substation to the new Nobles County Substation  
6 ("Application").

7 **Q. Were you involved in the preparation of the Application?**

8 A. Yes. I was primarily responsible for preparing the Application. I am sponsoring the  
9 Application and am available to address issues and questions arising from the Application.

10 **Q. Do you have any changes or corrections to make to the Application?**

11 A. Yes. The costs for the 345 kV route along Interstate 90 (I-90 Route) are greater than  
12 reported in the Application. The original figure of \$49,710,000 did not include removal  
13 costs for those sections of the route that would require replacing existing poles with  
14 double circuit structures. The updated total is \$51,189,117.

15 **Q. Do you have any clarifications you would like to make regarding the Draft  
16 Environmental Impact Statement (DEIS)?**

17 A. Yes. I have several clarifications. Table 1 of the DEIS provides information regarding the  
18 right of way required for each of the routes for the 345 kV line and the 115 kV line. That  
19 chart lists only the new right of way required and does not identify the amount of existing  
20 right of way that will be utilized for the lines. The total right of way required is shown on  
21 the Revised Table 1 in **Exhibit PR-1**.

22 In addition, Appendix E of the DEIS includes Xcel Energy's Data Request Responses to  
23 the MEQB staff, but it does not include all of the Company's responses to data requests.  
24 Some of the maps for for Request Number 10 were not included. Also, subsequent to the  
25 issuance of the DEIS, Xcel Energy provided responses for Requests 11 through 14. Xcel  
26 Energy will make these responses available at the hearings scheduled for March 1 through  
27 March 4, 2005.

28 **Q. What is the purpose of the new facilities?**

1 A. In March 2003, the Minnesota Public Utilities Commission (PUC) issued a Certificate of  
2 Need for four new high voltage transmission lines, including the 345 kV and 115 kV lines  
3 for which permits are sought in this proceeding. PUC Docket No. E-002/CN-01-195. The  
4 new 345 kV and 115 kV transmission lines and Nobles County Substation, along with  
5 other system enhancements, are designed to allow 825 megawatts (MW) of wind-  
6 generated energy to connect to the transmission system.

7  
8 **345 kV Transmission Line from Split Rock Substation to Lakefield Junction**  
9 **Substation**

10 **Q. Please describe, generally, the routes under consideration for the 345 kV line.**

11 A. The Application proposed two primary routes. They are referred to as the "Interstate  
12 Route" and the "Alliant Route". Approximately 9.7 miles of the route is in South Dakota.

13 Interstate Route: The Interstate Route is 88 miles long and generally follows  
14 Interstate 90 (I-90) from the Lakefield Junction Substation in Jackson County, Minnesota  
15 to the Split Rock Substation in Minnehaha County, South Dakota. The one significant  
16 exception is around the City of Worthington where the route jogs north and follows an  
17 existing Alliant Energy 161 kV transmission line for approximately 12 miles and then  
18 heads south back to I-90 to avoid interfering with the Worthington Municipal Airport.  
19 Maps showing the Interstate Route are included in Appendix B of the Application.  
20 Several of the identifiers for the route segments identified in the Application were  
21 modified in the DEIS due to the creation of additional route segments. Using the route  
22 segments identifiers from Figures A1, A2 and A3 in the DEIS, those comprising the  
23 Interstate Route are I15, T15, T14, C7, I9, I8, C5, T10, T9, I6 I5, I4, I3, I2 and I1.

24 Alliant Route: The Alliant Route is 85.7 miles long. Approximately 10.1 miles of  
25 the Alliant Route is in South Dakota. For the majority of the route, the line generally  
26 follows existing transmission line right-of-ways that are located between two and five  
27 miles north of I-90. Maps showing the Alliant Route are contained in Appendix B of the  
28 Application. The route segments comprising the Alliant Route are MR1, T14, T13, T12,

1 T11, T10, T9, T8, T7, T6, T5, T4, T3, T2, and T1.

2 **Q. What additional routes were proposed by the MEQB?**

3 A. During the project scoping which occurred after Xcel Energy filed its Application, MEQB  
4 staff gathered input from the Citizen Advisory Task Force and other members of the  
5 public. No other major routes were proposed, but several short reroute sections were  
6 identified. The DEIS provides a few examples of additional routes that could be  
7 developed from the various route segments for both the 345 kV and 115 kV transmission  
8 lines. The DEIS notes that additional routes could be developed other than the ones  
9 provided in the DEIS for the MEQB to consider in its routing decision.

10 **Q. What is Xcel Energy's preferred route for the 345 kV transmission line?**

11 A. In Minnesota, Xcel Energy strongly prefers the Interstate Route with a slight modification.  
12 It is referred to as Jackson County I-90 Option A in the DEIS and I will refer to it as the  
13 Modified Interstate Route. The route segments included in the Modified Interstate Route  
14 include I15, T15, T14, T13, J1, I8, C5, T10, T9, I6 I5, I4, I3, I2 and I1. (See Figures A1,  
15 A2 and A4 in the DEIS). We have another public meeting scheduled in South Dakota on  
16 March 24, 2005 to gather input for our SDPUC filing and have not finalized the South  
17 Dakota portion of the route yet.

18 **Q. Why did Xcel Energy modify the I-90 Route?**

19 A. Xcel Energy reviewed the information provided in the DEIS on the original proposed  
20 routes and also considered the additional landowner input provided at the various scoping  
21 and public meetings held since we filed the Application. Based on this analysis, we  
22 determined that replacing Segments C7 and I9 with Segments T13 and J1 was appropriate.

