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Eau Claire, WI 54702-0008

November 15, 2004

John N. Wachtler
Minnesota Environmental Quality Board
658 Cedar Street
St. Paul, MN 55155

**Re: Docket MEQB No. 03-73-TR-Xcel
EQB Data Request Number 10**

Dear Mr. Wachtler:

Here are Xcel Energy's responses to EQB staff's information request number ten (10) regarding the Split Rock to Lakefield 345 kV & Chanarambie to Nobles County 115 kV transmission line project. We are available to provide additional information or meet with you in person to discuss any questions in more detail.

1. *Route segment 18 in the area near Post's house on I-90 in Section 18 of Ewington Township in Jackson County (Map B.17). Please evaluate the approximate cost and feasibility of crossing I-90 to the south side and then crossing back to the north side before or at the point that crossing segment C6 connects to segment 18.*

EQB Request No. 10 – Map 1 is enclosed showing this location. Xcel Energy has reviewed this option using these maps.

As you are aware, the proposed corridor is shown in yellow on the map. While the detail is not shown on the map, it is likely that the transmission line would go around the on/off ramp for County Road 9. As we have discussed previously, Xcel Energy plans to go around any of the on/off ramps along I-90 unless we can span them or get permission from the MN DOT.

A possible route to avoid the Post Home on the north side of I-90 is shown in magenta. This has to be a short reroute since there are two farmsteads on the south side of I-90 that we would try to avoid. This route segment is approximately 700 feet longer than the route on the north side of I-90 and requires four dead end angles. This would add about \$425,000 to the cost of the project.

Xcel Energy has significant concerns with this reroute along the south side of I-90 in this area. Listed below is a summary of concerns and comments about this reroute:

- It will be difficult to avoid impacts to the Little Sioux River Tributary and a potential wetland area based on the aerial photos.



- There are two farmsteads on the south side of I-90 that are much closer than the Post farmstead. The Post house is approximately 290 feet from the I-90 fence. The house for the farmstead near the I-90 and County 9 intersection is approximately 275 feet from the south fence of I-90 and the house for the next farmstead to the west is approximately 285 feet from the south I-90 fence.
- Routing the line on the south side of I-90 would be approximately 700 feet longer than the route on the north side of I-90.
- We would need to cross I-90 twice within one mile. We would prefer to avoid multiple crossings of I-90 due to constructibility and access issues, especially in situations where we cross in areas where there is no road crossing of the Interstate.
- The proposed reroute to the south would add a total of approximately \$425,000 to the project cost.

Xcel Energy does not support this potential reroute since the Company believes the proposed line is a reasonable distance from the Post farm and the additional costs and impacts of moving the line are not warranted under these circumstances.

2. *Route segment I5 in Nobles County just west of Adrian, near some residences and rest stops (Map B.10). Please provide an initial evaluation of the cost and feasibility of crossing I-90 so as to be on opposite side from residences in that area, as well as more detail regarding the feasibility of rerouting the existing 69-kV line if this route is used.*

After discussing this option with you by phone on November 9, we agreed that a response to this data request was not necessary due to additional information. There are no homes closer than 1000 feet along the route where it is on the south side of I-90. EQB Request No. 10 – Map 2 shows this area in more detail.

3. *Route segment I5 on I-90 south of Luverne (B.8). Please provide more detailed evaluation of which side of I-90 is preferable in this area, including an evaluation of how to best avoid conflicts with this expanding industrial area.*

EQB Request No. 10 – Map 3 is enclosed which shows this area in more detail. We have reviewed this area and believe at this time the south side of the Interstate will allow us to best avoid conflicts in this area. However, as you are aware, it is a tight area and after discussing it in more detail with the team, we offer to restrict the line to the south side of I-90 in this area. Xcel Energy does have survey data for this area and can gather more specific information in this area to determine if there are some conflicts. It will take some preliminary design work that we believe we could provide at the public hearings in January.

