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November 17, 2009

Mr. Scott Ek
Office of Energy Security
85 7th Place East – Suite 500
St. Paul, MN 55101-2198

Re: DEIS for Brookings to Hampton 345kV Transmission Line Project
Comments from the City of Farmington

Thank you for the opportunity to review the Brookings County-Hampton 345 kV Transmission Line Draft Environmental Impact Statement (DEIS) dated October 2009. We are commenting on the DEIS, specifically on Segment 6, Lake Marion Substation to Hampton Substation. We understand and appreciate the need to construct this important facility and are writing this letter to support the significant research completed by the applicant to select a preferred route. This letter is not written in opposition of the project, but rather to provide comment on the completeness and accuracy of the DEIS, as additional support for the preferred option, and to provide input related to why alternatives 6P-01, 6P-04, and 6P-05 are not reasonable alternatives for the City of Farmington.

We offer the following comments and observations on these three alternatives.

262a

1. **DEIS Section 6.1.1 – Human Settlement – Visual Impacts**
Farmington is a growing community with a current population close to 20,000. The population doubled between 1990 and 2000 and continues at a rapid pace. It possesses a traditional downtown area, new growth housing areas, farms, open space and natural resources such as the South Creek of the Vermillion River. The alternative alignments would be visible to many residents and businesses and have a significant impact on the viewshed of the City.

There is already an existing HVTL along CSAH 50 and Denmark Avenue as it relates to 6P-01 and part of 6P-05. Installing another line would create a double row of these structures through the area. These lines would traverse populated areas adjacent to homes, schools, and churches. Mitigation for viewshed impacts generally involves screening and/or placing the project in an area with minimum impact. Due to the height of the transmission towers, screening is not possible and therefore placing the towers within the City of Farmington will have a negative impact on the viewshed of the existing community. The impact on having double HVTL on the viewshed for these alignments should be discussed in the EIS.

262b

2. **DEIS Section 6.1.3, 6.1.4, and 7.6 - Residential Development and Displacement :**
There is significant impact to residential properties associated with all three of the routes that pass through the City of Farmington. These three routes all border areas with a considerable number of established residential properties. It appears from mapping and ground review, there are more houses within the 1,000 foot route width than indicated in the DEIS in Farmington. This is outlined in the table below. Additionally, there is a house directly under the diagonal route of 6P-05 where it angles away from 6P-04. Further, some of the residences noted in the DEIS are multi-family dwellings, thus impacting more people. These additional impacts need to be included in the EIS.

262a.

Section 6.1.6 (Existing Utilities) does address the potential conflict with existing utilities to the extent that, "The applicants have stated they would work with landowners and the rural utility providers to avoid direct or indirect impacts to public utilities." and, "It may be necessary for the applicants to work with other public service utilities to relocate their facilities if they conflict with the location of the transmission line."

In addition, Page 6-18 of the applicants' RPA indicates, "The proposed structures would be between 130 and 175 feet tall, typically located just outside the public road ROW. Many of these roads currently do not share a right-of-way with a transmission line, with the exception of power distribution lines serving rural residences and farmsteads. However, the Preferred Route would share right-of-way for short distances in several locations, typically collocating with other routes at entrance and exit points to substations."

An example similar to the city of Farmington's concern with regards to County State-Aid Highway (CSAH) 50 and Denmark Avenue is discussed in the applicants' RPA on page 6-29 and states, "In Dakota County, a home-

Option	*Residences in 150' ROW in EIS*	*Residences in 150' ROW per City review*	*Residences in 1,000' route width in EIS*	*Residences in 1,000' route width per City review*
6P-01	0	0 (14 parcels w/i ROW)	31	33
6P-04	0	0 (1 parcel w/i ROW	0	0
6P-05	1	2 (15 parcels w/i ROW)	16	16

Further, while not all of the houses on Ash Street are within the proposed ROW of 6P-05, two more of them are extremely close (within 5 feet) to the ROW and if this route were to be chosen, they could be displaced.

Not only are there existing structures impacted by the routes, but all three routes border areas identified for new medium to high density residential development (6.0 – 12.0+ dwelling units/acre) in the City's Future Land Use Plan. The construction of route 6P-01, 6P-04 or 6P-05 in Farmington would likely result in portions of these parcels being undevelopable or severely limit the development potential as planned in the City's approved Comprehensive Plan. This is a major impact and a concern of the City of Farmington and ultimately the Met Council, who has approved the City's Comprehensive Plan and zoning density.

262c

3. **DEIS 6.1.4 and 7.6– Displacement of Non-Residential Buildings.**
The DEIS states that buildings would not be allowed within the 150 foot ROW. There are a number of farm outbuildings and other structures along CSAH 50 and Denmark Avenue (including the City's Fire Station) that are extremely close (within 5 feet) of the HVTL ROW that would be affected by this and are not included in the DEIS. Further, the airport's very high frequency omnidirectional radio range (VOR) is located directly within the path of DP-05 in the field west of Ash Street. This will have a significant impact on this airport as well as airports in the region. This impact should be included in the EIS.

262d

4. **DEIS 6.1.6 and 7.6 – Utilities**
The DEIS states that construction of the project is not expected to affect any public utilities. However, there are a number of public and private utilities located within the 150 foot ROW and the 1,000 foot route width.

- **Public Sanitary Sewer:** The City of Farmington recently constructed a 21- inch sanitary sewer line along the west side of Denmark Avenue. There is also a 24-inch sewer along the north side of CSAH 50 between Pilot Knob Road and Denmark Avenue. Further, the Met Council has a 42-inch interceptor line that extends from the border with Lakeville to the east crossing alignments 6P-04 and 6P-05 to the intersection of CSAH 50 and Denmark Avenue. The MCES is constructing a meter for this interceptor within the 6P-04/05 alignment on the western border of Farmington.

- **Public Water Main:** The City has a number of existing and proposed water main lines within the 150 foot ROW and 1,000 foot route width. The existing water main is located along CSAH 50 from near the western border of the City to Denmark Avenue and along Denmark Avenue from CSAH 50 to just north of 220th Street. The City has proposed water main that follows the 6P-04 alignment and water mains that will cross under the 6P-05 alignment.

based daycare facility is located along TH 3/ Chippendale Avenue West, south of the City of Farmington. Electric distribution lines, cable television and telephone lines are located along each of the roads the Preferred Route would follow, providing service to the adjacent homes and businesses. These lines do not present a barrier to construction and operation of the transmission line. It may be necessary for the applicants to work with other public service utilities to relocate their facilities if they conflict with the location of the transmission line." All potential routes are likely to present potential conflicts with other utilities that will have to be addressed during detailed design.

262b.

House locations and numbers (within 500-feet) were reviewed again for the FEIS. The updated house counts (modified slightly from DEIS) and the methods used to produce these data are provided in Appendix F. In addition, we did count multi-unit dwellings where individual units—such as townhomes—were distinguishable. Because the route centerlines we used to calculate the house counts and other methodology differences, our house

- **Other Utilities:** There is buried underground cable both north and south along CSAH 50 and gas lines along CSAH 50 and Denmark Avenue. The Northern Natural Gas Company is located in the northwest quadrant of CSAH 50 and Denmark Avenue. There are existing HVTL power lines along the north side of CSAH 50 and the east side of Denmark Avenue. Xcel Energy has a substation at the southeast quadrant of CSAH 50 and Denmark Avenue.

Construction of 345 kV transmission lines as shown in alternatives 6P-01/04/05 through Farmington would be difficult as the corridor is congested with existing public utilities. Additional transmission lines would not only be difficult to locate in this corridor, but the ability to access and maintain all utilities in the right-of-way would be compromised. Transmission lines constructed near public utilities such as sanitary sewers and water mains must be located sufficiently far away from the utility so that access and maintenance can be maintained to the pipe and manholes. HVTL lines cannot be shielded to protect arcing from backhoes or other construction equipment, thereby limiting effective access to existing systems and constructing planned improvements. Any electrical tower should be a minimum distance away from the pipeline so the utility can be dug up without undermining or adversely affecting the base of any electrical tower. This should be determined on a case by case basis, but in general could be around 50-feet in spacing. Working around or relocating these facilities and the associated underground utilities in this area will make the 6P-01/04/05 options prohibitively expensive and impact the City's existing and proposed infrastructure. These impacts need to be addressed in the EIS.

262e

5. **DEIS Section 6.7/6.8 7.6– Land Use Compatibility and Land-Based Economies**
The DEIS recognizes the land use impact of 6P-01, 6P-04, and 6P-05 on future land use in the City. Farmington is a fast growing suburban community that has grown in population by 54% from 2000 to 2008. With this rapid growth comes significant planning of infrastructure and economic development. All the proposed routes in Farmington are within or adjacent to the current Metropolitan Urban Service Area (MUSA) for some or most of their length. The MUSA is how growth is controlled by the Metropolitan Council and the City has designated these areas for commercial, business, and residential development to meet the Met Council's density requirements. Considering these areas for use as HVTL ROW significantly impacts density and development goals for the City set by Met Council, disrupts economic development, and negates the years of planning completed by the City and its residents for this area. The cost of this impact is significant in actual dollars, but more significant is the time of the many people involved.

- **Businesses**: There are a number of businesses within the City of Farmington affected by the 6P-01 and 6P-05 routes passing through the City. While none of these businesses are within the 150 foot ROW, many of them are within the 1,000 foot route width. The table below outlines the building footprint of the commercial and industrial buildings in Farmington.

Option	*Commercial Building Footprint with 1,000' route width*	*Industrial Building Footprint with 1,000' route width*
6P-01	147,260 sf	40,600 sf
6P-04	0 sf	0 sf
6P-05	7,000 sf	88,000 sf

Not only are there existing structures impacted by two of the routes, but all three routes border areas identified for new commercial, industrial, and residential development in the City's newly adopted Comprehensive Plan. The construction of route 6P-01, 6P-04 or 6P-05 would likely leave these parcels less developable and thus impact economic development in the City.

- **Schools**: Route 6P-01 is proposed along Denmark Avenue and passes by Boeckman Middle School. This school currently has 734 students enrolled and capacity for 1,000 students. Along with the students, there are approximately 80 faculty and staff working in the school. Well over half of the structure for this school sits within the 1000-foot route width for the transmission line.

counts may not match precisely with the City of Farmington's.

262c.

We have prepared a map of the commercial buildings within 150-feet and 500-feet of the initial route centerline in this area that is provided in Appendix C, map FEIS ID#262a. The location of the fire station, for example, is shown on this map.

262d.

Section 6.1.6 (Existing Utilities) does address the potential conflict with existing utilities to the extent that, "The applicants have stated they would work with landowners and the rural utility providers to avoid direct or indirect impacts to public utilities." and, "It may be necessary for the applicants to work with other public service utilities to relocate their facilities if they conflict with the location of the transmission line." (See response to FEIS ID#262a).

262e.

The DEIS does provide overall socioeconomic and human settlement data for each segment analyzed in Section 7.0 of the document. See also response to FEIS ID#262c.

The Christian Life School is located on the south side of CSAH 50. This school has 201 students in kindergarten through 12th grade as well as in their preschool program. In this area, route 6P-01 will pass by the school on CSAH 50. The 1,000-foot route width from route 6P-01 includes a portion of one of the buildings for this school. Additionally, route 6P-04 is proposed on the southern portion of the property for this school. There is a structure completely contained within the 1,000-foot route width from this route.

Based on the proximity of the proposed alignments of alternatives 6P-01 and 6P-04 to schools in this area, the City does not believe that these alignment options are appropriate. While the DEIS mentions that no significant health impacts have been observed from these types of transmission lines, many people remained concerned especially relating to children.

- **Religious Institutions**: There are two churches that lie in the 1000-foot route width for these transmission lines. The Christian Life Church is located on the south side of CSAH 50 in the same location as the Christian Life School. The facility used for worship is completely within the route width for route 6P-01. Alternative 6P-04 passes on the south side of the property for this church. This church has 320 members and average attendance for worship around 200 people.

  The Church of Saint Michael is located on Denmark Avenue at Ash Street. The entire property of this church falls within the 1,000-foot route width of both route 6P-01 and route 6P-05. This church has approximately 1,400 members and average attendance for worship around 800 people.

  The City does not consider any of these three alignments to be suitable based on their proximity to these two churches.

262f 6. **DEIS Section 6.9.2 - Airports**
Although the Airlake Airport is not within the city limits of Farmington, it is in close proximity to the City and the impacts to the three routes reviewed are significant and warrant inclusion in this letter. It should also be noted that additional impact analysis is needed in the EIS for the airport as 6P-05 is aligned so that it impacts the airport's very high frequency omnidirectional radio range (VOR). This would have significant relocation impacts for the VOR and impacts on communication for the local airport as well as any airports in the region. This needs to be addressed in the EIS.

All three routes run along 215th Street in the vicinity of the airport. These portions of the routes lie within the runway flight path and secondary clearance zones for the airport. The FAA restricts poles in this area to 150-feet in height. The standard for a pole carrying 345kV Transmission Lines is 175-feet. In the route selection process, several alternative poles were considered as well as consideration for burying the line in this segment. These options were not found to be feasible or cost effective, and, therefore, not recommended.

The route selection process concluded that development in vicinity of the airport was not recommended because of technical restrictions and additional impacts. The City concurs and supports these conclusions and believes that these alignment options are not viable based on the impacts associated with the airport.

262g 7. **DEIS Section 6.11/6.12 - Wetland / Water Bodies / Flora and Fauna**
Map 7.6-20 in the DEIS does not adequately address temporary and permanent wetland impacts in the City of Farmington. There are many wetland crossings for 6P-01/04/05 in Farmington, but are not noted as wetland impacts. These impacts need to be analyzed more fully in the EIS, especially since the routes are crossing wetlands associated with trout streams. Further, these wetlands are designated as a greenway corridor and protected in the City's Wetland Management Plan (see below). Information should be provided in the EIS if access roads to each tower will need to be constructed and if this is anticipated to impact wetlands.

The City's Wetland Management Plan was completed in 1997 and updated in 2008. A map from the Plan has been attached to these comments for reference. The proposed alignments cross many wetlands that are

262f.

First, regarding the runway flight path, the height of the transmission lines would be restricted to approximately 150-feet, which is feasible.

However, as the comment indicates, there is a Very High Frequency Omnidirectional Radio Range ("VOR") air navigation systems and Automated Weather Observation Stations("AWOS") located in this area. FAA Order 6820.10 "VOR, VOR/DME, and VORTAC Siting Criteria," specifies the distance setback requirements for trees, buildings, and metallic structures. These regulations specify that overhead transmission line structures with conductors should be located beyond 1,200 feet of the VOR antenna to avoid communication interference. Additionally, metallic structures are required to subtend vertical angles of 1.2 degrees or less, measured from the ground elevation of the VOR facility. Therefore, according to these FAA guidelines, a VOR air navigational station should not be located within 6,206 feet away from a 130 foot high steel structure in order to avoid potential interference with the operation of the facility. Structures of 175 feet in height should be 8,354 feet away from a VOR.

classified as "Protect" and this classification indicates that these are high quality wetlands. The City has specific standards for all of their wetlands, which are more restrictive than State and Federal rules.

Based on the National Wetland Inventory, we estimated that each alternative will cross the following wetland acreages within the City:

Alignment	*75 foot ROW width*	*1,000 foot route width*
6P-01	1.8 acres	18.6 acres
6P-04	3.0 acres	13.6 acres
6P-05	2.2 acres	18.3 acres

Both direct and indirect impacts to these wetlands, especially the "protect" wetlands, need to be more fully explored in the EIS. Because of these impacts, these alignment options are not fitting alternatives.

262h

8. **DEIS 6.1.5 – Trees and Windbreaks**
The DEIS indicates that reducing the amount of tree and windbreak removal was identified as important during many of the public meetings. Many of the wetland crossings for 6P-01, 6P-04, and 6P-05 contain trees which provide habitat in the area. Additionally, there is an east/west windbreak in the field associated with the 6P-04 alignment. Trees would either need to be fully removed or topped to accommodate the HVTL in these areas, thus resulting in a negative impact on residents and wildlife in the area.