23 **Q. What are the specific concerns that led you to the conclusion that Segments C7 and**  
24 **I9 should be replaced?**

25 A. The Company received several comments about the impacts of Segment I9 on nearby  
26 homes along both sides of I-90 in this section and the tributary to the Little Sioux River.  
27 If Segment I9 were used, the line would be placed on the north side of I-90 along Segment  
28 I9 to avoid homes close to I-90 on the south side. However, given the proximity of the

1 Little Sioux River tributary and associated wetlands, it will be difficult to minimize  
2 impacts in this area. By using Segments T13 and J1, which have costs comparable to  
3 Segments C7 and I9, the number of homes within 100 feet is reduced by one, and the  
4 number of public waters crossed declines from 28 to 24.

5 **Q. Why does Xcel Energy prefer the Modified Interstate Route to the Alliant Route?**

6 There are five primary reasons Xcel Energy supports the Modified Interstate Route:

7 1. The Alliant Route costs approximately \$7 million more than the  
8 Modified Interstate Route in construction expenses alone. A review of the various  
9 environmental and land use impacts associated with the two options show they are  
10 similar and do not justify this additional cost. The Alliant Route also passes by  
11 more homes located within 300 feet of the line than the Modified Interstate Route.

12 2. The Alliant Route would take approximately 13 more months to  
13 build than the Modified Interstate Route. This would result in an additional 13  
14 months of delay before the 825 megawatt level of outlet capacity can be reached  
15 on the Buffalo Ridge and 13 additional months during which the energy generated  
16 by wind turbines would be stranded and unable to reach market, resulting in  
17 additional significant overall costs.

18 3. The Alliant Route creates significant reliability concerns during  
19 construction. One of the most significant risks would face the City of Worthington  
20 Specifically, there would be 22 weeks during which the City of Worthington  
21 would be at an increased risk of an outage compared to 6 weeks on the Interstate  
22 Route.

23 4. The Modified Interstate Route would require less new right of way  
24 and less impact on agricultural operations. The Modified Interstate Route uses  
25 existing corridors for all but approximately 7 miles of the 88-mile route. In  
26 contrast, the Alliant Route relies upon completely new right of way for  
27 approximately 11 miles of its 86-mile route. Depending upon which segments are  
28 chosen near the Lakefield Substation, the amount of new corridors could increase

1 for the Alliant Route. Most of the new route segments proposed in that area have  
 2 sections that do not share existing transmission line or road right of way. The  
 3 Modified Interstate Route has slightly less permanent impacts since fewer  
 4 structures will be required (0.41 acres versus 0.53 acres for the Alliant Route).  
 5 More importantly, the Modified Interstate Route will have less short-term  
 6 agricultural impacts than the Alliant Route (141 acres for the Modified Interstate  
 7 Route versus 186 acres for the Alliant Route).

8 **5. As noted on the following table, the Modified Interstate Route**  
 9 **impacts no new homes within 300 feet of the route. In contrast, the Alliant**  
 10 **route impacts five additional homes, the closest of which is 60 feet from the**  
 11 **route centerline.**

12  
 13 **Houses Within 300 Feet of Transmission Lines**

	Houses Within 300 Feet			Distances from Each Newly Impacted House to Route Centerline (Feet)
	Total	Near Existing 161 kV Line	Newly Impacted by 345 kV Line	
Modified Interstate Route	4	4	0	N/a
Alliant Route	10	5	5	60, 170, 220, 240, 115

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 23 Note: Newly Impacted Houses are those that at the time Xcel Energy's Application did not have  
 24 a transmission line within 300 feet.

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 27 **Q. Can you answer specific questions regarding costs, timing and the reliability**  
 28

1 **concerns that would arise during construction of the 345 kV line on the Alliant**  
2 **Route?**

3 A. Specific questions are better addressed to my colleague and Project Manager, Grant D.  
4 Stevenson. Mr. Stevenson will be providing testimony and be available to answer specific  
5 questions. Walter T. Grivna, Manager Transmission Reliability Assessment, will also be  
6 available to offer testimony and answer questions regarding reliability.

7 **Q. Regardless of whether the Interstate Route, the Modified Interstate Route or the**  
8 **Alliant Route is selected, is Xcel Energy requesting flexibility in the final placement**  
9 **of the 345 kV transmission line?**

10 A. Yes. Xcel Energy has designated the side of I-90 and other roads that the transmission  
11 line will be located on and that is reflected in the route maps in Appendices B and E of the  
12 DEIS. For the majority of the route Xcel Energy is requesting that the MEQB designate a  
13 corridor 660 feet from the centerline of the designated route to allow for reasonable  
14 flexibility in locating the transmission line and minimizing impacts to landowners. This  
15 flexibility is important to allow landowner specific location concerns to be addressed as  
16 final design is completed.

17 **Q. Are there any specific areas of concern from a routing perspective?**

18 A. Yes. There are a few sensitive areas which the Company addressed in response to Data  
19 Request 10, which is included in Appendix E of the DEIS. In Question No. 3 of that  
20 request, Xcel Energy was asked to provide a more detailed evaluation of segment I5 on  
21 I-90 south of Luverne. We were specifically asked which side of I-90 is preferable in this  
22 area and to include an evaluation of how to best avoid conflicts with this expanding  
23 industrial area. Our response noted that we reviewed this area and preferred the south side  
24 of the Interstate to allow us to best avoid conflicts in this area. We have done some  
25 additional evaluation and request that the MEQB grant us flexibility along this section of  
26 the line to work with the landowners, the Minnesota Department of Transportation and the  
27 City of Luverne to determine the best location for the line in this area. Specifically, we  
28 ask that the MEQB issue a permit with a mile-wide corridor --beginning at the center of I-

1 90 and heading south -- for the portion of the route beginning two miles east of Highway  
2 75 and ending two miles west of Highway 75. We will copy MEQB staff on all  
3 correspondence and will provide the final alignment for staff review.