4. *Route segment W6 along 91st street in front of Post's house at MP32 (D.11). Please assess the feasibility and cost of consolidating a new 115-kV line with both the existing 69-kV line and the feeder line on one set of poles on the north side of 91st street should this route be selected.*



EQB Request No. 10 – Map 4 & 5 shows the location of the Post house. This option was also proposed to Xcel Energy at the public scoping meetings in Chandler last year. It is feasible for Xcel Energy to consolidate the 115 kV and 69 kV lines on one structure—this is the proposed plan in this location. It may be feasible for Xcel Energy to move the line to the north side of 91st street and consolidate the line with the existing double circuit 34.5 kV feeder line in that location. We have marked a potential reroute in red on the north side of 91st street beginning at MP 31.

Listed below are our feasibility and cost concerns for this proposal:

- The double circuit 34.5 kV feeder lines are owned by another party. We are not certain at this time if the owner would support consolidation of all the lines on one structure.
- We do not know what type of outages, if any, we could have for replacing the double, circuit 34.5 kV line with the new line in that area. 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.
- Placing that many lines on one structure creates clearance, safety and reliability concerns for Xcel Energy. In order 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 ROW and access issues limit our options.
- As far as costs, we would expect that adding the double circuit 34.5 kV lines to the structures would add about \$70,000 per mile. We would need two dead end angle structures to cross 90th street that would add approximately \$150,000 to the cost of that route segment. Therefore, it would be about \$220,000 to build the option we have shown in red on EQB Request No. 10 – Map 4 & 5.

5. *Route segment W6 (D.11). Some residents are requesting a more narrow corridor width than Xcel has requested the area between 10th Avenue and the County Line Avenue, and some have expressed a preference for using County Line (although not the resident on that road). Please provide more detail regarding what type of consolidation with the feeder lines or other transmission lines is possible, and what considerations need to be taken into account, including access to the substation. Please note that I am not requesting that the detailed engineering analysis be completed now, just more information on what the possibilities are for consolidation. The issue here is whether it is possible or desirable to complete more detailed design work and have more discussion with local residents now, before the route permit is issued. Or whether it is better to defer detailed discussion with local landowners on exact route until after permit is issued. One possibility is to narrow the potential corridor somewhat, but still allow flexibility in final detailed design.*

Xcel Energy personnel reviewed this option in the field this past week. We have marked the locations of the existing 34.5 kV feeder lines as light blue lines on EQB Map No. 10 –Map 4



& 5. We still believe our proposed route centerline is a good option. We have marked another potential route centerline in light purple. This route goes further to the east and along County Line road. We need to enter the Chanarambie substation from the west, so this option and the one we proposed are feasible and acceptable. We do not plan to go any further north on 10th Avenue for segment W6 than we have proposed, so that area is not under consideration. Xcel Energy would still prefer to have flexibility in siting the line since we expect other development in this area.

6. *Route Segment E5 (D.11). Please provide additional detail regarding which side of the road the new 115-kV would best be placed if that route segment is selected, and the potential for consolidation of new line with the existing feeder lines.*

EQB Request No. 10 – Map 6 shows this area in more detail. We had proposed to move the line from the south side of the road at MP 31 and stay on the north side until MP 36. After comments from landowners along this route and additional review we have determined that we would prefer to move back to the south side of the road. There are two farmsteads at MP 34.5 that are owned by the same family. The farmstead on the south is not occupied and is the location those landowners prefer. We would cross to the south side of the road at MP 34 as shown in light blue on the map. We eventually move to the south side of the road at MP 36, so we do not expect additional costs with this change.

As far as potential consolidation with the existing feeder lines, Xcel Energy would refer you to Question 4 for potential issues that may arise. Xcel Energy does not know at this time if we would consolidate with the existing feeder lines, but would be willing to consider it during the final design of the route.

7. *Route Segment J5 and J6, added in the scoping decision. Both of these route segments, as described in the scoping document, would include a wide corridor in the route permit in order to allow Xcel Energy to work out the best detailed route with nearby residents and landowners should the route segment be chosen by the EQB. However, more detailed review by your engineers would be helpful now in order to provide an initial assessment of the feasibility, cost, and potential routes in these areas.*

EQB Request No. 10 – Map 7 shows this area in more detail. Xcel Energy believes you meant Route Segments J4 and J6. If the EQB selected Route Segment J4 we would prefer to place the line along the road to the west of that segment. Since that does not appear to be an option, we would then place the line in the location marked on the map in magenta. This places it on a more logical division along the quarter-quarter section. We would not be able to span the fields in a way that would minimize impacts to farming operations for Segment J4.