9. **DEIS Section 6.6 and 7.6– Archeological and Historic Resources**
The City of Farmington is rich in historic architecture. The three routes all impose impacts to historic sites within the City. Sites were identified in the DEIS that were within one-half mile from the centerline routes evaluated for these transmission lines. There were 20 sites identified for alternative 6P-01, 15 for alternative 6P-04 and 12 for alternative 6P-05. While it is understood that the DEIS has not specifically identified the extent and location of these resources due to their sensitive nature, it should be noted that the City is concerned about impacts on these resources and does not see that mitigation of these impacts is feasible based on the proposed impact.

262i

10. **DEIS Section 6.10 - Parks / Recreation Areas**
The Rambling River Park is located to the east of Denmark Avenue near the South Fork of the Vermillion River. This park has many facilities including recreation fields. Two of the baseball fields located on this park are within the route width of 6P-01. There are two additional baseball fields just north of the Rambling River Park on the northeast corner of Denmark Avenue and CSAH 50. This property is owned by the Farmington School District. One of the baseball fields at this location is within the route width of 6P-01.

The South Creek of the Vermillion River is also identified as a Trout Stream in the area crossed by all alternatives 6P-01/04/05. This river is utilized by fisherman and provides recreational opportunity and is directly impacted by these alternatives.

There is a paved trail along the north side of the length of CSAH 50. Additionally, the City is constructing a trail on the south side of CSAH 50 near Denmark Avenue. This area will provide recreational uses for walker and bikers and should be identified in the EIS.

262j

11. **DEIS Section 6.12 and 7.6 - Wildlife**
With any large structure such as, tall buildings, guy wires, wind turbines and transmission lines, there are concerns related to impacts on birds and bats. However, impacts can be reduced if transmission lines are placed in areas where critical habitat for wildlife is less prevalent. The alignment options in the City of Farmington cross a number of wetland and greenway corridor areas. These areas are prime habitat for birds and other wildlife. Placing the transmission lines in these areas will continue to fragment the habitat as well as increase the likelihood of bird and bat collisions. Choosing alignments that have less suitable habitat would reduce this impact.

The location of the Airlake Airport VOR in this area and the applicable setbacks is shown on map FEIS ID#262b in Appendix C. As illustrated by this map and the comment, route alternative 6P-05 crosses within 50 feet of this VOR. As a result, this alternative is not a viable option. Likewise 6P-04 is just outside the 1,200 foot setback, making this alternative route an unlikely option also. Finally, alternative route 6P-01 runs about 4000 feet away from the VOR, which is within the FAA structure setback recommendation. A definitive decision on what the acceptable height of a transmission line structure or design would be for this route segment could only be made by filing a notice request from the FAA and/or MN/DOT. The applicants would need to file all necessary notice requirements with FAA and work with both FAA and MN/DOT to ensure compatibility between the transmission lines and air navigation stations and equipment during detailed design should this route be selected.

262g.

The detailed wetland data used in the DEIS is provided in Appendix B of the FEIS (FEIS ID#46). In addition, the detailed maps of the NWI wetlands in the vicinity of the property near

Thank you for the opportunity to comment on the DEIS. If you have questions or wish to discuss these comments with City Staff, please feel free to call me at 651-280-6820.

Sincerely,
City of Farmington

Lee Smick, AICP
City Planner

Farmington are shown on Figures LH7A and LH7B in Appendix A of the DEIS. Wetland data in the DEIS are based on the National Wetland Inventory. No wetland delineations will be conducted until a route has been chosen where necessary. Therefore, the DEIS wetland data may not match the City of Farmington data precisely. See also response to FEIS ID#188a.

262h.

Comments noted.

262i.

The DEIS maps note the locations of publically available data of locations of local parks, streams, and similar resources available at the time the RPA and DEIS were completed. The additional existing or planned park and facilities highlighted in the comment are noted.

262j.

Comments noted.

November 24, 2009

Mr. Scott Ek
Office of Energy Security
85 7th Place East – Suite 500
St. Paul, MN 55101-2198

Re: DEIS for Brookings to Hampton 345kV Transmission Line Project
Comments from the City of Lakeville

We appreciate the opportunity to review the Brookings County-Hampton 345 kV Transmission Line Draft Environmental Impact Statement (DEIS) dated October 2009. We are commenting on the DEIS, specifically on Segment 6, Lake Marion Substation to Hampton Substation. We understand and appreciate the need to construct this important facility and are writing this letter to support the significant research completed by the applicant to select a preferred route. This letter is not written in opposition of the project, but rather to provide comment on the completeness and accuracy of the DEIS and to provide input related to why alternatives 6P-01, 6P-04, and 6P-05 are not reasonable alternatives for the City of Lakeville.

We offer the following comments and observations on these three alternatives.

264a

1. **DEIS Section 6.1.3, 6.1.4, and 7.6 - Residential Development and Displacement:** There is significant impact to residential properties associated with the proposed routes that pass through the City of Lakeville. While no houses were identified within the 150 foot ROW, it appears from mapping and ground review that there are more houses within the 1,000 foot route width than indicated in the DEIS in Lakeville. Further, some of the residences are multi-family dwellings, thus impacting more people. These additional impacts need to be included in the EIS.

Option	*Residences in 1,000' route width in EIS*	*Residences in 1,000' route width per City review*
6P-01	36	42
6P-04	22	26
6P-05	21	25

As stated in the EIS and above, there are no homes within the 150 foot ROW. However, there are 13 homes immediately east of Dodd Boulevard along the north side of CSAH 70 where the ROW comes immediately up to their front door. These impacts need to be addressed in the EIS.

Not only are there existing residential uses impacted by the routes, but all three routes border areas identified for new medium to high density residential development (4 – 9 dwelling units/acre) in the City's Comprehensive Land Use Plan in the following locations: between Dodd Boulevard and Humboldt Court for 6P-01/04/05; between Hamburg Avenue and Cedar Avenue for 6P-01. The construction of route 6P-01, 6P-04 or 6P-05 in Lakeville would likely result in these parcels being undevelopable or severely limit the development potential as planned in the City's approved Comprehensive Plan. This is a major impact and a concern of the City of Lakeville and ultimately the Metropolitan Council, who has approved the City's Comprehensive Plan and zoning density.

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264a.

The 13 homes directly east of Dodd Boulevard and north of CSAH 70 are identified on Detail Map LH7A and LH7B in Appendix A of the DEIS. Also, house locations and numbers (within 500-feet) were reviewed again for the FEIS. The updated house counts (modified slightly from DEIS) and the methods used to produce these data are provided in Appendix F. In addition, we did count multi-unit dwellings where individual units—such as townhomes—were distinguishable. Because the route centerlines we used to calculate the house counts and other methodology differences, our house counts may not match precisely with the City of Lakeville data.

264b.

To help highlight the issues raised in this comment, we have prepared a map of the commercial buildings within 150-feet and 500-feet of the initial route centerline in this area that is provided in Appendix C, map FEIS ID#264.

264c.

(See response to FEIS ID#264b)

264c **2. DEIS 6.1.4 and 7.6– Displacement of Non-Residential Buildings.**
The DEIS states that buildings would not be allowed within the 150 foot ROW. There are 1,330 square feet of industrial buildings that are within the 150 foot ROW of 6P-01 (see Item 3 below).

264c **3. DEIS Section 6.7/6.8 7.6– Land Use Compatibility and Land-Based Economies**
The DEIS recognizes the land use impact of 6P-01, 6P-04, and 6P-05 on future land use in the City. Lakeville has a population of over 55,000 and has continued to grow. With this rapid growth comes significant planning of infrastructure and economic development. All the proposed routes in Lakeville are within the current and/or 2020 Metropolitan Urban Service Area (MUSA). The MUSA is how growth is controlled by the Metropolitan Council and the City has designated these areas for commercial, business, and residential development to meet the Met Council's density requirements. Considering these areas for use as HVTL ROW significantly impacts density and development goals for the City by Met Council, disrupts economic development, and negates the years of planning completed by the City and its residents for this area. The cost of this impact is significant in actual dollars, but more significant is the time of the many people involved in preparing the City's Comprehensive Plan.

- **Businesses**: There are many businesses within the City of Lakeville affected by the three routes passing through the City. The amount of commercial and industrial impact on these routes is shown in the table below based on calculating the building foundation size. It should be noted that some of these buildings many have more than one floor active in their business and the actual square footage of impact and displacement could be greater.

Option	***Commercial Buildings Footprint with 150' ROW***	***Industrial Buildings Footprint with 150' ROW***	***Commercial Buildings Footprint with 1,000' route width***	***Industrial Buildings Footprint with 1,000' route width***
6P-01	0 sf	1,330 sf	652,520 sf	886,880 sf
6P-04	0 sf	0 sf	782,180 sf	649,400 sf
6P-05	0	0	763,920 sf	673,730 sf

Square footage of impact based on foundation size only, not actual in-use building square footage.

This table shows that not only will there be about 1.5 million square feet of existing commercial/industrial buildings within the 1,000 foot route width for each alternative, but also the there would be a business that would be displaced. The building in question that would be partially (1,330 sf) within the ROW has a 95,000 sf footprint and would be displaced by the 6P-01 route. This is a significant impact both to the City and to the project if businesses need to be relocated.

Not only are there existing structures impacted by the routes, but all three routes border areas identified for new commercial and industrial development in the City's newly adopted Comprehensive Plan. The construction of route 6P-01, 6P-04 or 6P-05 would likely leave these parcels less developable and thus impact economic development in the City.

- **Future CSAH 70:** CSAH 70 is currently a two lane road. However, future plans include widening the road to a four lane facility by adding to the road to the south, with two lanes in each direction and turn lanes. The right-of-way has mostly been obtained for this purpose and associated utilities for the corridor. The road and public utility right-of-way is not available for HVTL. The City, County, and State have had this plan for CSAH 70 for many years and have prepared for these improvements. This will cause the 6P-01/04/05 alignment along CSAH 70 to shift elsewhere within the route width, thus resulting in more impacts to homes and businesses. This impact should be discussed in the EIS.

264d.

(See response to FEIS ID#262d)

264e.

Section 7.6.4.9 of the DEIS addresses potential impacts to Airlake Airport. See also response to FEIS ID#262f.

264f.

Section 6.1.1 of the DEIS describes potential visual and aesthetic impacts of the project and mitigation for those impacts. The DEIS recognizes that the visual profile of transmission line structures and wires may decrease the perceived aesthetic quality of property. The level of impact to visual resources generally depends on the sensitivity and exposure of a particular viewer and can vary greatly from one individual to the next. Therefore, it is difficult to predict whether a transmission line project would alter the perceived visual character of the environment, or viewshed, and constitute a negative visual impact.

Measures to mitigate instances where existing HVTLs exist along a corrider would be to require that the applicants co-locate a new transmission line and the existing HVTL on new triple-circuit

- **Schools:** Route 6P-01/04/05 is proposed along CSAH 70 and passes by Lakeville South Senior High School and the associated athletic fields. This school currently has 1,850 students enrolled.

  Based on the proximity of the proposed alignments of alternatives 6P-01/04/05 to schools in this area, the City does not believe that these alignment options are appropriate. While the DEIS mentions that no significant health impacts have been observed from these types of transmission lines, many people remained concerned especially relating to children. Additionally, the schools have made significant financial investments that could be impacted.

264d **4. DEIS 6.1.6 and 7.6 – Utilities**
The DEIS states that construction of the project is not expected to affect any public utilities. However, there are a number of public and private utilities located within the 150 foot ROW and the 1,000 foot route width.

- **Public Sanitary Sewer:** The City has a sanitary sewer main from east of Dodd Boulevard to Hamburg Avenue along the 6P-01/04/05 alignment. A sewer main is located between CSAH 70 and CSAH 50 along the 6P-01 alignment. Further, the Met Council has an interceptor line that extends from CSAH 70 on Cedar Avenue to the east crossing alignments of 6P-04 and 6P-05, eventually crossing through Farmington to the intersection of CSAH 50 and Denmark Avenue. The MCES is constructing a meter for this interceptor within the 6P-04/05 alignment on the eastern border of Lakeville.

- **Public Water Main:** The City has a number of water main lines along CSAH 70 from east of Dodd Boulevard to Cedar Avenue, from CSAH 70 to CSAH 50 on Hamburg Avenue, and along CSAH 50.

- **Other Utilities:** Northern Natural Gas has a facility at the northeast quadrant of 215th Street and Kenrick Avenue. The underground gas pipeline is aligned along the north and then crosses to the south side of 215th Street just east of Kaparia Avenue and then traverses to the southeast. There is an existing HVTL along the north side of 215th Street west of Juniper Way which then crosses to the south side east of Juniper Way. The HVTL follows Hamburg Avenue on the west side to CSAH 50 and then follows CSAH 50 to the east on the north side of the road. There is underground cable along CSAH 70.

Construction of 345 kV transmission lines as shown in alternatives 6P-01/04/05 through Lakeville would be difficult as the corridor is congested with existing public utilities. Additional transmission lines would not only be difficult to locate in this corridor, but the ability to access and maintain all utilities in the right-of-way would be compromised. Transmission lines constructed near public utilities such as sanitary sewers and water mains must be located sufficiently far away from the utility so that access and maintenance can be maintained to the pipes and manholes. HVTL lines cannot be shielded to protect arcing from backhoes or other construction improvements, thereby limiting effective access to existing systems and constructing planned improvements. Any electrical tower should be a minimum distance away from the pipeline so the utility can be dug up without undermining or adversely affecting the base of any electrical tower. This should be determined on a case by case basis, but in general could be around 50-feet in spacing. Working around or relocating these facilities and the associated underground utilities in this area will make the 6P-01/04/05 options prohibitively expensive and impact the City's existing and proposed infrastructure. These impacts need to be addressed in the EIS.

structures along that ROW. There is also the option to bury or underground either the new or existing transmission line in that area. Section 4.6 of the DEIS discusses underground options.

Areas where there is a potential for transmission line proliferation such as described by the city of Lakeville will be evaluated in greater detail to ensure mitigation methods are commensurate with the final placement of the proposed transmission line. That is, if the proposed line where to be placed along side an existing transmission or distribution line the potential visual impacts, impacts to agriculture lands and structures may significantly change from the potential impacts initially discussed in the DEIS, therefore mitigation methods would need to address such changes identified during the final design, should a permit be issued. For instance the applicants have indicated that if the alignment were along county road 50 the 345kV would likely be placed on the south side of the road. A 115kV line exists along the north side. At Denmark the applicants have indicated the 345kV lines would be run along the west side of the road as a 69kV lines exist along the east side of Denmark. The loss of flexibility this flexibility to move to the other side of the road in routes segments such as, especially in the urban fringe

264d

5. DEIS Section 6.9.2 - Airports

Airlake Airport is partially within the city and the impacts on the 6P-01/04/05 routes are significant because of their proximity to the airport. All three routes run along CSAH 70 in the vicinity of the airport. This portion of the routes lie within the runway flight path and secondary clearance zones for the airport. The FAA restricts poles in this area to 150-feet in height. The standard for a pole carrying 345kV Transmission Lines is 175-feet. In the route selection process, several alternative poles were considered as well as consideration for burying the line in this segment. These options were not found to be feasible or cost effective, and, therefore, not recommended.

It should also be noted that additional impact analysis is needed in the EIS for the airport as 6P-05 is aligned so that it impacts the airport's very high frequency omnidirectional radio range (VOR). This would have significant relocation and communication impacts on the local airport as well as any airports in the region and needs to be addressed in the EIS.

The route selection process concluded that development in the vicinity of the airport was not recommended because of technical restrictions and additional impacts. The City concurs and supports these conclusions and believes that these alignment options are not viable based on the impacts associated with the airport.

264e

6. DEIS Section 6.1.1 – Human Settlement – Visual Impacts

There is already an existing HVTL along CSAH 70 and CSAH 50 associated with 6P-01/04/05 routes. Installing another line would create a double row of these structures through the area. These lines would traverse populated areas adjacent to homes, schools, and businesses. Mitigation for viewshed impacts generally involves screening and/or placing the project in an area with minimum impact. Due to the height of the transmission towers, screening is not possible and therefore placing the towers within the City of Lakeville will have a negative impact on the viewshed of the community. The impact on having double HVTL on the viewshed for these alignments should be discussed in the EIS.