4 Finally, as noted in Section 3.1.1.1 of the Application, Xcel Energy will consider double  
5 circuiting with other transmission lines nearby and exercise the option when feasible and  
6 prudent. Special structures may be used in areas where long spans, corner structures or  
7 special issues arise such as wetland or avian issues.

8  
9 **115 kV Transmission Line from Nobles County Substation to Chanarambie**  
10 **Substation**

11 **Q. What routes did Xcel Energy proposed in the Application for the 115 kV line?**

12 A. Xcel Energy identified two routes for the new 115 kV transmission line between the  
13 existing Chanarambie Substation to the new Nobles County Substation. The two routes  
14 are referred to as the "West Route" and the "East Route". They both start at the  
15 Chanarambie Substation and head South and East to the location of the new Nobles  
16 County Substation. Generally, the East Route is a mile to the East of the West Route.  
17 The specific routes are shown in Appendix D of the Application and Figure A6 in the  
18 DEIS.

19 **Q. What are the specific route segments comprising each route?**

20 A. The West Route is comprised of Segments, W3, W4a, W4b, W4c, W4d, W5, W6, and  
21 either W2 and EW1 or AW1. Segments EW1 and W2 would be utilized for Substation A  
22 or Substation B. Segment AW1 would be utilized if Substation C were selected. The East  
23 Route is comprised of Segments, EW1, E2, E3a, E3B, E3c, E3d, E4, and E5 to connect  
24 with Substations A or B. Substation C is not an option for the East Route.

25 **Q. How long is each of these routes?**

26 A. The lengths of the East Route and the West Route vary depending on which substation is  
27 selected. There are three proposed substation sites. Substation Site A is located north of  
28 Reading and covers portions of Sections 14, 15, 22, 26 and 27 of Township 103, Range

1 41, primarily in areas adjacent to Highway 266, 9 and 14. Substation Site B is located in  
2 portions of Sections 25, 26, 27, 34, 35, and 36 of Township 103, Range 41, focusing on  
3 the area where Segments T9, T8 and I6 intersect. Substation C is located in portions of  
4 Sections 29, 30, 31 and 32, Township 103, Range 41, mostly adjacent to County Road  
5 13/Jones Avenue. If Substation A or Substation B is selected, the West Route would be  
6 36.2 miles long and the East Route would be 36.6 miles long. If Substation site C is  
7 selected, which can only considered for the West Route, the West Route would be 35.6  
8 miles long.

9 **Q. Does Xcel Energy have a preference for the East Route or the West Route?**

10 A. Yes.

11 **Q. Please describe which route is preferred and why.**

12 A. Xcel Energy has reviewed the data and prefers a route that combines portions of the East  
13 and West Routes, which we will refer to as the Modified East Route since it entails the  
14 majority of the East Route. A map showing the Modified East Route is attached as  
15 **Exhibit PR- 2**. This route includes segments W5, C2, E4, E3d, E3c, E3b, E3a, W3, W2,  
16 EW1 and Segment N5 if Substation Site B is chosen. (Please see my Revised Table 1 in  
17 **Exhibit PR-1** for the information on the Modified East Route). This option impacts fewer  
18 homes and wildlife management areas, has more corridor sharing and requires less new  
19 right of way than the East Route. The Modified East Route will require additional  
20 expenditures, which we believe are justified because they will result in an appreciable  
21 reduction in environmental impacts from our original proposal and best balances the pros  
22 and cons of the East Route and the West Route.

23 **Q. Are there specific parts of this Modified East Route that you would like to highlight?**

24 A. Yes. We prefer to have the flexibility on the 115 kV route to work with landowners on  
25 locating the poles and selecting which side of the road to put the line on. We have no  
26 objection to the MEQB noting specific locations where it may warrant one specific side of  
27 the road. However, we prefer the flexibility to work that issue out with landowners in  
28 other areas where we may not be impacting wind rows or locating the line on the same

1 side of the road as homes. We have several sections of the route where we would agree to  
2 be more specific:

- 3       ▪ The line would be on the south side of Segment E3c to avoid the homes on the  
4 north side of the road.
- 5       ▪ Xcel Energy refined its route segment W6 in Response to Question 5 of Data  
6 Request No. 10 which is shown in EQB Request No. 10 - Map 4 & 5. We  
7 have two more specific alternatives in that area that are shown on these maps  
8 in yellow and light purple. Xcel Energy prefers to have flexibility in siting the  
9 line in this area since we expect other wind turbine and 34.5 kV feeder  
10 construction in this area.
- 11       ▪ Xcel Energy responded to questions about Route Segment E5 in Data Request  
12 10, Question 6 and EQB Request No. 10- Map 6. We provided our position on  
13 which side of the road the new 115-kV would be placed if that route segment  
14 were selected. EQB Request No. 10-Map 6 from that response shows the route  
15 modification we proposed in light blue.