If the EQB selected segment Segment J6, we would follow the western edge of the area marked by the boundary of Segment J6. This would allow us to avoid the low areas on the eastern edge of this segment.



Xcel Energy's main concern with any of the additional segments in this area is that they reduce the use of shared ROW proposed in this area with the Alliant Energy Lakefield Junction to Triboji 161 kV line.

It also appears to Xcel Energy that the only advantage to these additional routes is that they move the line away from one set of landowners and next to a different set of landowners.

Please feel free to contact me at 715-839-4661 if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads 'Pamela Jo Rasmussen'.

Pamela Jo Rasmussen
Team Lead, Siting & Permitting

Enclosures



Split Rock to Lakefield Junction 345kV Line
 Xcel Energy
 Windfarm Transmission Improvement Projects

EQB REQUEST No. 10 - Map 2
 DETAILED ROUTE MAP

October 2004
 0 1000 2000 3000 Feet
 1" = 2000 feet



Legend

- Proposed (Hobbs County Subdivision Site Area)
- MP 31 Milepost on Interstate Route
- MP 30 Milepost on Alliant Route
- MP 29 Milepost on Alliant Route
- MP 28 Milepost on Alliant Route
- MP 27 Milepost on Alliant Route
- MP 26 Milepost on Alliant Route
- MP 25 Milepost on Alliant Route
- MP 24 Milepost on Alliant Route
- MP 23 Milepost on Alliant Route
- MP 22 Milepost on Alliant Route
- MP 21 Milepost on Alliant Route
- MP 20 Milepost on Alliant Route
- MP 19 Milepost on Alliant Route
- MP 18 Milepost on Alliant Route
- MP 17 Milepost on Alliant Route
- MP 16 Milepost on Alliant Route
- MP 15 Milepost on Alliant Route
- MP 14 Milepost on Alliant Route
- MP 13 Milepost on Alliant Route
- MP 12 Milepost on Alliant Route
- MP 11 Milepost on Alliant Route
- MP 10 Milepost on Alliant Route
- MP 9 Milepost on Alliant Route
- MP 8 Milepost on Alliant Route





Legend

- Proposed Inland County Substation Site Area
- 345 KV Proposed Route Corridor
- 345 KV Proposed Route Centerline
- Natural Resource Management Areas
- NWS Wetlands
- 40FC08 Public Water Streams
- 401008 Public Water Basin

Existing Transmission Line Voltage

- Less than 100 kv
- 115 kv
- 115 kv
- 161 kv
- 230 kv
- 345 kv

MP 2 Milepost on Interstate Route
MP 2 Milepost on Alliant Route



Split Rock to Lakefield Junction 345KV Line
Xcel Energy
Windfarm Transmission Improvement Projects

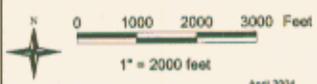
October 2004



Legend

	115 kV Proposed Route Corridor		Existing Transmission Line Voltage
	115 kV Proposed Route Centerline		less than 69 kv
	Natural Resource Managed Areas		69 kv
	ICWT Wetlands		115 kv
	MRD&B Public Water Streams		161 kv
	DMR Public Water Lines		230 kv
			345 kv

Milepost on East Route
 Milepost on West Route



Nobles County to Chanarambie 115kV Line
 Xcel Energy
 Windfarm Transmission
 Improvement Projects

EQB REQUEST
 No. 10 - Map 4 & 5
 DETAILED
 PROJECT MAP



Legend

- Proposed Public Utility Subdivision Site Area
- 140 kV Proposed Route Corridor
- 140 kV Proposed Route Construction
- Natural Resource Management Area
- NWC Wetland
- 4000B Public Water Diversion
- 4000B Public Water Basin
- Existing Transmission Line Voltage
 - Less than 69 kV
 - 69 kV
 - 115 kV
 - 161 kV
 - 230 kV
 - 345 kV

0 1000 2000 3000 Feet
 1" = 2000 feet
 N

Split Rock to Lakefield Junction 345kV Line
Xcel Energy
Windfarm Transmission Improvement Projects

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