264f

7. DEIS Section 6.11/6.12 - Wetland / Water Bodies / Flora and Fauna

Map 7.6-20 in the DEIS does not adequately address temporary and permanent wetland impacts in the City of Lakeville. There are many wetland crossings for 6P-01/04/05 in Lakeville, but are not noted as wetland impacts. These impacts needs to be analyzed more fully in the EIS, especially since the routes are crossing wetlands associated with trout streams and the South Creek Greenway.

The City has adopted the South Creek Management Plan in 2000. This plan recognizes the unique resources of South Creek of the Vermillion River and its associated wetlands as a trout stream. Buffers, native vegetation, and shading the stream with trees are important goals of the Plan. If tree removal is needed as part of implementation of these route alternatives, it will have an impact on temperature in the trout stream. These issues should be addressed in the EIS.

Based on the National Wetland Inventory, we estimated that each alternative will cross the following wetland acreages within the City:

Alignment	*75 foot ROW width*	*1,000 foot route width*
6P-01	5.1 acres	53 acres
6P-04	8.4 acres	103 acres
6P-05	5.1 acres	74 acres

areas like Highway 50 in Farmington, do increase the potential for greater impact.

Finally, please refer to the discussion on problematic routes in Section 1.0 which identifies routes that have been determined to be problematic when evaluated against to comparable alternatives.

264g.

(See response to FEIS ID#262g)

264g.

(See response to FEIS ID#262i)

264h.

Comments noted.

Both direct and indirect impacts to these wetlands need to be more fully explored in the EIS. Because of these impacts, these alignment options are not fitting alternatives.

264g **8. DEIS Section 6.10 - Parks / Recreation Areas**
The City of Lakeville Housing and Redevelopment Authority (HRA) owns an ice arena located along CSAH 70 east of Holyoke Avenue within the 1,000 foot route width. This arena has a seating capacity for 900 spectators.

There is a paved trail along the north side of the length of CSAH 50. This area provides recreational uses for walker and bikers and should be identified in the EIS.

The City also has a designated snowmobile route along CSAH 70 between Jacquard Avenue and Dodd Boulevard. These uses should be considered in the EIS.

264h **9. DEIS Section 6.12 and 7.6 - Wildlife**
With any large structure such as, tall buildings, guy wires, wind turbines and transmission lines, there are concerns related to impacts on birds and bats. However, impacts can be reduced if transmission lines are placed in areas where critical habitat for wildlife is less prevalent. The alignment options in the City of Lakeville cross a number of wetland and greenway corridor areas. These areas are prime habitat for birds and other wildlife. Placing the transmission lines in these areas will continue to fragment the habitat as well as increase the likelihood of bird and bat collisions. Choosing alignments that have less suitable habitat would reduce this impact.

Thank you for the opportunity to comment on the DEIS. If you have questions or wish to discuss these comments with City Staff, please feel free to call Steven C. Mielke, City Administrator, at 952-985-4401.

Sincerely,
City of Lakeville

Holly Dahl
Mayor

cc: Steven C. Mielke, City Administrator
Dave Olson, Community and Economic Development Director
Keith H. Nelson, City Engineer

Dakota COUNTY

November 25, 2009

Physical Development Division
Lynn Thompson, Director

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Environmental Mgmt. Department
Office of GIS
Parks and Open Space
Surveyor's Office
Transit Office
Transportation Department
Water Resources Department

Scott Ek, Project Manager
Energy Facility Permitting
Minnesota Office of Energy Security
85 Seventh Place East, Suite 500
St. Paul, MN 55101-2198

RE: CapX2020 Draft EIS, Docket No. ET2/TL-08-1474

Dear Mr. Ek:

Thank you for the opportunity to review and comment on the draft Environmental Impact Statement for the CapX2020 transmission line project. Dakota County staff reviewed the study as it affects the County and are providing the comments enclosed with this letter.

Dakota County staff are not endorsing, recommending or prioritizing any of the route options described in the EIS. Except for some transportation-related comments, the issues County staff identified generally apply to any route. County staff's three primary concerns are:

- County-held conservation easement agreements preclude utility easements on several properties near route options, including a cluster in Greenvale Township (see enclosed map and expanded comments).
- Several County roads near the route options are expected to require expansion beyond current right of way. Utility easements and pole siting should account for these anticipated future right of way needs so as not to inhibit these long-term improvements.
- Each route option would cross the Vermillion River or its tributaries. Care should be taken to minimize impacts on this designated trout stream, particularly by avoiding placement of poles in crucial buffers.

Please consider Dakota County staff as a skilled resource familiar with the area and its challenges — including wetlands, hazardous waste sites, groundwater and transportation — as you evaluate this EIS.

If you have any questions, please contact Kurt Chatfield at (952) 891-7022 or kurt.chatfield@co.dakota.mn.us.

Sincerely,

Lynn Thompson

Lynn Thompson, Director
Physical Development Division

cc: Dakota County Board of Commissioners
cc: Brandt Richardson, County Administrator

265a.

Should a route be chosen that would necessitate crossing of the Vermillion River, the applicants would likely require a license to cross Public Waters from the DNR. In addition, a route permit, if issued by the Commission, would typically include conditions that would require a permittee to use best management practices when constructing near wetlands or riparian areas and may include language such as, "The placement of power pole structures, shall be avoided to the maximum extent possible by placing these structures above the floodplain contours outside of the designated floodplain, and by spanning the floodplain with the transmission line."

Also, if construction activities would result in the disturbance of one acre or more of soils, a National Pollutant Discharge Elimination System (NPDES) stormwater permit from the

Minnesota Pollution Control Agency (MPCA) would is required.

265b.

The DEIS evaluated the alternative route proposed by the applicants using an assumed alignment that would have the transmission

Dakota County Staff Comments on CapX2020 EIS

Environmental hazards and natural resources

County staff identified multiple potential environmental hazards, waste sites and wells along each proposed alignment that likely will require slight route modifications and mitigation for any of the current route options. Each option has a comparable number of significantly affected potential sites that likely would not constitute a determining factor in route selection. Therefore, County staff will provide more detailed comments after a route is selected and the project moves closer to implementation.

265a The towers should not be placed in the buffer area of the Vermillion River or any of its tributaries. The Vermillion River Watershed Joint Powers Organization buffer requirements are enclosed in map form. Regardless of which route is chosen, prudent tower placement would be 150 feet from the meander belt on each side of the stream. County permits will be required for any towers in shoreland and floodplain areas; more information is available from the County's Zoning Administrator at (952) 891-7044.

The Dakota County Water Resources Department should be contacted at (952) 891-7541 upon route selection to initiate a thorough evaluation of potential hazards and impacts on natural resources.

Conservation easements

265b The draft EIS does not mention the Dakota County Farmland and Natural Areas Program or the permanent conservation easements that would be affected by the alternate route along County Road 86 (280th Street) in Greenvale Township. Although sections 6 and 7 address "Affected Environment/Potential Impacts" and "Environmental Impacts," including Wildlife Management Areas and Scientific and Natural Areas, Dakota County's permanent natural area and farmland conservation easements are not addressed. These easements prohibit transmission lines and poles on the properties, which is especially problematic for line routing options in Greenvale Township.

A permanent agricultural conservation easement is on the Wayne and Candace Hallcock property (5975 280th Street West) north and south of 280th Street, where the alternate route jogs south from 280th Street just east of Fairgreen Avenue (see Figure 1). This easement, in place since February 10, 2008, is co-held by the Natural Resources Conservation Service of the United States Department of Agriculture, and contains the following language:

"4.3. Structures. There shall be no construction or placing of any house, garage, barn or other building, … antenna, utility pole, tower, conduit, line, cellular communication tower … or any other temporary or permanent structure or facility on the Protected Property, except as authorized pursuant to this section and section 7.5 below.

(d) Utility Services and Septic Systems – Maintenance, repair, replacement, removal, and relocation of existing electric, gas, and water facilities, sewer lines and/or other public or private utilities, including telephone or other communication services over or under the Protected Property for the purpose of providing electrical, gas, water,

structure centerline following along 280th Street/ County Road 86 turning south and following the boundary between Sections 1 and 2 of Greenvale Township. The alignment as evaluated in the DEIS would not encroach upon either of the above conservation easements identified by Dakota County. In addition, special conditions could be included in a route permit that would assist in mitigating concerns related to three areas by limiting route width and area.

Section 8.6 (Other Approvals) of the DEIS describes the approach the applicants would likely take should Farmland and Natural Areas Project (FNAP) lands need to be encroached upon and states, "Applicants would likely work with landowners, local government entities administering such programs, and the sponsoring federal agency on a site-by-site basis to coordinate the approvals necessary for placing the transmission facilities on these lands.

In addition, a HVTL route permit, if issued by the Commission, would supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government under Minnesota Statute 216E.10, subd. 1.

sewer, or other utilities to serve improvements outside of the Protected Property for such purposes, is permitted. Grantors shall not permit or grant easements for new utility transmission or distribution facilities or systems without the written consent of the Grantee. Maintenance, repair or improvement of a septic system(s) or other underground sanitary system that exists on the Protected Property at the time of this Easement, or the construction of a septic or other underground sanitary system, for the benefit of any of the improvements permitted herein, is permitted. All other utilities are prohibited on the Protected Property."

In addition, the County expects to acquire in December 2009 a permanent natural area conservation easement on the Carrie Jennings/Charles Mahler property (8919 280th Street West) adjacent to and north of 280th Street in Greenvale Township. This permanent, natural area conservation easement contains the following language regarding structures within the easement boundary:

"4.3. Structures and Improvements. There shall be no temporary or permanent buildings, structures, roads, trails, or other improvements of any kind placed or constructed on the Protected Property except as specifically approved in the Management Plan, or as set forth below:

A. Utilities Utility systems and facilities may be installed, maintained, repaired, extended, and replaced only to serve uses and activities specifically permitted by this Easement and the Management Plan. This includes without limitation, all systems and facilities necessary to provide power, fuel, light, water, communication, and waste disposal including poles, antenna, lights, towers and arms, utility lines, or piping necessary to serve the Protected Property. Any permitted utility system or facility installed, repaired or constructed shall be done with minimal disturbance to the vegetation and topography. Following installation and construction, the surface and vegetation shall be restored to a condition consistent with the conservation purposes of this Easement in a timely and appropriate manner."

The proposed transmission line would not provide power to any uses or activities permitted on the two conservation easements, and therefore, would not be allowed to be sited within the easement boundaries. These two Dakota County permanent conservation easements should be addressed by the EIS relative to the alternate route. The transmission line route must avoid these and other easements in Dakota County's FNAP program because the easement deeds do not permit new structures on or over the protected land.

265c

Additionally, the second paragraph of Page 7-183 in Section 7 states "There are no WPA or WMA areas within the 150-foot ROW or 1,000-foot route width of any route alternatives associated with the original Alternate route." Although factually true, this language should be revised to indicate that the Chub Lake Wildlife Management Area is adjacent to the alternate route along 280th Street in Greenvale Township, between the two Dakota County permanent conservation easements. A transmission line in this vicinity likely would impact the WMA, even if it does not run through the property itself.

265c.

Section 6.10 (Recreation) acknowledges the potential for impacts to WMAs. The DEIS states, "WMAs within the project area may be impacted by the placement of poles where routes bisect or run immediately adjacent to these areas and where spanning the WMA area is not possible. In these cases, temporary impacts to 1 acre of land per pole are anticipated due to construction activities. For each pole placed within a WMA, permanent impacts of 55 feet are expected. The applicants would need to acquire an easement within an adjacent WMA if direct impacts are unavoidable. Other WMAs located outside the route may experience visual impacts in areas where the line is located near enough to the WMA to be seen by visitors. The applicants have stated that they avoided crossing WMAs when selecting their proposed routes, and would place poles adjacent to any parkland so as to avoid impacts to the extent feasible."

265d.

Comment noted.

265e.

The various future and existing described road rights-of-way have been noted and will be taken

Transportation

Dakota County East-West Corridor Preservation Study

In 2003, Dakota County, the City of Farmington, the City of Lakeville, Empire Township, Eureka Township, Castle Rock Township, the Minnesota Department of Transportation, the Metropolitan Council and Scott County conducted a joint study of the transportation needs for the rapidly-growing area in southern Dakota County. The Dakota County East-West Corridor Preservation Study area is bounded by I-35 on the west, Highway 3 on the east, County Highway 46 on the north and County Highway 70 on the south.

More than half of the projected population growth for the county will occur in this area; transportation and development challenges will worsen as rapid growth continues. Based on these factors, the study partners agreed to a corridor preservation plan that identifies five east-west highway corridors for preservation. One of these corridors, identified in the study as Alignment E along the CSAH 70 corridor with a future diagonal connection to CSAH 74, is identified as a CapX2020 preferred corridor variation option.

The following study recommendations pertain to this corridor:

- Preservation of the alignment for development as a potential four-lane arterial with a 150-foot width under County jurisdiction. The County is considering the need for a 200-foot corridor west of CSAH 23.
- Grade separation/bridge structures necessary to cross a tributary of the Vermillion River. Mitigation of river impacts will likely be necessary for the alignment east of Cedar Avenue.
- The County must investigate design options that include a 120-foot wide right-of-way through the urban and development segment in Farmington.
- The extension of CSAH 31 from its existing terminus at CSAH 50 south to this future alignment is a logical system connection that may influence transmission line siting.

265d If CapX2020 segments 6P-01, CP-04 or 6P-05 are selected as options, it is very important that coordination occur with Dakota County staff about where structures are built so the transmission line does not interfere with existing and future county highway and right of way requirements outlined above.

Enclosed is a map that identifies the location of Alignment E. The figure also is available at http://www.co.dakota.mn.us/NR/rdonlyres/000013a2/bwfkykfaahrweuostjrzjphtzjiiy cnz/AllFigures.pdf

County Permits

For all route segments adjacent to, within, or crossing Dakota County highway right of way, Gordon McConnell at (952) 891-7115 should be contacted for the necessary County permits and information regarding the permitting process.

265e Route-Specific Comments

The following comments pertain to the CapX2020 preferred route and variation routes.

- County State Aid Highway (CSAH) 9 (Dodd Boulevard) between 240th Street West and 250th Street West
  - County highway right of way width requirement is 110 feet.
- CSAH 31 (Denmark Avenue alignment) between CSAH 50 (212th Street West) and 225th Street West

into consideration in the recommendations and eventual decision on the best route for the proposed transmission line.

- County highway right of way width requirement is 110 feet.
- A future county highway with 150-foot right of way requirement is planned to intersect CSAH 31 at the County Road 74 (Ash Street) intersection.

- CSAH 50 (212th Street West) between Hamburg Avenue and CSAH 31 (Denmark Avenue)
  - County highway right of way width requirement is 110 feet.

- CSAH 70 (215th Street West) between I-35 and CSAH 23 (Cedar Avenue)
  - County highway right of way width requirement is 150 feet. However, Dakota County may consider future right of way width needs of up to 200 feet for this corridor because of the highway's importance in connecting multiple counties.

- Future CSAH 70 (215th Street West alignment) between CSAH 23 (Cedar Avenue) and CSAH 31 (Denmark Avenue)
  - The County plans for a future county highway with a 150- to 200-foot right of way requirement in the approximate alignment of segment 6P-05. Coordination with Dakota County should accur regarding any future corridor considerations. Please refer to previous comments regarding the Dakota County East-West Corridor Preservation Study for additional details.