16 **Q. What is Xcel Energy's position on underbuilding facilities on the transmission lines?**

17 Xcel Energy will work to consolidate facilities wherever possible, but we do not  
18 underbuild lower voltage lines on our 345 kV lines. For the 115 kV lines, there are  
19 several factors that will need to be taken into consideration and we request the flexibility  
20 to address underbuild issues during the line design process:

- 21       ▪ Xcel Energy plans to design the 115 kV line to handle 34.5 kV  
22 underbuild. In areas near the Nobles County, Fenton and Chanarambie  
23 Substations, we may include double circuit underbuild. Given we know  
24 there will be additional wind generation built in these areas, we want to  
25 reserve the use of the underbuild on these structures for new feeder lines.
- 26       ▪ When considering consolidation of facilities, we need to note that other  
27 parties own some of the distribution lines and double circuit 34.5 kV  
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feeder lines. We are not certain at this time if the owner or owners would support consolidation of all the lines on one structure.

- We have to consider outage issues for consolidating any existing feeder lines with the new line. In addition, some parties have expressed concerns with putting that many lines on one pole in an area where it could have several impacts on wind outlet if there were an outage.
- Finally, placing that many lines on one structure creates clearance, safety and reliability concerns for Xcel Energy. To perform maintenance on any of the lines, it is likely we would have to take outages of one or all of the other circuits. In addition, multiple circuits create safety concerns for our linemen working on them. Given this, Xcel Energy limits the number of these types of structures on its system, and only builds them in areas where right of way and access issues limit our options or structure consolidation reduces congestion in areas around substations.

**Nobles County Substation**

**Q. Does Xcel Energy have a substation site it prefers?**

A. Yes. The Company would like to be able to acquire 40 acres to build the substation and allow for future expansion as well as a buffer to nearby homes. The Company prefers Substation Site A because there is sufficient land available for these purposes, because it is located near a major thoroughfare, T.H. 266, which affords good access for trucks and heavy equipment, and because it is near the town of Reading, where future development may occur. It would also create a shorter route than Substation Site B or C.

**Q. What about the other substation sites?**

A. Substation Site B would require additional road upgrading and a slightly longer transmission line, but would be acceptable. If Substation Site B is approved, we note that Segment N5 needs to be approved for the 115 kV line. Substation C, however, should be dropped from consideration because we have been informed a home is planned to be built

1 on the main site we were considering in Section 32 for that Site.

2 **Q. Is Xcel Energy requesting any flexibility for the 115 kV transmission line around the**  
3 **substations?**

4 A. Yes. We request the flexibility to design the 115 kV line as a double circuit line around  
5 our three substations in the area. We would not design more than one mile in any  
6 direction from the substation due to our planning criteria concerns regarding double  
7 circuit lines. If wind energy continues to develop in the area as expected, it is likely that  
8 other transmission lines will connect at the Nobles County Substation. Building the first  
9 mile from the substation as double circuit will enable a future line to be consolidated on  
10 the same structures.

11 We also request the flexibility to site the 115 kV, and 345-kV/161 kV line around the  
12 Nobles County Substation. Once a final substation site is selected we will then be able to  
13 determine how the lines will enter the substation. We request the flexibility to consider  
14 designing any of the lines within a mile of the substation to accommodate additional  
15 transmission lines. We know for certain we will work to incorporate 34.5 kV underbuild.  
16 We would provide the preliminary layout to the MEQB for review before finalizing the  
17 structures. This way we can work to minimize the number of structures around the  
18 Nobles County substation.

19  
20 **Right of Way Acquisition**

21 **Q. Will new right-of-way be required for the new facilities?**

22 A. Yes.

23 **Q. What general steps will Xcel Energy undertake to acquire the easements needed for**  
24 **the transmission lines and substation?**

25 A. Xcel Energy's acquisition procedures are discussed in two handouts that were submitted to  
26 the MEQB as part of this proceeding. The first is titled "General Rights-of-Way  
27 Information Minnesota" and the second is titled "Commonly Asked Questions Regarding  
28 Transmission Line Right-of-Ways and Easements". Both are attached hereto as **Exhibits**

1           **PR-3 and PR-4.**

2           **Q.    Should the MEQB be making any decisions in this proceeding regarding the**  
3           **appropriate amount of just compensation that should be paid to landowners whose**  
4           **property is acquired for the facilities?**

5           A.    No. This is not the appropriate venue for resolving compensation or eminent domain  
6           concerns. As noted in the DEIS, the MEQB does not have authority over issues of  
7           landowner compensation and therefore, the MEQB should not be making any eminent  
8           domain decisions.

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10           **Pole Location**

11           **Q.    Have the proposed routes considered plans for future expansion of local roadways?**

12           A.    Yes. The DEIS evaluated expansion plans and identified only one area of concern in  
13           Nobles County. This area is where Segments C1 and E3 parallel C.R. 72 for 3.5 miles. If  
14           a route permit is issued for these segments, Xcel Energy will cooperate with Nobles  
15           County to locate the poles such that relocation will not be required to accommodate the  
16           planned roadway expansion.

17           **Q.    Concerns have also been raised regarding whether the Company should be required**  
18           **to place poles in the public right of way so that if the poles later need to be relocated,**  
19           **the Company will bear those costs. Will this issue be considered here?**

20           A.    No. As noted in the DEIS, policy issues of financial responsibility for pole relocations is  
21           beyond the scope of this hearing. In addition, Xcel Energy committed in the Application  
22           to review the most current road plans with each county and township to determine if there  
23           were any potential conflicts with their planned road work prior to finalizing our  
24           transmission line plan and profile.