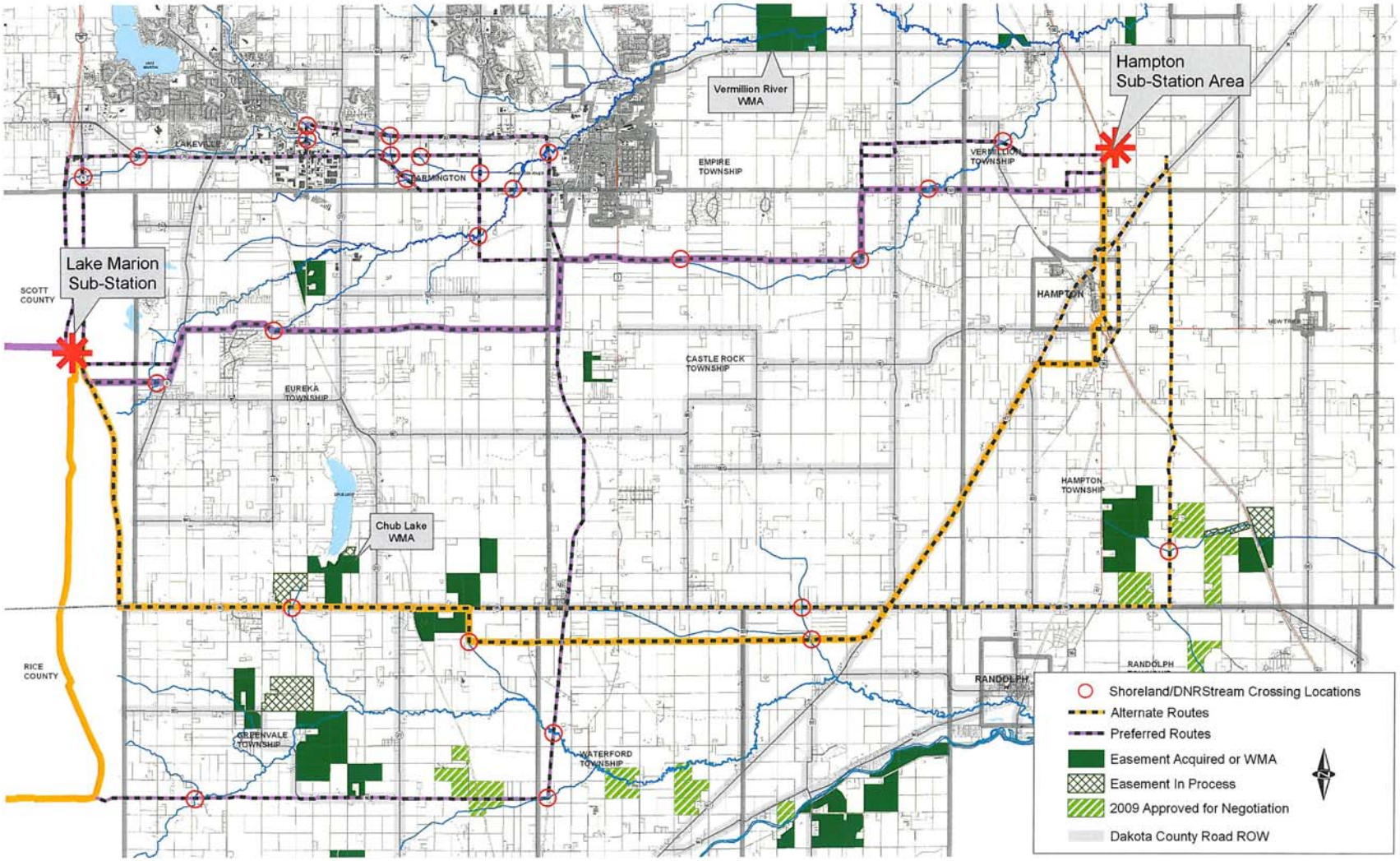
- County Road 90 (307th Street West) between Hayes Avenue and CSAH 23 (Foliage Avenue)
  - County highway right of way width requirement is 110 feet.
  - The road is currently gravel and may be paved in the future.

The following comments pertain to the CapX2020 alternate route and variation routes.

- CSAH 47 (Northfield Boulevard) between Fischer Avenue and 285th Street
  - County highway right of way width requirement is 110 feet.
  - The Minnesota Department of Transportation and Dakota County have plans for a new diamond-shape interchange with frontage roads at CSAH 47 and TH 52. These agencies may require additional right of way for the future interchange. Coordination of future CapX2020 corridor plans should occur with Mn/DOT and Dakota County.

- CSAH 86 (280th Street) between Scott County boundary and Fischer Avenue
  - Current County highway right of way width requirement is 110 feet. However, Dakota County is considering a future right of way width need of up to 200 feet for this highway corridor because of the highway's importance in connecting multiple counties.
  - Dakota County has identified a future realignment of CSAH 23 (Foliage Avenue) south of CSAH 86 to connect with CSAH 23 (Galaxie Avenue) north of CSAH 86. The County has yet to identify the timing of a future study to determine alignment options. The Dakota County Transportation Department should be contacted at (952) 891-7100 regarding the CSAH 86 and CSAH 23 intersection future alignments.

CAPX2020 Lake Marion Substation to Hampton - EIS Review Map Dakota County



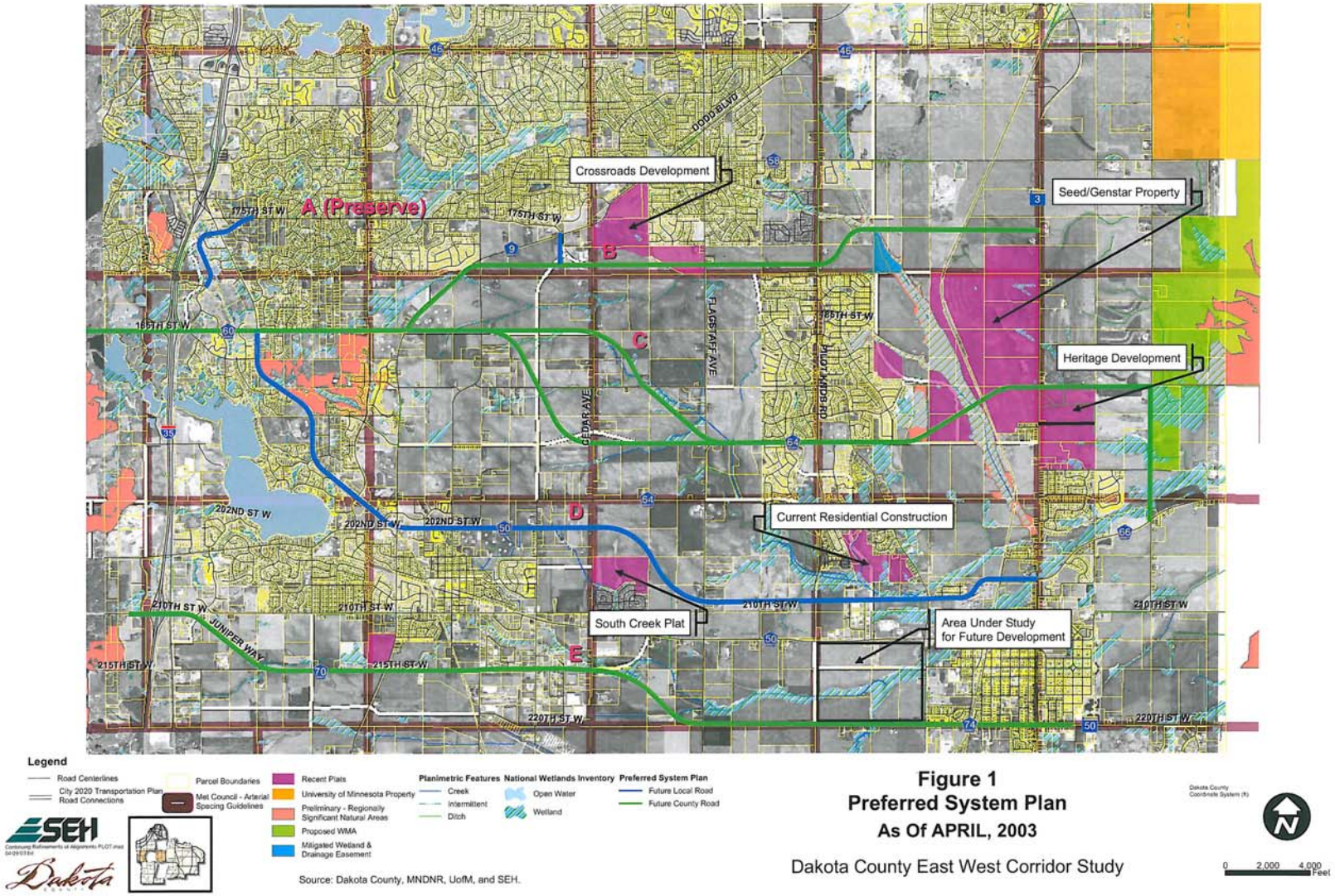


Figure 1
Preferred System Plan
As Of APRIL, 2003

Dakota County East West Corridor Study

Ek, Scott (COMM)

From: Davis, Brad [BDavis@co.scott.mn.us]
Sent: Wednesday, November 25, 2009 3:10 PM
To: Ek, Scott (COMM)
Subject: Scott Co Comment Letter on Draft EIS
Attachments: Draft EIS comment letter.pdf

Hello Scott,

A hard copy of the attached pdf comment letter with cited attachments is being sent in the mail to you this morning, in advance of the November 30 comment period deadline.

266a In addition to the comments contained in this memo, our Natural Resources manager adds another comment: Any river crossing in the county should avoid tower footprint in the buffer area. A conservative approach would be to apply a 150' buffer to each
266b riverbank for all crossings. Finally, wetland impacts should be avoided when possible and if unavoidable should then abide by all WCA requirements.

Brad Davis, AICP
Planning Manager
Scott County Planning Department
bdavis@co.scott.mn.us
(952) 496-8654

266a.

A route permit, if issued by the Commission, would typically include conditions that would require a permittee to use best management practices when constructing near wetlands or riparian areas and may include language such as, "The placement of power pole structures, shall be avoided to the maximum extent possible by placing these structures above the floodplain contours outside of the designated floodplain, and by spanning the floodplain with the transmission line." See also response to FEIS ID#263h.

266b.

(See response to FEIS ID#188a)

266c.

The DEIS does not discuss policy issues surrounding whether utilities or local-government should be liable for the cost to relocate utility poles when roadways are widened, as indicated in Section 3.3.

266d.

The Scott County 2030 Comprehensive Plan Update, dated March 24, 2009, indicates,

SCOTT COUNTY PLANNING DEPARTMENT

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November 25, 2009

Scott Ek
Project Manager
Minnesota Department of Commerce
Office of Energy Security
85 7th Place East, Suite 500
St. Paul, MN 55101

Re: Comment Letter on *Brookings County - Hampton 345 kV Transmission Line Project*
Draft Environmental Impact Statement (October 2009)

Dear Mr. Ek:

Scott County is submitting these written comments on the Draft EIS for the *Brookings County – Hampton 345 kV Transmission Line Project*. These comments are based on County staff's evaluation of Sections 1-7 of the Draft EIS document. The purpose of this comment letter is to state why the County remains concerned with segments of the Preferred and Alternate route options that cross Scott County and provide supporting documentation for these concerns.

1. **Impact on Highway Corridor & Interchange Plans**: Scott County remains concerned that the Preferred Helena to Lake Marion Substation route segment is proposed along 12 miles of County Road 2. Locating the proposed transmission line along this corridor will negatively impact the County's long-term plans to widen and expand County Road 2. This roadway is classified as an A-minor arterial and the corridor right-of-way is planned to widen to 150 to 200 feet under the County's adopted 2030 Transportation Plan (attached are the adopted Future Functional Classification and Future Right-of-Way Needs Maps for Scott County). The placement of the transmission lines within this county highway corridor should consider this future ROW need, and could result in placing transmission line poles deeper into adjacent farmland which might cause considerable agricultural impacts. The County is not in a position to pay for the relocation of any transmission line poles as part of any future corridor improvement project.

   Section 6.9.1 of the Draft EIS acknowledges this issue and indicates that the applicants plan to install poles just outside the existing public ROW – about five feet into fields or other private property when possible. It further states that the applicant's reason for this placement is to "avoid potential liability for the cost of moving the poles if the roadway is expanded in the future." Again, to avoid potential liability for the costs of moving poles by *either* the private utility or the local government, the County recommends that the routes do not follow roadways planned for future expansion – such as County Road 2.

266c

   The Department of Commerce should also be aware that Scott County and the Minnesota Department of Transportation have entered into a Joint Powers Agreement to jointly prepare a CSAH 2 and I-35 Interchange Footprint Study. The footprint will be used as a tool to preserve the necessary right-of-way for planned interchange improvements (which falls within the proposed Alternate route corridor). This potential routing issue needs to be addressed in the Final

266d

An Equal Opportunity/Safety Aware Employer

"that there are no current construction plans for projects on any existing State Highways within Scott County in MN/DOT's 2008-2030 Transportation System Plan."

The applicants' however have indicated in a letter dated, November 30, 2009 that they will collaborate with MN/DOT on where its future intersection projects may be and will design alignments for this project to accommodate these planned expansions.

266e.

Section 7.5.4.7 of the DEIS does describe the potential impacts the transmission alignment along CSAH 2 may have such as land functionality, agriculture impacts, property values, and commercial and residential compatibility. At times the existing MinnCann pipeline corridor may be located on properties that also share a property boundary with CSAH 2. The transmission ROW would potentially follow along CSAH 2 ROW, but would be approximately one-half mile south of the existing pipeline ROW. There are a numerous examples throughout Minnesota that demonstrate the compatibility of transmission lines following and sharing existing road right-of-ways. Also, one of the criteria considered in Minnesota

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EIS. County staff requests a meeting with Office of Energy Security and local staff to discuss this issue in more detail.

2. **Impact on Existing Homes**: Scott County remains concerned that the Preferred Helena to Lake Marion Substation route segment impacts more existing homes than the Alternate Helena to Lake Marion Substation route segment. The Draft EIS in Section 7.5.4.1 confirms Staff's previous analysis that the Preferred route segment crosses more existing homes - within 500 feet of the proposed route centerline - than the Alternate route segment. Using the criteria discussed throughout the public involvement process of "keeping the line as far away from homes as possible," it appears to staff that the Alternate route segment continues to better meet this set of criteria.

3. **Impact on Planned Future Development Areas and Parcels**: Scott County remains concerned that the Preferred Helena to Lake Marion Substation route impacts planned future development areas and individual parcels more than the Alternate Helena to Lake Marion Substation route segment. Staff is pleased to see the County's adopted 2030 Land Use Plan analyzed during the Draft EIS process. As noted in the Draft EIS, the Preferred Helena to Lake Marion Substation route segment crosses Urban Expansion Areas slated for long-term urban service areas (with end land use densities guided at 3 units per acre) and Rural Residential Reserve Areas (with end land use densities guided at 2.5 to 10 acre lots). The Draft EIS accurately notes that the Alternate Helena to Lake Marion Substation route segment crosses areas in Rice and Le Sueur Counties that are not planned for this much residential development.

266e Staff is concerned that Section 7.5.4.7 does not acknowledge the potential impact the transmission line corridor will have on those properties along County Highway 2 that are already impacted by the MinnCan pipeline corridor. These two utility corridors in close proximity create undue hardship on the future development options for these landowners and impede local government's ability to provide logical extension or roads and other infrastructure in this area. (Attached is a map prepared by the Scott County Planning Department that identifies the parcels along the Preferred Helena to Lake Marion Substation route segment that would be dually impacted by the transmission line and existing MinnCan pipeline).

We hope that these comments and concerns will be considered during the Final EIS process. Thank you.

Sincerely,

Brad Davis, AICP
Planning Manager
Scott County Planning Department

Cc: Scott County Board of Commissioners
Gary Shelton, Administrator

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Rule for selecting a transmission line route is the use of existing transportation, pipeline, and electrical transmission systems or ROWs (Minn. R. 7850.5910).