25  
26           **Compliance**

27           **Q.    Are there other issues you want to address?**

28           A.    Yes. Several landowners have expressed concern regarding potential impacts to their tile

1 systems. In addition, we are currently working with Martin County to identify their water  
2 and tile systems as part of our Lakefield to Fox Lake 161 kV transmission line. Known  
3 locations of tile will be determined during the surveys for the lines and substations, In  
4 addition, upon notice that a tile system may be in place, the Company will investigate  
5 locations and avoid interference wherever possible. Should construction damage any tile,  
6 the Company will repair or replace it as appropriate. The Company would not oppose a  
7 permit condition incorporating this commitment.

8 **Q. How will the Company ensure that it meets permit conditions for this project?**

9 A. Since this project is so large and we have multiple projects underway, we will be using an  
10 environmental inspector to assist us in complying with the permit conditions. The  
11 inspector will work with the designers and ROW agents on design and permitting issues.  
12 The inspector will train construction crews to ensure they follow the conditions in our  
13 permits and our standard construction contract requirements to minimize impacts.  
14 Periodic inspections of the construction activities will occur as part of this effort. This  
15 person will work under my direction.

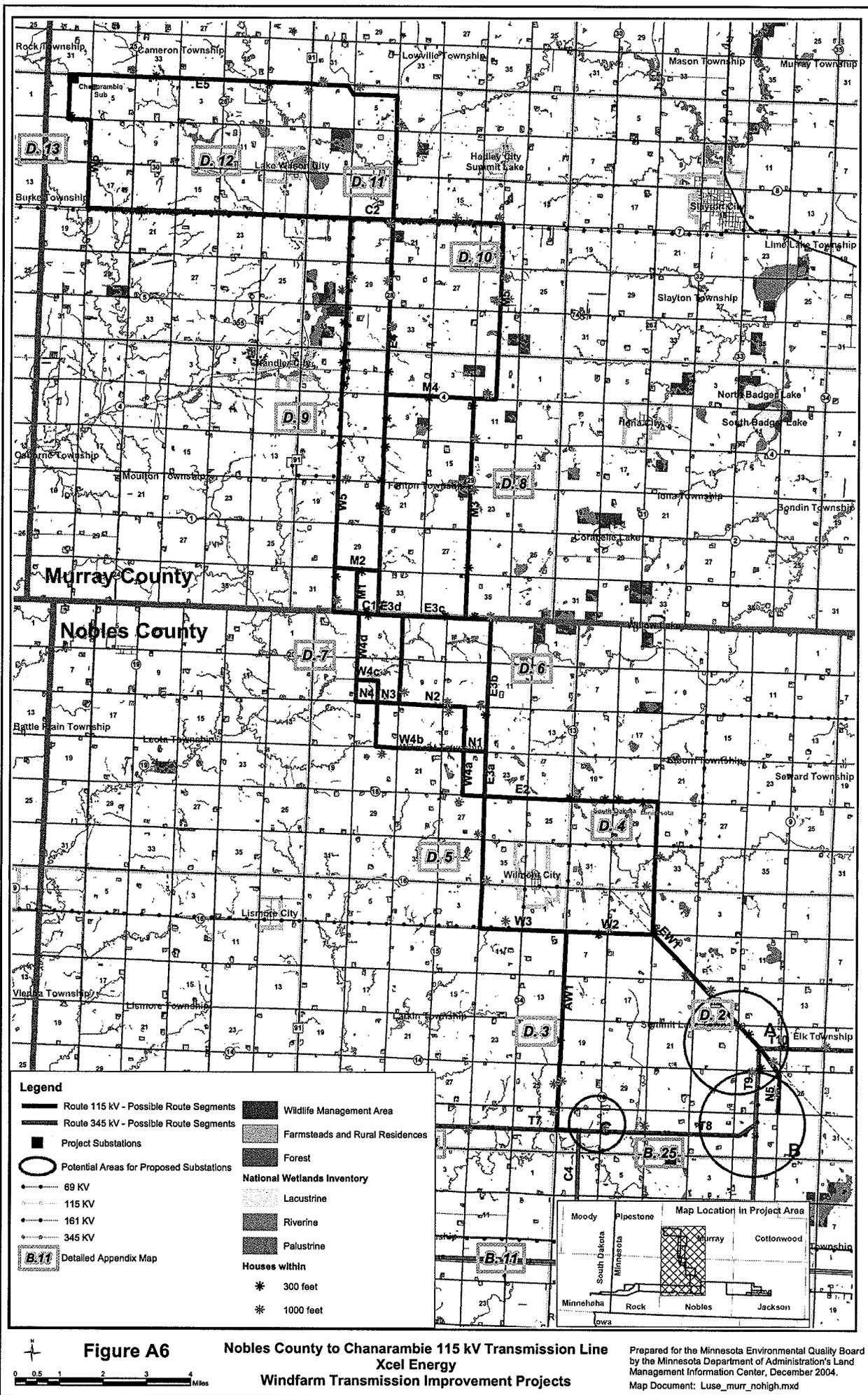
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17 **Conclusion**

18 **Q. Does this conclude your direct testimony?**

19 A. Yes.  
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**Table 1 - Revised  
Summary Comparison of Selected Alternative Routes**