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Lezlie Vermillion, Deputy Administrator and Public Works Director
Michael Sobota, Community Development Director
Helena Township
Belle Plaine Township
Cedar Lake Township
New Market Township
City of Elko New Market
City of New Prague
City of Belle Plaine
Rice County (Planning and Zoning)
Le Sueur County (Planning and Zoning)

Comments on DEIS for Brookings Co. - Hampton 345 Transmision Line Project (CapX2020)

Patton, Bob (MDA)

Sent: Monday, November 30, 2009 9:28 AM

To: Ek, Scott (COMM)

Cc: Poorker, Craig [cpoorker@GREnergy.com]; Rasmussen, Pamela [pamela.jo.rasmussen@xcelenergy.com]; Ross McCalib, Laureen [lrossmccalib@grenergy.com]; Kinney, Robin (MDA); Scheffert, Peter (MDA); Hanks, Mary (MDA); Moynihan, Meg (MDA); Balk, Becky (MDA)

Dear Mr. Ek:

I have reviewed the Draft Environmental Impact Statement on behalf of the Minnesota Department of Agriculture. The discussion of agriculture in Section 6.81 of the DEIS, the related discussion of stray voltage in Section 6.2, and segment-specific discussion in Section 7.0 appears to be complete and adequate.

267a We request that the full text of the Agricultural Impact Mitigation Plan be included in the Final Environmental Impact Statement as an attachment. Inclusion of the AIMP in the FEIS should help make the document more accessible to farmers and landowners potentially impacted by the power line.

Thank you for the opportunity to comment. Please let me know if you have any questions.

Sincerely,

Bob Patton

Robert Patton, AICP
Land Use and Environmental Review Coordinator
Agricultural Development and Financial Assistance Division
Minnesota Department of Agriculture
625 Robert Street North
Saint Paul, MN 55155-2538

Ph: 651-201-6226
Fx: 651-201-6120

267a.

Comment noted. The AIMP has been attached to the FEIS as Appendix D.

Ek, Scott (COMM)

From: Patton, Bob (MDA)
Sent: Monday, November 30, 2009 9:29 AM
To: Ek, Scott (COMM)
Cc: Poorker, Craig; Rasmussen, Pamela; Ross McCalib, Laureen; Kinney, Robin (MDA); Scheffert, Peter (MDA); Hanks, Mary (MDA); Moynihan, Meg (MDA); Balk, Becky (MDA)
Subject: Comments on DEIS for Brookings Co. - Hampton 345 Transmision Line Project (CapX2020)

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Ph: 651-201-6226
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(See response to FEIS ID#267)

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40

November 30, 2009

Mr. Scott Ek, Project Manager
Energy Facility Permitting
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Draft Environmental Impact Statement for the proposed 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota [PUC Docket No. ET2/TL-08-1474]

Dear Mr. Ek:

The Minnesota Department of Natural Resources (DNR) has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota. The DNR offers the following comments regarding the DEIS.

269a The DEIS does not currently contain the information necessary to sufficiently compare alternatives, segments, or various combinations of segments. For example, it is difficult to locate an impact matrix that quantitatively compares the Preferred and Alternative Routes and that is further broken down by segment. For the DNR and public to consider the overall impacts of the project and alternative, an impact matrix would be a helpful addition to the Final Environmental Impact Statement (FEIS). The matrix should be a summary of detailed information contained within specific sections of the document. The following topics are examples of information that would need to be contained within a section and then summarized in the comparison matrix: the number of Wildlife Management Areas (WMAs) impacted; permanent and temporary impacts to each WMA; the number of Public Water crossings, including permanent and temporary impacts; the number of trails crossed; floodplain impacts by acres; native prairie impacts, and wetland impacts.

269b The DNR was unable to determine the potential direct and indirect impacts to WMAs from the maps and discussion included in the DEIS. The FEIS should clarify whether impacts are for a new line or are related to an existing transmission line corridor. Information should be included about the permanent, temporary and
269c required Right of Way (ROW) for each WMA impacted. The FEIS should present information as total numbers by segment and as total numbers for the Preferred and Alternative Routes. Further discussion regarding potential impacts to WMAs depicted on Map 7.4-22E is necessary. Please coordinate directly with the DNR concerning impacts to WMAs. The mitigation plan for impacts to WMAs needs to be developed and approved by the DNR prior to purchasing easements and applying for any license to cross permits.

269d Construction activities on WMAs should be limited to the winter season to reduce impacts to vegetation, wildlife, and wetlands. Additionally, conducting construction activities only during winter would limit the disturbance to recreational users during the spring, summer, and fall seasons.

269e Page 5-2 discusses staging and lay-down areas that would be obtained from landowners though rental agreements. The DNR recommends that no staging or lay down areas be located on WMAs or immediately adjacent to a WMA. This will decrease the direct and indirect natural resource impacts associated with the project.

269a.

To more easily convey the information about the proposed project it was divided in to six segments, each of which were described in Sections 7.1 to 7.6 of the DEIS.

Appendix E of the DEIS includes a Data Summary Table that presents quantitative data for portions of the applicants' preferred and alternative routes and alternative route segments located within each of the six project segments as organized in Section 7 of the DEIS. For each separate route segment the table provides the potential number of acres of WMAs at different distances from the route alignment used in the DEIS, number of shallow lakes, wild and scenic river crossings, scientific natural areas (SNAs), acres of cropland, marsh, aquatic, among others.

269b.

The potential impacts and mitigation described in the DEIS are for a new 237 to 262-mile, 345 kilovolt (kV) transmission line beginning at the state's western border near Hendricks, Minnesota, and ending south of the Twin Cities metro area near Hampton, Minnesota, as proposed by Great River Energy and Xcel Energy. The proposed project would also include the construction of four new substations and the expansion of four existing substations.

269af Page 6-20 discusses the crossing of Bucks Lake by the Preferred Route and refers to the high value of habitat and recreational bird watching that occurs at the lake. A great blue heron colony exists near Bucks Lake. The lake is also utilized each year by substantial numbers of bald eagles, great egrets, and other waterfowl. The DNR does not support a crossing of Bucks Lake due to the high concentration of species using the area for resting, roosting, feeding, and nesting. However, if the selected route crosses in this general area, the alternative that parallels Route 169 south of Bucks Lake should be used. This alternative segment would provide a substantial amount of avoidance and minimization of impacts to natural and recreational resources in the project area.

269g Page 6-21 discusses the use of H-frame structures for floodplain areas in order to reduce the number of towers and floodplain impacts. The DNR encourages the use of the H-frame structures if they are shown to reduce impacts to streams, floodplain, wetlands, or upland habitat areas. The FEIS should place an additional emphasis

269h on river crossings. A discussion of river crossings and what specific avoidance and minimization techniques will be used to reduce impacts should be included. Any impacts related to river crossings should be coordinated with the DNR.

269i Specifically, the DNR agrees with the approach presented in the DEIS to span crossings of water bodies or wetlands to avoid degradation due to increased sedimentation and soil erosion caused by construction or maintenance activities. In areas where this may not be avoided, the DNR requests to be involved in structure placement and structure-type options discussions.

269j Page 6-22 discusses the removal of existing trees throughout the entire 150 foot ROW, including forested wetlands, that would result in the permanent alteration from forested wetlands to shrub/scrub or emergent wetlands. The FEIS should list the acres of converted forested wetlands by location and alternative. The DNR strongly supports mitigation for the conversion of forested wetlands to non-forested wetlands during the wetland permitting process. The DNR also encourages the applicant to consider managing the ROW to benefit

269k wildlife and to take preventative measures to avoid or minimize invasive plant species from establishing in the disturbed corridors. Preventative measures supported by the DNR should benefit both wildlife utilizing those areas and encourage native plant establishment. An example of beneficial ROW management would be spraying herbicides to control invasive species in areas where sensitive bird or insect species are not present.

269l Please note that it may be difficult to obtain ROW access across WMAs or other state properties that have federal interests. Any property that was purchased in part with federal funds would need to obtain separate approval with the federal agency that provided funding.

269m Page 6-25 discusses the use of bird flight diverters as a method to reduce potential avian fatalities. The DNR supports the use of bird flight diverters in areas with a high potential for collision, such as river crossings or in the vicinity of waterfowl production areas, WMAs, recreational areas, or wetland complexes. However, where possible, avoidance of these highly utilized areas is first encouraged.

269n Segment 6 Alternate Route (Map 7.6-19) depicts the route to pass across Chub Lake and along the southern boundary of Chub Lake WMA. The wetlands along Chub Creek are part of a Central Region Regionally Significant Ecological Area and are part of the Chub Creek Marsh wetland complex. This area is utilized by waterfowl and migratory bird species and has been categorized as an area of High Biodiversity Significance. The DNR has concerns regarding the construction of a transmission line through this area.

269o Segment 6 Alternate Route (Map 7.6-15) depicts the route parallel to Scott County Highway 46. A tributary to the Vermillion River parallels this road on the west side. The DNR recommends that any final route within this

Section 6.10 (Recreation) acknowledges the potential for impacts to WMAs. The DEIS states, "WMAs within the project area may be impacted by the placement of poles where routes bisect or run immediately adjacent to these areas and where spanning the WMA area is not possible. In these cases, temporary impacts to 1 acre of land per pole are anticipated due to construction activities. For each pole placed within a WMA, permanent impacts of 55 feet are expected. The applicants would need to acquire an easement within an adjacent WMA if direct impacts are unavoidable. Other WMAs located outside the route may experience visual impacts in areas where the line is located near enough to the WMA to be seen by visitors. The applicants have stated that they avoided crossing WMAs when selecting their proposed routes, and would place poles adjacent to any parkland so as to avoid impacts to the extent feasible."

269c.

(See response to FEIS ID#269a)

269d.

The information provided in the comment may be presented as a condition in a route permit, if issued by the Commission.

corridor be located on the east side of County 46, or include sufficient setback from this stream to ensure that the transmission line does not occupy an extended length of riparian area.

269p Sheet LC10 depicts the transmission line paralleling the road adjacent to Leuscher-Barnum WMA. The DNR recommends considering routing the line around the top of the north section of the wetland, shown on the north side of the road, as a mechanism to reduce wetland impacts and potential avian fatalities.

269q Appendix D states that a blank cell indicates that a particular rare feature is not within 1 mile of the centerline. This should be reworded: a blank cell indicates that there are no known occurrences of the rare feature within 1 mile of the centerline.

269r The DNR provided project consultants with preliminary shapefiles of MCBS Sites in Lincoln and Lyon Counties. Counts of these preliminary Sites should be included in the tables in Appendix D and in the tables in Section 7.

269s Appendix G, Example 3 depicts a route identified in the DEIS as a United States Fish and Wildlife Service (USFWS)/DNR Route along with an Analysis of Example table showing potential impacts. The DNR would like to clarify that, in this location, the Alternative crossing with a possible north and south connector back to the Preferred Route appears to be the most protective of the Minnesota River. However, please note that the DNR has not endorsed either the Preferred or Alternative Route for this transmission line as may be incorrectly understood by identifying the route as a USFWS/DNR route.

269t A state-listed threatened plant has been documented in T112N R19W Section 18 along the preferred route in the Lake Marion Sub to Hampton Sub section. A botanical survey will be required if construction proceeds in this area.

269u Please refer to the enclosed fact sheet regarding recommendations for avoiding and minimizing impacts to the Blanding's turtle (*Emydoidea blandingii*), a state-listed threatened species. The enclosed flyer should also be given to all contractors working in areas where Blanding's turtles may be encountered.

269v The Final EIS should explicitly state that rare species surveys will be required if any native prairie or rock outcrops will be impacted by the proposed project.

Though Species of Special Concern (SPC) plants have no legal protection, the DNR recommends that known occurrences be avoided (e.g., by spanning) where they intersect with the project footprint.

269w Substation location impacts should be addressed in further detail. The study areas for the substations are substantially larger than the approximately 40 acres required for new construction and 16 or more acres required for expansion of an existing substation site. The large study areas contain resources the DNR is concerned about. Many of those resources have been identified in the DEIS and, as indicated in the April 30, 2009 letter from the DNR (attached), should be avoided. The specific potential locations for substations within study areas would need to be identified for the DNR to provide substantial comments on potential impacts.

269x The Final EIS should explicitly state the potential impacts and mitigation for the following rare native plant communities, or any other rare native plant communities, that are potentially within the project footprint:

Native Prairie

Brookings County to Lyons County Substation:

269e.

Comment noted.

269f.

Comment noted.

269g.

Comment noted.

269h.

River crossing as it pertains to transmission line structures and construction techniques are addressed in Section 4.0 of the DEIS. Section 6.1.1 describes aesthetic and visual impacts of the proposed transmission facility including potential mitigation methods when it would be necessary to cross rivers or streams. Sections 6.10 (Recreation), 6.11 (Water Resources), 6.12 (Flora and Fauna), 6.13 (Rare and Unique Natural Resources) of the DEIS detail the potential impacts and mitigation methods associated with the identified river crossings proposed as part of the project. Section 7.0 of the DEIS also addresses potential river crossing impacts and mitigation with respect to a specific segments of the proposed project.

Preferred Route: T112N R46W Sections 2 & 11; T112N R45W Sections 2 & 11;
T112N R44W Section 12
Alternate Route: T111N R46W Section 30 & 31; T111N R43W Section 17; T111N R42W Section 20
Lyon County Sub to MN Valley Sub:
Alternate Route: T113N R40W Section 19
Lyon County Sub to Cedar Mountain Sub:
Alternate Route: T113N R35W Section 20
Cedar Mountain Sub to Helena Sub:
Preferred Route: T112N R33W Sections 3-5; T112N R30W Section 3
Alternate Route: T113N R27W Section 2

Rock Outcrops
Lyon County Sub to MN Valley Sub:
Preferred Route: T115N R39W Sections 3, 4, & 10

Basswood Forests
Lyon County Sub to Cedar Mountain Sub:
Alternate Route: T113N R35W Sections 21 & 22
Cedar Mountain Sub to Helena Sub:
Preferred Route: T112N R27W Sections 23 & 24

In general, discussion of mitigation should be addressed in more detail. It was previously recommended that appropriate mitigation should be discussed and agreed upon prior to finalization of the EIS. Therefore, more detail should be provided in the FEIS as route and substation locations are selected and more thoroughly defined.

Thank-you for the opportunity to provide comments regarding the DEIS for the Brookings County, South Dakota to Hampton, Minnesota Transmission Line. Please contact me with any questions.

Sincerely,

Jamie Schrenzel

Jamie Schrenzel, Planner Principal
Environmental Review Unit
Division of Ecological Resources
(651) 259-5115

Enclosures (2)

269i.

This would typically be a condition of the route permit.

269j.

Data on forested wetlands acres is provided in FEIS Appendix B, FEIS ID#46.

269k.

Noxious weeds and invasive vegetation are addressed in Section 6.12.1.3 of the DEIS

269l.

Comment noted.

269m.

Comments noted.

269n.

Comment noted.

269o.

(See response to FEIS ID#265a)

269p.

The Leusher-Barnum WMA is located south of 275th Street where the transmission line alignment depicted in the DEIS would follow

Environmental Review Fact Sheet Series

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle

(Emydoidea blandingii)

Minnesota Status:	Threatened	State Rank[1]:	S2
Federal Status:	none	Global Rank[1]:	G4

HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade* and road kills during seasonal movements
- increase in predator populations (skunks, raccoons, etc.) which prey on nests and young

*It is illegal to possess this threatened species.

in this area. The requested route width in this area encompasses the entire boundaries of the WMA, so there would be flexibility to route the transmission alignment in an area agreeable to the DNR, in consultation with the applicants.

269q.

It was inferred that a blank cell indicated that there are no known occurrences of the rare feature within 1 mile of the centerline.

269r.

Minnesota County Biological Survey (MCBS) sites are addressed in several areas throughout the DEIS. For example:

6.12.1.2 - "Throughout the Project area, there are several areas where native vegetation occurs naturally or is managed. Designated habitat or conservation areas include managed lands such as DNR WMAs and U.S. Fish and Wildlife Service wildlife protection areas (WPAs) and easements, and unmanaged areas include DNR-designated Minnesota County Biological Survey (MCBS) biodiversity significance and rare native habitats and communities. These resources provide habitat for native vegetation, wildlife, and rare and unique resources. Native prairie commonly occurs along railroads. These areas have been inventoried by the DNR and are listed as state designated railroad prairie."

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	**List 2. *Additional* recommendations for areas known to be of state-wide importance to Blanding's turtles.**
GENERAL	
A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

269s.