Route Option	Length	Transmission ROW (miles)	Roadway ROW (miles)	Percent Shared	Total NEW ROW Required (Acres)	Total ROW Required (Acres)	Houses <300'	Houses >1000'	# of WMA and WPA w/in 2 miles	# of PWI Waters Crossed	Corners	Costs
<b>345 kV Routes</b>												
I-90	88.0	19.4	65.4	96.4%	692	1046	5	57	12	28	27	\$51,189,117
Alliant	85.7	67.6	6.7	86.7%	272	1502	12	30	11	23	25	\$58,320,072
#54	88.5	24.6	55.2	90.1%	694	1142	4	47	17	23	23	\$52,476,941
I-90 w/Option A (Jackson Co.) Modified I-90 Route	88.0	18.4	62.4	91.8%	736	1071	5	56	13	24	28	\$51,024,950
Alliant w/Option B (Jackson Co.)	85.2	69.8	8.7	92.1%	207	1476	10	26	11	27	23	\$58,549,163
Alliant w/Option C (Jackson Co.)	84.7	69.8	6.7	90.3%	215	1484	11	33	12	24	21	\$58,283,755
I-90 Using Crossover C4 and J1	86.1	22.3	54.9	89.6%	695	1101	4	56	13	23	29	\$50,643,815
I-90 Using Crossover C4 only	86.1	23.3	59.9	96.6%	634	1058	4	57	12	27	29	\$50,807,982
<b>115 kV Routes</b>												
West	36.1	13.0	29.2	80.7%	139	241	11	12	8	12	16	\$15,548,680
East	36.6	0.0	35.6	97.4%	192	192	18	16	18	12	12	\$13,417,520
Example East Option B	36.6	0.0	34.6	94.6%	205	205	15	17	15	13	14	\$13,417,520
Example East Option C	37.1	8.5	35.6	97.3%	153	227	12	16	24	11	14	\$15,114,010
Example West A from Sub C	36.0	13.5	30.1	86.2%	132	239	10	12	8	12	17	\$15,603,150
Example West A from Sub A	36.5	13.0	31.2	85.3%	135	237	12	11	9	12	21	\$15,695,480
Modified East Route+A4	36.1	7.0	33.1	91.8%	163	229	13	13	12	13	11	\$14,462,490





## GENERAL RIGHT-OF-WAY INFORMATION MINNESOTA

This handout has been developed to provide information about the basic protections afforded landowners under State and Federal Laws regulating the acquisition of real estate for public use to build transmission lines and substations.

### **POLICIES AND PRACTICES FOR RIGHT-OF-WAY-ACQUISITION USED IN CONSTRUCTION OF ELECTRIC TRANSMISSION LINES.**

After all of the necessary approvals from state and local governments have been obtained, Xcel Energy representatives will proceed to acquire easements for the location and construction of the new line following the standard sequence of practices described below.

- **ABSTRACT OF TITLE**

The right-of-way representative or other persons engaged by the utility will complete a search of the public records of all lands involved in the project. A title report will then be developed to determine the legal description of the property, the owner(s) of record of the property, and information regarding easements, liens, restrictions, encumbrances and other conditions of record.

- **SURVEY PERMISSION**

A right-of-way representative would then contact each property owner or his or her representative to inform them of the project. The right-of-way representative will describe the need for the transmission line and how it may affect their property. The utility's survey crews would then need to enter the property to complete their preliminary survey work.

- **SURVEY STAKING**

After the power line design is completed, the line is then staked. This means that the survey crew locates each structure or pole on the ground and places a surveyor's stake to mark the structure locations. By doing this, the right-of-way representative can show the landowner exactly where the structure(s) will be located on their property.

- **DOCUMENT PREPARATION**

The utility will prepare all of the documents required to complete each transaction. Some of the documents that may be required include: Easement, Purchase Agreement or Contract, Deed, and Clearing and Construction Notice. These documents will be in the name of the Xcel Energy operating company in this state, which is Northern States Power Company-Minnesota

- **ACQUISITION PROCESS**

Each property on which easement rights are to be acquired will be viewed by the utility's representative(s) to determine the amount of just compensation for the rights to be obtained. In the event that a complicated appraisal problem exists, or if statutory requirement in the local jurisdiction dictates, an appraisal will be completed by the utility's representative(s) to determine the value of the rights being acquired. The utility will make an offer to the owner to obtain the property rights.

- **NEGOTIATIONS**

A utility right-of-way representative will begin the negotiating process by presenting the required legal document(s) to the property owner. They will also provide maps of the line route or site, maps showing the landowner's parcel, and an offer of compensation for the easement or purchase. The landowner will be allowed a reasonable amount of time in which to consider the offer and to present material to the utility that the owner believes is relevant to deciding the value of the property.

If the utility and the landowner cannot agree on the amount of compensation being offered by the utility as being fair and equitable, or if the landowner just wants a second opinion as to what is fair and just compensation, the landowner may have a second appraisal made on his property. Xcel Energy provides up to \$500 toward the landowner's attorney/appraiser fees, as long as the appraisal conforms to the conditions of prevailing State Statutes, and follows good appraisal practices.

- **NEGOTIATED SETTLEMENT**

The representative for the utility will work closely with the landowner to try to arrive at a negotiated settlement that is fair and acceptable to all parties. In nearly all cases, the utility's representatives are able to work with the landowners to address their concerns. However, in some cases a negotiated settlement is not possible and the landowner may choose to have an independent third party determine the value for the rights taken. This is accomplished through the exercise of the right of Eminent Domain by the utility. The process of exercising the right of Eminent Domain is called Condemnation.

- **ACQUISITION BY EMINENT DOMAIN (CONDEMNATION)**

In any project that requires easements for power plants or power line construction, Xcel Energy's goal is to offer fair and equitable compensation to landowners. Condemnation proceedings will only be initiated by the utility when reasonable efforts to negotiate an agreement at what is believed to be just compensation have failed.

Although Xcel Energy's preference is to negotiate with the landowner, there may be times where this is impossible and the utility and the landowner reach an impasse. If the power line construction schedule has reached a critical stage, the utility would initiate a procedure known as the "quick take" process.

"Quick take" steps:

1. Xcel Energy files a "quick take" petition with the court.
2. The landowner receives notice of the petition, which starts a 90-day process.
3. The court schedules a hearing to establish need.
4. If the court finds that the project is in the public interest, it can grant the "quick take" petition.
5. Xcel Energy deposits the independent appraised value of the property easement with the court or landowner within a 90-day period.
6. The court issues notice of 90-day "quick take" order.
7. After the 90-day period expires, title for the easement transfers to Xcel Energy.
8. Construction can begin.

During the 90-day process, the court also appoints a three-person condemnation commission. The three people must be knowledgeable of real estate issues and residents of the county in which the "quick take" process was initiated. The court appoints a chairman, who schedules viewings of the "quick take" easements. Next, the commission schedules a valuation hearing. Xcel Energy and landowners can testify as to the value of the easements. (Xcel Energy provides up to \$500 toward the landowner's attorney/appraiser fees.) The commission then makes an award as to the value of the property. Each party has 40 days from the filing of the award to appeal to district court for a jury trial. The jury hears land value evidence and makes its award. At any point in this process, the case can be dismissed if the parties reach a settlement.

Although not part of the eminent domain process, Minnesota law also provides for the following:

- The landowner can request easement payment in 10 installments, plus 8 percent interest, instead of a lump-sum payment.
- Landowners can apply for state tax credits on property that is encumbered by an easement.

#### • **THE CONSTRUCTION PROCESS**

Once the easement or land rights have been acquired and immediately prior to construction, the utility's right-of-way representative will contact the property owner and discuss the construction schedule.

During construction the following may be required:

- Temporary removal or relocation of certain fences
- Installation of temporary (or permanent at land owner request) gates
- Early harvest of crops where possible
- Removal or relocation of equipment and livestock from the right-of-way.

- **RESTORATION AND CLEAN UP**

The right-of-way representative will contact each property owner after construction is completed to see if any damage has occurred as a result of the utility's project. If damage has occurred to crops, fences, or the property, the utility will fairly reimburse the landowner for the damages caused. In some cases the utility may engage an outside contractor to restore the damaged property to as near as possible to its original condition.

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**Split Rock to Lakefield Junction 345 kV Transmission Line Project  
Nobles County Substation  
Nobles County to Chanarambie 115 kV Transmission Line Project**

**COMMONLY ASKED QUESTIONS REGARDING  
TRANSMISSION LINE RIGHT-OF-WAYS AND EASEMENTS**

These projects require a Certificate of Need from the Minnesota Public Utilities Commission (MPUC) and a Route Permit from the Minnesota Environmental Quality Board (MEQB). In addition, the Split Rock to Lakefield Junction 345 kV transmission line requires a Facilities Permit from the South Dakota Public Utilities Commission (SDPUC). The MPUC issued a Certificate of Need order to Xcel Energy on March 11, 2003. Xcel Energy is now pursuing the Route Permit from the MEQB and the Facilities Permit from the SDPUC. Once the agencies have approved the routes for the transmission line and the substation location, Xcel Energy will then pursue construction of the facility. In order to build the lines, we will need to acquire property easements for the transmission line right-of-way (ROW).

**1. WHAT IS AN EASEMENT?**

An easement is defined as a permanent land right acquired by a person or party to use the land or property of another for a special or particular purpose. Landowners are paid a fair price for the easement and can continue to use the land for most uses, such as agriculture.

**2. WHAT IS THE DIFFERENCE BETWEEN A RIGHT-OF-WAY AND AN EASEMENT?**

These terms are used interchangeably but an easement is the permanent land right and the ROW is the land area on which the facilities are located.

**3. HOW WIDE WILL THE RIGHT-OF-WAY NEED TO BE FOR THE PROPOSED TRANSMISSION LINES?**

For the Split Rock to Lakefield Junction 345 kV transmission line, the ROW will be 150 feet in width (75 feet on each side of the center of the transmission line). Exceptions to this will be where the transmission line route changes direction and turns significantly, which could require down guys and anchors outside the 150 foot strip. In addition, if the route follows a road, the ROW requirements for private property will be 85 feet with some of the easement overhanging the road

For the Nobles County to Chanarambie 115 kV transmission line, the ROW will be 75 feet in width (37.5 feet on each side of the center of the transmission line). Exceptions to this will be where the transmission line route changes direction and turns significantly, which would require down guys and anchors outside the 75 foot strip. In addition, if the route follows a road, the ROW requirements for private property will be 40 feet with some of the easement overhanging the road

**4. WHAT EASEMENT RIGHTS WILL BE NEEDED FOR THE CONSTRUCTION OF THE POWER LINE?**

Xcel Energy will require an easement that allows for surveying, construction, operation and maintenance of a transmission line across a defined strip of the landowner's property. The easement will be in the name of the Xcel Energy operating company in this state, which is Northern States Power Company-Minnesota.

**5. WHAT ACTIVITIES ARE ALLOWED WITHIN THE EASEMENT AREA?**

Land within the ROW may be used for any purpose that does not interfere with the construction or operation of the transmission line. In agricultural areas, the land may be used for crop production and pasture. In areas where the land will be developed, streets, lawn extensions, underground utilities, and curb and gutters, etc., may cross the ROW with permission from the utility.