Comment noted.

269t.

This would typically be a condition of the route permit.

269u.

This would typically be a condition of the route permit.

269v.

This would typically be a condition of the route permit.

269w.

The applicants' have narrowed down the potential locations for the new and existing substations in The Testimony of Craig Poorker on Behalf of Applicants, dated October 13, 2009 (FEIS Appendix E).

- Hazel Creek Substation (Preferrred and Alternative) - southeast corner of the intersection of 520th Street (County Road B3) and 260th Avenue in Granite Falls.
- Cedar Mountain Substation (Preffered) - Camp Township, Renville County at the

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

Protecting Blanding's Turtle Nests: Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is ***very important*** that the fencing be **removed before August 1st** so the young turtles can escape from the nest when they hatch!

REFERENCES

[1]Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). http://www.natureserve.org/ranking.htm (15 April 2001).

Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

26 northwest corner of the intersection of County Road 3 and 640th Avenue.

- Cedar Mountain Substation (Alternative) - Birch Cooley Township, Renville County, on the west side of 380th Street, ¼ mile north of County Highway 12.
- Helena Substation (Preferred) - southeast corner of the intersection of 231st Avenue and 320th Street (County Road 28) in Derrynane Township in Le Sueur County.
- Helena Substation (Alternative) - West 270th Street between Church Avenue and Aberdeen Avenue in Belle Plaine Township in Scott County.
- Hampton Substation (Preferred and Alternative) - Two different locations that are each located on the west side of Highway 52 near 215th Street. One of these substation sites is located on the north side of 215th Street and the other is located on the south side of 215th Street.

269x.

The sites listed by the DNR are noted and incorporated, if not already addressed in the DEIS. Section 6.12.1.2 (Native Vegetation) and 6.13.2 (Threatened and Endangered

REFERENCES (cont.)

Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.

Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.

Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. Chelonian Conservation and Biology 3(4):626-636.

Species Habitat)of the DEIS fully and clearly addresses native vegetation and threatened and endangered species, respectively. The DEIS specifically states, "Where structure placement cannot be avoided within areas of documented rare resources, a biological survey should be conducted to determine the presence of rare species or suitability of habitat for such species and coordination would occur with appropriate agencies to avoid and minimize impacts. If the resource is unavoidable, a takings permit from the DNR may be required along with other conditions."

See also response to FEIS ID#269t.

269y.

The DEIS and the FEIS are not decision making documents. A specific route and/or substation location(s) will not be established in the DEIS or FEIS documents. The Commission will make a decision on the final route permit in spring 2010.

CAUTION

BLANDING'S TURTLES
MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

BLANDING'S TURTLES DO NOT MAKE GOOD PETS
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Blanding's Turtle Fact Sheet for full recommendations)

- This flyer should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles that are in imminent danger should be moved, by hand, out of harms way. Turtles that are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest and do not allow pets near the nest.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).

Compiled by the Minnesota Department of Natural Resources Division of Ecological Resources, Updated March 2008
Endangered Species Environmental Review Coordinator, 500 Lafayette Rd., Box 25, St. Paul, MN 55155 / 651-259-5109

Minnesota Department of Transportation
Transportation Building
Mail Stop 130
395 John Ireland Boulevard
Saint Paul, MN 55155-1899

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State of Minnesota
NOV 30 2009
Dept of Commerce

November 30, 2009

HAND DELIVERED

Scott Ek
Project Manager
Minnesota Office of Energy Security
85 7th Place East, Suite 500
St. Paul, MN 55101-7891

Re: In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota
MPUC Docket Number: ET2/TL-08-1474

Dear Mr. Ek:

As requested by the Minnesota Office of Energy Security, the Minnesota Department of Transportation (Mn/DOT) has reviewed the October 20, 2009 Draft Environmental Impact Statement (EIS) for the proposed Brookings to Hampton 345 kV transmission line project.

Both the preferred and alternate routes evaluated in the draft EIS have a number of locations that either cross or run parallel to highways that are part of the state trunk highway system and the National Highway System. Due to the significant magnitude of the impacts on these highways, the enclosed comments provide the background on Mn/DOT's Utility Accommodation Policy. Mn/DOT's policy seeks to permit utilities to occupy portions of the highway rights-of-way where such occupation does not put the safety of the traveling public or highway workers at risk or unduly impair the public's investment in the transportation system. The enclosed comments also provide input on specific impacts associated with the proposed project discussed in the draft EIS.

Mn/DOT appreciates the collaborative process and approach to the development of the draft EIS, and we look forward to continued cooperative efforts on this important project. Should you have any questions about the enclosed comments, please contact me by telephone at 651-366-4791 or by e-mail at dave.seykora@state.mn.us.

270a.

Pursuant to Minn. Stat. 216E.02, Subd. 2 (Power Plant Siting Act), "…it is the policy of the state to locate large electric power facilities in an orderly manner compatible with environmental preservation and the efficient use of resources. In accordance with this policy the Commission shall choose locations that minimize adverse human and environmental impact while insuring continuing electric power system reliability and integrity and insuring that electric energy needs are met and fulfilled in an orderly and timely fashion."

270b.

The term sharing as used in the DEIS refers in general terms to sharing the right of way (ROW) of existing infrastructure including local road, state highways, pipelines, rail lines, and transmission lines. The discussed is not specific to highway related ROWs.

The degree to which the transmission line would use a portion of a highway ROW would depend upon the final placement of the transmission facility in relation to a particular portion of highway ROW and ultimately, the Use and Occupancy Agreement between the applicants and

Sincerely,

David G. Seykora
Office of the Chief Counsel

cc: Deborah R. Pile, OES
Laureen Ross McCalib, CapX2020
Michael Barnes, Mn/DOT
Scott Peterson, Mn/DOT
Mukhtar Thakur, Mn/DOT
Val Svensson, Mn/DOT

MN/DOT. The Use and Occupancy Agreement is the document by which MN/DOT approves the use and occupancy of highway ROW by utility facilities, as defined in the Utility Accommodation Policy.

Pole locations along a selected route would need to be evaluated individually in relation to the topography of the land, the geometry of the roadway, the width of the highway ROW, the design of the transmission facility structures, and other factors as determined by MN/DOT.

270c.

In following with the Scoping Decision Document, the DEIS did include a discussion of transportation issues and the potential impacts and mitigation associated with the proposed project. Although not included in the Section 1.0 (Summary) of the DEIS, transportation issues

were addressed throughout the document. Section 6.9 (Transportation and Public Services) of the DEIS summarizes the project's potential impacts on local roadways, highways, airports and railroads, and describes potential mitigation. In addition, a section describing the transportation and public services specific to each of the six segments was included in Sections 7.1 to 7.6 of the DEIS.

Minnesota Department of Transportation

Memorandum

Engineering Services Division
395 John Ireland Boulevard
St. Paul, MN 55155-1899

TO: Scott Ek
Minnesota Office of Energy Security

FROM: Mn/DOT

DATE: November 30, 2009

SUBJECT: Review of October 20, 2009 Draft Environmental Impact Statement for the proposed Brookings to Hampton 345 kV transmission line project

On October 20, 2009, the Office of Energy Security (OES) issued a Notice of Availability of Draft Environmental Impact Statement and request for public comments on the draft environmental impact statement (EIS) relating to the route permit application by CapX2020 for a 345 kV line from Brookings County, South Dakota to Hampton, Minnesota. The Minnesota Department of Transportation (Mn/DOT) submits the following comments and recommendations in response to the Notice and request for comments.

Mn/DOT has adopted a formal policy and procedures for accommodation of utilities on the highway rights of way ("Utility Accommodation Policy"). A copy of Mn/DOT's policy can be found at http://www.dot.state.mn.us/utility/files/pdf/appendix-b.pdf . The policy is also in the record in this matter as Schedule 19 of the Direct Testimony of Mr. Craig Poorker.

Mn/DOT's approach to the high voltage transmission lines ("HVTL") involved in the CapX2020 proposal is to work to accommodate these HVTLs within or as near as feasible to the highway rights of way, based on an evaluation of the specific locations to ensure that appropriate clearance is maintained to preserve the safety of the traveling public and highway workers and the effective operation of the highway system now and in the foreseeable future. Mn/DOT's Utility Accommodation Policy seeks to guide the balance between accommodation of utility operations in the highway rights-of-way and preserving the safe and efficient operation of the transportation system.

The provisions of the Utility Accommodation Policy are based on the framework of several interrelated state and federal laws that led to its creation. Therefore these comments will begin with a discussion of the legal and regulatory structure under which the Policy was adopted. These comments will then discuss the types of circumstances and concerns that must be considered when applying the Utility Accommodation Policy to a specific situation as Mn/DOT works to accommodate a utility in a highway right-of-way while preserving the safe and efficient operation of the highway. The comments will provide as much specific information as is possible at this time on locations where the HVTL routes

270d.

The OES believes the quote is taken out of context. This Section of the DEIS discusses the size of new ROW or easement required for the transmission line. It further discusses the mitigation methods (e.g. road ROW sharing) that could be implemented to reduce the size of the easement required from the private landowner(s) and the potential loss of productive agricultural land.

As identified in MN/DOT's comment letter and the Utility Accommodation Policy, there are rules and laws in-place that provide a transportation landowner with well-defined directives that restrict use of road and/or highway ROW for only that purpose unless otherwise permitted under an accommodation policy. A private landowner is not afforded the same latitude.

270e.

It appears MN/DOT explains such circumstances in their comment letter:

"While a permit is required for such a circumstance, Mn/DOT intends to apply its policy in a prudent manner consistent with the approach described earlier in these comments. Mn/DOT understands from discussions with CapX2020 that some HVTL design adjustments may be possible in some

proposed by CapX2020 in this application either cross or run parallel to the trunk highway system. Finally, these comments will discuss a few specific portions of the draft EIS.

I. Legal Framework Applicable to Mn/DOT's Utility Accommodation Policy

Mn/DOT's policy regarding accommodation of utilities is governed by both federal and state statutes and regulations. These comments will first describe the primary federal laws and then the state laws.

A. Applicable Federal Laws

Certain highways in Minnesota are part of the National Highway System, which is established under 23.U.S.C. §103. The National Highway System and the Dwight D Eisenhower National System of Interstate and Defense Highways (Interstate System) are together known as the Federal-aid System. 23 U.S.C. §103(a). See also 23 CFR Part 470. In addition to the highways on the National Highway System, other highways also receive federal funding. Together, all the highways that receive federal funding are known as "Federal-aid highways." 23 CFR §470.103. The Federal-aid highways in Minnesota that are impacted by the Brookings – Hampton CapX2020 route proposal that would run parallel to the highway include I-35, US 52, US 169, US 71, MN 23, MN19, MN 22, MN 50, MN 67 and MN 68. Other Federal-aid highways that would be crossed by the route proposals include US 75, US 59, MN 271, MN 4, MN 5, MN 15, MN 21, MN 13 and MN 3.

Congress articulated the transportation policy of the United States in 23 U.S.C. §101(b). Among other things, Congress noted that "it is in the national interest to preserve and enhance the surface transportation system to meet the needs of the United States for the 21st Century," that "the current urban and long distance personal travel and freight movement demands have surpassed the original forecasts and travel demand patterns are expected to continue to change," and that "special emphasis should be devoted to providing safe and efficient access for the type and size of commercial and military vehicles that access designated National Highway System intermodal freight terminals." 23 U.S.C. §101(b)(3)(A), (B) and (E).

Federal law requires that "The real property interest acquired for all Federal-aid projects . . . shall be adequate for the construction, operation, and maintenance of the resulting facility and for the protection of both the facility and the traveling public." 23 C.F.R. §710.201(e). In addition, all real property that is part of the Federal-aid highway system must be devoted exclusively to highway purposes unless an alternative use is permitted by federal regulation or the Federal Highway Administration ("FHWA"). This basic proposition is stated in 23 C.F.R. §710.403, which provides:

> (a) The [State Transportation Department] must assure that all real property within the boundaries of a federally-aided facility is devoted exclusively to the purposes of that facility and is preserved free of all other public or private alternative uses, unless such alternative uses are permitted by Federal regulation or the FHWA. An alternative use must be consistent with the continued operation, maintenance, and safety of the facility, and such use shall not result in the exposure of the facility's users or others to hazards.

Similarly, 23 C.F.R §1.23 restricts use of the highway right-of-way unless otherwise permitted. This section provides:

> (a) Interest to be acquired. The State shall acquire rights-of-way of such nature and extent as are adequate for the construction, operation and maintenance of a project.

circumstances that would minimize the amount of blowout or mitigate its impact on highway operations. Mn/DOT anticipates that it and CapX2020 will evaluate the proposed location for each pole in close proximity to a trunk highway along the designated route to determine where the blowout of the lines over."

270f.

It is not known if or when a second 345 kV circuit would be added to those portions of the proposed project constructed as double-circuit poles, but carrying only one 345 kV circuit. Should the applicants decide in the future to install the second 345 kV circuit they would be required to apply for a certificate of need and route permit for the expansion of an existing facility.

Should a permit be issued for the currently proposed project it would be reasonable for both the applicants and MN/DOT to consider and evaluate those instances where there is the potential for a second 345 kV circuit to be installed on poles that may be located along or near roads and highways as determined through MN/DOT Use and Occupancy Agreements.

(b) Use for highway purposes. Except as provided under paragraph (c) of this section, all real property, including air space, within the right-of-way boundaries of a project shall be devoted exclusively to public highway purposes. No project shall be accepted as complete until this requirement has been satisfied. The State highway department shall be responsible for preserving such right-of-way free of all public and private installations, facilities or encroachments, except (1) those approved under paragraph (c) of this section; (2) those which the Administrator approves as constituting a part of a highway or as necessary for its operation, use or maintenance for public highway purposes and (3) informational sites established and maintained in accordance with Sec. 1.35 of the regulations in this part.

(c) Other use or occupancy. Subject to 23 U.S.C. 111, the temporary or permanent occupancy or use of right-of-way, including air space, for nonhighway purposes and the reservation of subsurface mineral rights within the boundaries of the rights-of-way of Federal-aid highways, may be approved by the Administrator, if he determines that such occupancy, use or reservation is in the public interest and will not impair the highway or interfere with the free and safe flow of traffic thereon.

(Emphasis added.)

Federal law recognizes accommodating the placement of utility facilities as a permissible exception to the general mandate that all of a highway right-of-way, including the air space above the right-of-way, must be used solely for highway purposes. Section 109(l) of Title 23 of the U. S. Code provides:

> **(1)** In determining whether any right-of-way on any Federal-aid highway should be used for accommodating any utility facility, the Secretary shall—
>
> **(A)** first ascertain the effect such use will have on highway and traffic safety, since in no case shall any use be authorized or otherwise permitted, under this or any other provision of law, which would adversely affect safety;
>
> **(B)** evaluate the direct and indirect environmental and economic effects of any loss of productive agricultural land or any impairment of the productivity of any agricultural land which would result from the disapproval of the use of such right-of-way for the accommodation of such utility facility; and
>
> **(C)** consider such environmental and economic effects together with any interference with or impairment of the use of the highway in such right-of-way which would result from the use of such right-of-way for the accommodation of such utility facility.

The U.S. DOT has implemented this statutory directive by adopting the rules relating to accommodation of utilities found at 23 C.F.R. Part 645, Subpart B. These regulations require that each state transportation department submit its policies for accommodating utilities within highway rights of way to the FHWA. 23 C.F.R §645.215(a). See also 23 C.F.R §645.209(c). The FHWA will approve the policy upon determination that it is consistent with federal statutes and regulations, and any changes to the policy are also subject to FHWA approval. 23 C.F.R §645.215(b) and (c). Once a state's policy has been approved by the FHWA, the state transportation department can approve requests by a utility to use or occupy part of the right-of-way of a highway that is part of the Federal-aid highway system if the request is encompassed by that policy. Exceptions to the policy can be granted, but if a state proposes to grant to a utility an exception to its utility accommodation policy, the exception is subject to review and approval by the FHWA. 23 C.F.R § 645.215(d).