**6. WHAT ARE THE MAIN BUILDING AND PLANTING RESTRICTIONS IN THE EASEMENT?**

The primary building and planting restrictions are: 1) prohibiting the construction of buildings or structures within the ROW strip, and 2) prohibiting the planting of tall growing species of trees in the ROW strip.

**7. WHY CAN'T BUILDINGS BE PLACED IN THE RIGHT-OF-WAY?**

If a building or structure located within the ROW were to catch fire, it could burn into the power line and take the line out of service for an extended period. When a power line is out of service it affects the ability of thousands of people to heat and light their homes and businesses. At certain times of the year, especially during winter months, outages are not only an inconvenience; they may become life threatening. Utilities have determined that the best way to prevent the possibility of these types of outages is to restrict the placement of structures within the ROW. In addition, access to the line is required if an outage occurs. The construction of building or other structures within the ROW could hamper maintenance crews from accessing the line to make the necessary repairs.

**8. WHY DOESN'T THE UTILITY BUY A STRIP OF LAND FOR THE LINE INSTEAD OF TAKING AN EASEMENT INTEREST?**

Utilities occasionally purchase ROWs for transmission lines in fee title. However, we have found that in most cases, landowners prefer to retain the ownership of the property so that they can maintain better control over the use of the property, subject of course to the limitations of the transmission line easement. In many cases, the retention of the ownership of the ROW by the landowner provides the landowner with continued use of the property for such things as agricultural operation, yard extensions or open areas adjacent to residences. In each of these cases the property continues to contribute positively and productively to the property owner as well as the public. Utilities are simply interested in assuring that their right to operate the transmission line is protected. In most cases, adjacent uses pose no threat to the line nor do they create a hazard to the public.

**9. HOW WILL THE PRESENCE OF A TRANSMISSION LINE ON MY PROPERTY AFFECT THE VALUE OF MY PROPERTY?**

In recent years, the utility industry and others have conducted numerous studies evaluating this issue. Specifically, is there a loss in property value caused by the proximity to power lines? All of the studies that we have reviewed to date--including regional and national studies that have been completed by competent, certified appraisers using valid appraisal analyses methods--have shown no significant loss in value as a result of the transmission line being in near proximity to the property. These studies generally use paired sale analysis, which compares properties that have power lines located on them or that abut powerlines, with those properties where no power lines are present. These properties are also compared on the basis of similar size, similar features and amenities.

Overall the large body of studies has not supported the claim that property values are significantly lowered as a result of proximity adjacent to a transmission line. In fact, some studies have shown that in some relatively exclusive subdivisions, lots that have been strategically designed to abut power line ROWs have sold first--and in some cases, for more money than those lots located away from the power line. These studies have indicated that in some cases properties abutting a power line have sold for nearly 8 percent above the asking price for the other lots. Purchasers indicated that they were willing to pay more for those lots because of the buffer created by the extra green space associated with the power line ROW. It is important for landowners to remember that every property is different and that the final determination of the value of their property and how it is affected by the power line will be addressed by the appraiser in the individual analysis of their property.

**10. WILL THE PAYMENT FOR THE EASEMENT ON MY PROPERTY BE LIKE THE ONES LANDOWNERS ARE RECEIVING FOR ALLOWING WIND TURBINES ON THEIR LAND?**

No. Wind developers represent entrepreneurial enterprises. They are not regulated by state or federal agencies in terms of the expenditures they make or the rates they charge. As an entrepreneurial business they assume more investment risk and also have the potential to see extremely high rates of return on their investments.

Wind farm developers do not fall in the category of essential services as defined by the States of Minnesota or South Dakota. As a result developers do not have the right of eminent domain to use to acquire property for their projects should arms length negotiations with landowners fail. As a result they often have to pay landowners an amount that is far in excess of what is realistic as compared to the properties actual fair market value. In contrast, Xcel Energy, like all investor owned utilities in Minnesota is a regulated company. Its electric rates and its return on equity are set by the State of Minnesota. All of its expenditures are subject to audit and review by a variety of regulatory agencies and are subject to prudence reviews. If expenditure is not deemed to be prudent it can be excluded from recovery in rates. All of Xcel Energy's major transmission line projects must undergo a comprehensive regulatory agency approval process before they can be constructed. Ultimately these projects must be found to be in the public interest through issuance of a Certificate of Need and must be constructed as authorized in terms of design and cost.

As a regulated "essential service" utility serving the public interest Xcel Energy does have the right of eminent domain, which allows property, in this case ROW, to be to be acquired for approved projects, even if a landowner is unwilling to grant Xcel Energy an easement. The rules which govern eminent domain laws in Minnesota and South Dakota require that the amount paid for an easement be based on the "before and after" value of the property. In other words compensation is based on the appraised difference in value of the property before the easement taking vs. its value after the easement is granted. In the interest of fairness to all of our ratepayers and the landowners with whom we deal, this basic approach is taken whether an easement is acquired through negotiation or through the exercise of eminent domain.

In reality the power of eminent domain is not used frequently. Most of our easement payments represent at least 50%-70% of the fair market value of the impacted parcel. It should be noted that granting an easement to Xcel does not entirely restrict the landowner's use of the property. For example in agricultural areas the right of way area can still be farmed except where the transmission structures are located. In addition payments are made for access routes to the ROW (if required), impacts to ornamental trees, and other unique circumstances.

For more information on ROW issues, please contact Ron Flynn, Team Lead, Siting and Land Rights at 1-800-238-7968, extension 2433 or [ronald.f.flynn@xcelenergy.com](mailto:ronald.f.flynn@xcelenergy.com).