B. Applicable Minnesota Laws

Article 14 of the Minnesota Constitution establishes the state trunk highway system. Under Minn. Stat. §161.20, the Commissioner of the Department of Transportation is

270g.

In addition to discussing underground crossing options of the Minnesota River in this area, Section 4.7 (Aerial Crossing of River) also discusses the possibility of an aerial crossing and states, "One proposed option for crossing the Minnesota Rive near Le Sueur is installation of the transmission line on the Highway 169 bridge. The MN/DOT's Utility Accommodation Policy includes policies and procedures for the installation of utilities on highway bridge structures. However, placement on the Highway 169 bridge does not appear to be possible."

270h.

In addition to the NESC safety clearance standards the NERC requires utilities to keep vegetation away from power lines. Vegetation management within the transmission line right of way is critical to the reliability, maintenance and operation of the transmission line. The extent of the vegetation removal will depend on a number of factors including type of vegetation, proximity to the line, and overall health of the vegetation. During easement acquisition the applicants would work with the landowner to determine what vegetation removal will be needed. If vegetation is removed that serves a function such as living

charged with the responsibility to carry out the directive of Article 14 to construct, improve and maintain the trunk highway system, and is authorized to acquire property and take other steps necessary to fulfill this responsibility. All of the Federal-aid highways in Minnesota that are impacted by the Brookings – Hampton CapX2020 proposal are part of the trunk highway system.

Minnesota has several statutes relating to use of highway rights-of-way by utilities. Minn. Stat. §222.37, Subd. 1, provides in part:

> Any . . . power company . . . may use public roads for the purpose of constructing, using, operating, and maintaining lines . . . for their business, but such lines shall be so located as in no way to interfere with the safety and convenience of ordinary travel along or over the same; and in the construction and maintenance of such line . . . the company shall be subject to all reasonable regulations imposed by the governing body of any county, town or city in which such public road may be.

Minn. Stat. § 161.45 provides additional specifications for utility facilities occupying portions of a trunk highway right-of-way. Section 161.145, Subd. 1 provides in part:

> Electric transmission . . . lines . . . which, under the laws of this state or the ordinance of any city, may be constructed, placed or maintained across or along any trunk highway . . . may be so maintained or hereafter constructed only in accordance with such rules as may be prescribed by the commissioner who shall have power to prescribe and enforce reasonable rules with reference to the placing and maintaining along, across, or in any such trunk highway of any of the utilities hereinbefore set forth.

Subdivision 2 of §161.45 specifies the general rule that if the relocation of a utility placed in a trunk highway right-of-way is necessitated by a construction project on the trunk highway, the utility bears the costs associated with the relocation of its facility. However, if a utility facility is located on the Interstate System, then the cost of relocation of such facility is to be paid out of the state trunk highway fund. See Minn. Stat. § 161.46.

Minnesota Rules part 8810.3100 through 8810.3600 contain the rules relating to placement of utility facilities in trunk highway rights of way. Under Section 8810.3300, a utility must obtain a permit for any construction or maintenance work in a trunk highway right-of-way, and special rules apply to interstate highways. Section 8810.3300, Subp. 4 provides in part as follows:

> Utilities along the interstate highways shall be located outside the control-of-access lines except as outlined below. Where the control-of-access lines coincide with the right-of-way lines, the utilities shall generally be located on private property. Where the control-of-access lines and right-of-way lines do not coincide, utilities may in general be located in the area between them. All utilities shall be serviced and maintained without access from the ramps, loops, and through traffic roadbeds. Utilities may be serviced from frontage roads and roads other than another interstate highway which cross either over or under the interstate highway. At aerial crossings of an interstate highway, supporting poles may be located on interstate highway right-of-way if they are a minimum of 30 feet beyond the shoulders of all through traffic roadbeds; however, in no event shall they be located in a median unless its width is 80 feet or more. . . .
>
> There may be extreme cases where, under strictly controlled conditions, a utility may be permitted inside the control-of-access lines along an interstate highway. In each case there must be a showing that any other utility location is extremely difficult and unreasonably costly to the utility consumer, that the installation on the right-of-way of the interstate highway will not adversely affect the

snow fence or wind break the applicant will work with the landowner to plant and reestablish new vegetation compatible with being located within the transmission line ROW. There are instances and are decided on a case-by case basis that may allow certain low growing species within the HVTL ROW, the species would of course be limited to those that would not mature into hazards to the transmission facility and it would also depend on where in the ROW the vegetation is allowed. Again, much of this is discussed during easement negotiations with the particular landowner.

The commenter should also refer to the letter and diagram provided by the applicants in FEIS Appendix E.

270i.

There have been no reports of accidental ignition of fuel caused by spark discharges induced from transmission line electric and magnetic fields. However, it would be remiss to not address this topic, as a person performing any activity in proximity to a high-voltage transmission line should always proceed with good sense and caution.

There are a number of theoretical conditions that would simultaneously have to exist. Even then the occurrence of ignition would be unlikely. For

design, construction, stability, traffic safety, or operation of the interstate highway and that the utility can be serviced without access from through traffic roadbeds, loops, or ramps.

In addition, Subp. 6 of part 8810.3300 requires that, except for the negligent acts of the state, its agents and employees, the utility shall assume all liability for and save the state harmless from any an all claims arising out of the utility's work and occupation of a portion of the trunk highway right-of-way.

C. Mn/DOT's Utility Accommodation Policy

Mn/DOT has adopted a policy statement regarding the circumstances and methods under which it will grant permits to utilities to occupy a portion of a trunk highway right-of-way. Mn/DOT's Utility Accommodation Policy is in conformance with the federal and state statutes and regulations described above, and is also consistent with the American Association of State Highway and Transportation Official (AASHTO) publications, A Guide for Accommodating Utilities Within Highway Right-of-Way and A Policy on the Accommodation of Utilities Within Freeway Right-of-Way. Mn/DOT's Utility Accommodation Policy has been reviewed and approved by FHWA under 23 CFR §645.215(b). Therefore, with respect to Federal-aid highways, further review by the FHWA is required for Mn/DOT to grant an exception to the general application of the Policy, but FHWA review and approval is not necessary for permits granted within the scope of the Policy.

Mn/DOT's Utility Accommodation Policy recognizes that it is in the public interest for utility facilities to be accommodated on highway rights-of-way when such use does not interfere with the flow of traffic and safe operation of vehicles or otherwise conflict with applicable laws or impair the function of the highway. The Policy applies to all utilities, both public and private. Therefore it speaks in somewhat generic terms to cover as many anticipated situations as possible.

The Policy was developed with integrated sections, and two or more sections usually need to be read together when applying the Policy to the context of a utility accommodation circumstance. Some of the provisions most relevant to the CapX2020 route applications include:

- Part I.F – articulates the general policy of accommodation of utilities;
- Part I.G – contains provisions for granting exceptions to the Policy;
- Part V – addresses the location requirements for utilities occupying a portion of a highway right-of-way that apply to most highways;
- Part VI – contains special rules for utility accommodation requests along freeways;
- Part X – contains specific requirements relating to overhead power and communication lines.

Mn/DOT is expressly required to include in its Utility Accommodation Policy some provisions that apply specifically to freeways. 23 CFR §645.209(c). Freeways are characterized by the fact that they are subject to full control of access – i.e., preference is given to through traffic by restricting areas where any person, including vehicles that use the highway, may enter or leave the freeway. By implementing full control of access, through traffic can safely achieve higher speeds and encounter fewer stoppages or slowdowns of the flow of traffic. On freeways, all crossings at grade are prohibited, and fencing is installed along the right-of-way to prevent other persons (including snowmobilers, bicyclists, walkers, etc.) or animals from entering the freeway right-of-way. Freeways also require special design considerations, such as the wider clear zones adjacent to the roadway due to the higher speeds achieved by through traffic on freeways.

instance a person would have to be standing on damp earth while the vehicle is well insulated from the ground (dry pavement on a dry day). The pouring spout would have to be metallic and grounded, for instance, through the body of a person standing on damp earth or vegetation. Finally a spark would need to occur in the exact region where the fuel vapors and air mix to the optimal proportions. The probability of having all the conditions necessary for fuel ignition present at the same time is extremely improbable. In addition, very large vehicles (necessary to collect larger amounts of electric charge) are often diesel-powered, and diesel fuel is less volatile and more difficult to ignite. It has been concluded that the probability of a spark ignition is so low that in practice it will never occur. Fuel ignition does not pose a significant hazard and any impacts would be less than significant.

Electric Power Research Institute. 1982. Transmission Line Reference Book: 345 kV and Above. Second Edition.

As stated by the applicants in the route permit application, “There is a potential for vehicles under HVTLs to build up an electric charge. If this occurs, the vehicle can be grounded by attaching a grounding strap long enough to touch the earth. However, such buildup is a rare event because

The control of access aspect of freeways is a key consideration underlying the special rules regarding utility accommodation requests on freeways. The Utility Accommodation Policy states: "The installation of new utility facilities shall not be allowed longitudinally within the right of way of any freeway, except in special cases under strictly controlled conditions." Under Utility Accommodation Policy, Section VI.C, the utility seeking to establish that special circumstances exist to justify an installation on a freeway must demonstrate to Mn/DOT's satisfaction the following:

a. The accommodation will not adversely affect the safety, design, construction, traffic operations, maintenance, or stability of the freeway.
b. Alternate locations are not available or are cost prohibitive from the standpoint of providing efficient utility services.
c. The accommodation will not interfere with or impair the present use or future expansion of the freeway.
d. The location of the utility facility outside of the right of way would result in the loss of productive agricultural land or loss of productivity of agricultural land. In this case, the utility owner must provide information on the direct and indirect environmental and economic effects for evaluation and consideration by the Commissioner of Transportation.
e. Access for constructing and servicing utility facility will not adversely affect safety and traffic operations or damage any highway facility.

Concurrence by the FHWA is also required before the permit for a longitudinal installation on a freeway can be granted.

II. Overview of Transportation-Related Impacts of HVTLs

The preferred and alternate routes proposed by CapX2020 in this matter either cross over or run parallel to Federal-aid highways in a number of locations. When a route is ultimately selected by the Minnesota Public Utilities Commission (MPUC), a permit from Mn/DOT will be required in any location where the HVTL will occupy any portion of the highway right-of-way. In anticipation of the time when CapX2020 will submit applications for permits after one of the routes is selected, Mn/DOT has engaged in an ongoing dialogue with representatives of CapX2020 and the OES in an effort to identify information that will be needed to assess the permit applications and, to the degree that specificity is possible at this stage of the proceedings, areas where specific concerns will need to be addressed along various potential route scenarios.

Mn/DOT believes these discussions have been beneficial for all three participants. The discussions have been challenging due to the large number of locations where the proposed HVTL route and the trunk highways potentially intersect, the variety of unique circumstances that exist all along each of those potential locations, and the number of unknowns and uncertainties surrounding the selection of the actual locations where the CapX2020 utilities will eventually apply for permits from Mn/DOT.

One of the concepts Mn/DOT has discussed with CapX2020 and OES is the fact that highway rights-of-way do not have a uniform width. The width of the right-of-way, and the distance from the centerline of the roadway to the boundary of the right-of-way, varies from highway to highway, and even from mile to mile along a given highway. The reasons for this variability are many, and include considerations such as the time when the right-of-way was purchased, the topography and geology of the area, the negotiations with the individual landowners from whom the right-of-way was acquired, and the timing and nature of changes and upgrades to the highway that have occurred over the years.

vehicles generally are effectively grounded through tires. Modern tires provide an electrical path to the ground because carbon black, a good electricity conductor, is added when they are produced. Metal parts of farming equipment are frequently in contact with the ground when plowing or engaging in various other activities. Therefore, vehicles will not normally build up charge unless they have unusually old tires or are parked on dry rock, plastic or other surfaces that insulate them from the ground."

A typical tractor-trailer gasoline truck or other (bulk fuel transfer) used to replenish an underground fuel-storage tank and road construction or maintenance equipment is commonly grounded and bonded during fuel handling operations, and this is done to eliminate electric discharges; therefore, fuel ignition does not pose a significant hazard. In addition, MN/DOT rules require grounding, and bonding between tanks during product transfer, and apply to fueling tank operations. Loading and unloading must be attended by a qualified person.

270j.

It appears MN/DOT explains such circumstances and conditions in their comment letter:

> "In areas where the elevation of the roadway is significantly different than the surrounding

Due to this variability, a uniform policy that an HVTL can safely be located "X" feet or "Y" feet outside the highway right-of-way boundary line generally does not work well. Rather, Mn/DOT's approach is to evaluate the type of activities that regularly occur on and along highways. For purposes of this discussion, we will divide these activities into three groups – (a) traffic that uses a highway, (b) maintenance, repair and related activities and structures associated with the ongoing operation of the highway, and (c) construction activities that are likely to occur in the foreseeable future. These functions or uses of the highway have a height and width in which they take place either along the roadway surface or in the ditches, near bridges, intersections or interchanges where the maintenance and construction activities take place.

Once the zones of these recurring highway activities are identified, a safety buffer zone from the location of the energized wires of the HVTLs must be applied. The Occupational Safety and Health Administration (OSHA) and the National Electric Safety Code (NESC) provide guidance on the safety clearances for activities near various voltages of HVTLs. The OSHA or NESC safety buffer should be applied between the zones of transportation activities and the location of the energized lines.

1. Traffic That Uses a Highway

Minnesota's trunk highways are designed to facilitate both personal travel and the distribution of freight throughout the state. Pursuant to Minn. Stat. §§169.80 and169.81, vehicles that do not exceed 13 feet 6 inches in height and 8 feet 6 inches in width can be operated on Minnesota's highways without a permit. Vehicles with larger dimensions, excluding farm vehicles, must obtain a permit. Over the past 5 years, Mn/DOT has issued 233,376 permits for oversize vehicles to operate on state trunk highways. These do not include oversize farm machinery (which do not require a permit) nor movements of houses or other buildings such as grain bins. The number of building moves vary between 400 and 600 per year. Of the oversize vehicle permits issued, 73 were for vehicles over 18 feet 5 inches high, with the largest reaching nearly 37 feet high. An example of the type of oversize loads frequently transported over trunk highways are the blades, base sections and nacelles used in constructing wind turbines.

In addition to freight and building moves, other traffic on the roadway portion of trunk highways includes such activities as snowplows, which operate on both the roadway and the shoulder. Snowplows are about 13 feet tall, and when their boxes are raised to distribute sand and salt, their height can reach as high as 18 feet. The relative size of snowplows on a typical highway surface is depicted in the drawing enclosed as Attachment 1.

2. Maintenance, Repair and Operational Activities

In addition to the zone associated with vehicles traveling on a highway, there is another zone associated with maintenance and operational activities alongside the roadways. Examples of maintenance activities performed by highway workers, and the types of equipment commonly associated with those activities, include the following:

- guardrail and fence installation and repairs, using augers, loaders and skidsteers (which commonly have raised buckets for pulling posts, etc.).
- vegetation control, using mowers, bucket trucks for tree trimming, and equipment for applying herbicides.
- cleaning ditches, culverts and drains, using backhoes and excavators of various sizes that have boom arms that are used to scoop dirt and vegetation and deposit it into a dump truck that will be parked along side the highway. Mn/DOT's larger ditch dredging equipment has a horizontal reach as long as 60 feet and a vertical operating dimension of up to 47 feet.

topography, the utility may need to construct access roads or paths to get maintenance equipment to the poles, and may need to reshape the land to establish flat maintenance landings on which to position its maintenance equipment. The size of the utility's maintenance landings could require regrading the drainage slopes near the highway, tree removal, and construction of retaining structures in the highway right-of-way. If the impact in a specific location is severe, Mn/DOT may have to deny a permit for that location. Under its Utility Accommodation Policy, Mn/DOT may grant a permit despite the fact that the HVTL will have impacts on the highway, and it may require conditions that the owner of the HVTL must comply with as part of the granting of a permit."

Section 5.0 of the EIS indicates that, "Before construction can begin, the applicants must obtain all federal, state, and local approvals. They must also acquire private easement rights, complete soil testing, and finish detailed engineering and design, including determining exact pole placement locations." The proposed structure locations would be on private rights-of-way. The applicants have indicated that they do not anticipate a need to modify the slope of road rights-of-way around the base of any transmission structures nor do

- bridge inspections, using snoopers which have articulating arms that can lift a worker out over the side and then underneath the bridge structure.
- vehicular accidents on highways often require special equipment to retrieve vehicles and repair damage. For example, when large vehicles such as trucks or buses run off the road or go down large ditches or into wetlands, large equipment with booms or winches may be used to pull them out.

Occasionally there is a need for immediate medical transport from roadside locations due to accidents and illnesses. For these situations there are a number of air medical helicopters stationed throughout Minnesota that will land in the roadside environment. These aircraft require clear approach and departure paths as well as an area large enough for the helicopter to land. Given the dimensions of the helicopters used in Minnesota, an area with a diameter of 90 feet should be considered the minimum requirement for landing. There should be two approaches to this area from different directions separated by an arc of at least 90° so that the aircraft can land and take off without a tailwind. Powerlines can be a particularly difficult obstruction for helicopter landings at night. The lines themselves are nearly invisible to the pilot, who must use the presence of poles as evidence that the lines exist. Most helicopters operating in this environment have line cutters installed on the aircraft to cut powerlines they encounter. Even so, helicopter crashes occur when powerlines get entangled in their rotor system or landing gear.

Mn/DOT also maintains a number of structures alongside highways necessary for the safe and efficient operation of the highway, each of which requires periodic installation, maintenance and repair work. Examples of these structures include:

- road signs. The largest signs tend to be on freeways. Signs that extend out over the travel portion of a freeway must have 17.33 feet of clearance to the bottom of the sign, and the top of such signs can be 30.5 feet tall and may require boom trucks, bucket trucks or cranes to install or maintain such signs. Roadside guide signs along freeways can reach 13 feet tall and tend to be located as far out in the clear zone as practical.
- light posts, traffic control signals and poles for traffic monitoring cameras exist at various locations along highways, and range in height from 20 to 50 feet.
- high mast light towers are used along some freeways, and range in height from 100 to 140 feet.
- noise walls, which can be up to 20 feet high, are becoming increasingly common along freeways.

The relative size of some of these structures on a typical highway surface is depicted in the drawing enclosed as Attachment 2.

Another type of physical item located along highways is snow fences, either structural or living. Some snow fences are in the highway right-of-way, and others are placed by agreement with adjoining landowners and may be 150 feet off the highway right-of-way. Mn/DOT is usually able to work out arrangements with a utility owner regarding height and placement of vegetation used as a living snow fence in locations where a utility is placed. If living snow fences owned by Mn/DOT need to be removed or relocated to accommodate a utility placement, compensation for the removed vegetation is usually required as a condition for issuance of the permit.

3. Future Construction Activities

Mn/DOT continually evaluates the future needs for the trunk highway system and has construction projects in varying stages of development. Some have been designed and funded and are ready for construction. Others have been identified as needed or are anticipated due to development trends but have not yet been funded. The types of

they anticipate needing to construct access roads through road rights-of-way. Should a final route be approved, the applicants would be able to identify potential impacts to MN/DOT right-of-way and work with them to minimize or eliminate grade impacts around the base of structures. The applicants typical easement allows use of the ROW over private property for construction and maintenance purposes. Access to this ROW is typically gained from secondary roads which bisect the private property ROW. In the unusual case where access is required from a MN/DOT roadway the applicants would follow MN/DOT's established permitting process which provides a case by case review.

270k.

Roadway expansion is a possibility and that maintenance is an ongoing concern. The applicants would work with MN/DOT to identify planned expansion projects which would be addressed in the line design when a route is selected. The NESC specifies clearances over or near commercial vehicle operation. These clearances also accommodate maintenance and emergency needs by allowing vehicles up to 14 feet tall underneath the conductors. The applicants' design standards would greatly exceed the NESC requirements. If a route is selected

construction projects Mn/DOT performs that could impact the location of a HVTL range from relatively minor changes to the width of a highway to major reconstruction projects. Examples of such construction projects might include:

- widening a roadway by addition of travel lanes or turn lanes, installation of a roundabout, or widening a shoulder area;
- rebuilding a highway in a way that changes the location or grade of a roadway; and
- addition of an overpass or interchange on a freeway or other highway.

In addition to changes in the configuration of a highway, consideration must be given to the equipment used during the construction process. Construction projects often involve the use of large excavators and cranes similar in size to the equipment described above which Mn/DOT uses for its maintenance activities. The equipment used in bridge work is especially large, usually requiring cranes with long booms to lift material into place. The equipment used on construction projects also need to be refueled at the job site, which requires consideration of the safety precautions necessary for this procedure.

The activities associated with vehicular traffic using the roadway surface have a zone in which they typically occur. The lighter shaded area above the roadway surface in the drawing enclosed as Attachment 1 depicts the zone or area in which vehicular traffic on the roadway may operate. The zone within which the activities associated with maintenance work take place is depicted by the darker shaded area on the drawing enclosed as Attachment 3.

The drawings enclosed as Attachments 1, 2 and 3 do not depict a specific location on a specific highway. Rather, they are illustrative of the zones or areas on any given highway where transportation-related activities may take place. In addition to these zones of activities, Mn/DOT will also consider factors such as the width of the right-or-way, the topography of the land and the geometry of the roadway in a specific location when deciding whether to grant a permit to a utility to occupy a portion of the highway right-of-way in that location.

III. Brookings to Hampton Route Proposals

In applying its Utility Accommodation Policy to a permit application, Mn/DOT must evaluate each pole location individually in relation to the topography of the land, the geometry of the roadway, the width of the highway right-of-way, the design of the HVTL structures, and other factors. Given the variability of these factors and the large number of potential locations, Mn/DOT is not able to provide specific answers at this time about whether it can grant permits for the potential locations where the various route proposals intersect with highway rights-of-way. As referenced earlier, Mn/DOT's approach to the CapX2020 proposal is to work to accommodate these HVTLs within or as near as feasible to the highway rights of way, based on an evaluation of the specific locations to ensure that appropriate clearance is maintained to preserve the safety of the traveling public and highway workers and the effective operation of the highway system now and in the foreseeable future.

To the degree that specificity is possible at this stage in the process, Mn/DOT will provide additional information about a few of the locations proposed in the routes involved in the CapX2020 application.

A. Highway Crossing Locations Proposed by CapX2020

where an unusual circumstance may occur, the applicants would work with MN/DOT to make sure these circumstances would be addressed in the final line design.

270l.

The goal of scenic byway corridor management is to carefully provide the proper balance between protecting the byway's natural, historic, cultural, and recreational resources for future generations while promoting economic development opportunities for the betterment

of local government and local businesses (River Stories: A Corridor Management Plan for the Minnesota River Valley Scenic Byway). Actions that have explicitly been prohibited along scenic byways are the installation of outdoor advertising signs/devices.

The scenic byways that are applicable to this project are identified in the DEIS in the sections mentioned by the Commenter. All of the proposed routes included in the DEIS would cross both The Historic King of Trails (U.S. Highway 75) designated by the Minnesota State Legislature in 2001 and The Minnesota River National Scenic Byway. The DEIS did indicate that the proposed project has the potential to cause visual impacts,

The Applicant's preferred and alternate route proposals contain over 30 locations where the proposed HVTLs would cross over a trunk highway, as distinguished from circumstances where it would run parallel to the highway.

Highway crossings generally do not pose insurmountable difficulties in issuing a permit. Mn/DOT routinely grants such permits to a variety of types of utilities. These permits usually have conditions associated with them, such as placement of the poles so that they do not become a physical obstruction that might be struck by an errant vehicle or block the visibility of traffic. Mn/DOT also does not permit utilities to run diagonally across intersections, and prefers that crossings occur as close to right angles as possible. Under Section V.G.5 of the Utility Accommodation Policy, special handling may be required for crossings of scenic byways. Mn/DOT has a long history of working with utilities, including the members of CapX2020, to establish appropriate conditions in locations where the utility seeks to cross a trunk highway. With CapX2020, Mn/DOT does not anticipate encountering such difficulties that there would be locations where it would be unable to grant permits, with appropriate conditions, for the highway crossings proposed in this matter.

B. Locations Parallel to Highway Rights of Way Proposed by CapX2020

As proposed by CapX2020, the preferred route has four locations where the proposed HVTL would run parallel to the trunk highway rights of way. The alternate route has seven additional locations where the proposed HVTL would run parallel to the trunk highway rights of way. In addition, the draft EIS evaluates many variations of the proposed routes that were identified in the scoping process. These additional variations on the routes have nine locations where the proposed HVTLs might run parallel to a highway right-of-way.

The locations Mn/DOT has identified where CapX2020 might, depending on which route is ultimately selected, construct a HVTL that runs parallel to a trunk highway include the following:

- Preferred Route – US Highway 169. The preferred route proposed by CapX2020 would cross the Minnesota River just north of Le Sueur and then enter the US Highway 169 right-of-way near the interchange on the east side of the river. The proposed line would run on the north side of Highway 169 for about a mile and then cross the highway just south of the Minnesota River Valley Safety Rest Area and proceed through the wooded area to get to St. Thomas Road.
- Variation 4P-04 on Preferred Route – US Highway 169. Route Alternative 4P-04 runs along US Highway 169 for about 1.6 miles near Le Sueur from a point near where MN Highway 93 intersects with Highway 169 to a point where it rejoins the proposed preferred route near the interchange on the east side of the Minnesota River. Mn/DOT understands that there has been some discussion by others of the possibility of using the Highway 169 bridge as part of this route variation.
- Variation 4B-05 on Preferred Route – US Highway 169. Route Variation 4B-05 follows the preferred route until it reaches the rest area on US Highway 169 and then continues east for about 9.6 miles on Highway 169 until it reaches the point where the proposed alternate route crosses Highway 169.
- Preferred Route – MN Highway 50. As proposed by CapX2020, the preferred route would run parallel to MN Highway 50 for a little more than two miles just east of the Hampton substation location.
- Preferred Route – MN Highway 19. As proposed by CapX2020, the preferred route would run parallel to MN Highway 19 for about three miles between Gibbon and Winthrop in Sibley County.
- Variation 3P-06 on Preferred Route – MN Highway 19. Route Variation 3P-06 makes an adjustment to the preferred route that would add a segment of about one mile that would run parallel to MN Highway 19 between Marshall and Vesta in

specifically to The Minnesota River National Scenic Byway. The visual impacts however were not determined to rise to the significance of detracting from the Byways' already established intrinsic qualities or de-designation under 23 U.S.C. Sec. 162. The proposed transmission facility would not encroach upon the scenic byways in a longitudinal manner, but instead cross over the byway corridors in a perpendicular fashion. In at least two of the areas there are in fact already existing transmission lines.

In fact, the Corridor Management Plan does not identify transmission line facilities as an issue of concern in their Corridor Management Plan. An example they do provide in the plan is the use of the Hydro-Axe roadside vegetation trimming equipment which leaves the vegetation mangled and unsightly for the season. The Alliance indicates that it is working with MN/DOT to decrease the use of this equipment along the byway.

A transmission line crossing in any of these areas would not have an impact on the qualities that led to the scenic designation of the two byways and was therefore not discussed further in the DEIS. However mitigation methods in these areas could be implemented such as strategic pole placement during final design as well as landscape or vegetation design to minimize any perceived aesthetic impacts.

Redwood County. In the testimony of Craig Poorker, CapX2020 adopted this variation as a modification of their preferred route.

- Variation 4P-02 on Preferred Route – MN Highway 19. Route Variation 4P-02 makes an adjustment to the preferred route that would add a segment of about four miles that would run parallel to MN Highway 19 just west of Fairfax.
- Variation 4P-05 on Preferred Route – MN Highway 22. Route Variation 4P-05 makes an adjustment to the preferred route that would add a segment of about a half a mile that would run parallel to MN Highway 22 south of Gaylord.
- Both Preferred and Alternate Route – MN Highway 52. CapX2020 proposes to construct a new substation near US Highway 52 north of Hampton. Under the preferred route proposal, the HVTL would run alongside Highway 52 for less than a half mile south of the new substation. Under the alternate route proposal, the HVTL would continue further alongside Highway 52 to a point about 2 miles south of the new substation, where it would cross Highway 52 and head in a southwesterly direction.
- Alternate Route – I-35. The alternate route proposed by CapX2020 would join I-35 at 57th Street W. in Rice County and run north parallel to I-35 for approximately 6.75 miles to the Lake Marion substation. The proposed alignment is on the east side of I-35 for most of this segment of the route.
- Variation 5P-03 on Preferred Route – I-35. Route Variation 5P-03 makes an adjustment to the preferred route that would add a segment of about a 1.7 miles that would run parallel to I-35 from the 250th Street interchange to the Lake Marion substation. This stretch of the freeway is also part of the proposed alternate route, except it would run on the west side of I-35 rather than on the east side of I-35.
- Variation 6P-01 and Variation 6P-04 on Preferred Route – I-35. Both Route Variation 6P-01 and Route Variation 6P-04 make an adjustment to the preferred route that would add a segment of about a 2.8 miles that would run parallel to I-35 just north of the Lake Marion substation. This route would run on the west side of I-35.
- Alternate Route – MN Highway 19. The alternate route proposed by CapX2020 would run parallel to MN Highway 19 for about a mile just to the north of Lonsdale.
- Alternate Route – MN Highway 25. The alternate route proposed by CapX2020 would run parallel to MN Highway 25 for about a mile just to the west of Belle Plaine.
- Alternate Route – MN Highway 22. The alternate route proposed by CapX2020 would run parallel to MN Highway 22 for about a mile north of Gaylord.
- Alternate Route – MN Highway 19/67. The alternate route proposed by CapX2020 would run parallel to MN Highway 19/67 for about 4.5 miles west of Redwood Falls.
- Variation 1A-02 and 1A-03 on Alternate Route – MN Highway 19. Route Variation 1A-02 and Route Variation 1A-03, which are variations of the alternate route, both include a segment that would take the applicant's HVTL along MN Highway 19 for about 3.5 miles just west of Marshall.
- Alternate Route – MN Highway 68. The alternate route proposed by CapX2020 would run parallel to MN Highway 68 for about 2 miles north of Milroy.
- Alternate Route – MN Highway 23. The alternate route proposed by CapX2020 would run parallel to MN Highway 23 for about 2 miles north of Hanley Falls.
- Variation 2B-01 on Alternate Route – MN Highway 23. Route Alternative 2B-01, which is a variation of the alternate route, includes a segment of about 10.5 miles that would run along MN Highway 23 from a point west of Cottonwood to Granite Falls.

C. Additional Information of Several Specific Areas

Although Mn/DOT cannot at this time state with specificity where permits might be granted for each of the locations listed above, there are a few situations where some additional information can be provided that would assist in the development of the EIS.

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The MN/DOT has indicated that there at least two scenic easements (Scenic Area Order Number 40049) that are located within the applicants preferred route that was proposed to run along a portion of Highway 169 and St. Thomas Road in Henderson and Tyrone Townships, Le Sueur County, and were not identified in the DEIS. Because the transmission facility would have the potential to impact the visual and potentially the physical nature of the scenic easement(s), the preferred route following along Highway 169 would not likely be permittable by MN/DOT, pursuant to 23 CFR 645.209 which states, "New utility installations, including those needed for highway purposes, such as for highway lighting or to serve a weigh station, rest area or recreation area, are not permitted on highway right-of-way or other lands which are acquired or improved with Federal-aid or direct Federal highway funds and are located within or adjacent to areas of scenic enhancement and natural beauty. MN/DOT would need to carefully evaluate the conditions regarding a request for a permit and in this area and would ultimately need to grant a permit exception should the Commission issue a route permit for this specific area of the project.

1. US Highway 169

US Highway 169 near Le Sueur is a high volume Interregional Corridor. On the preferred route and route variations 4P-04 and 4B-05, the HVTL is proposed to run parallel to Highway 169 between the Minnesota River and the Minnesota River Valley Safety Rest Area. The proposed route would run through a scenic easement area located near the rest area adjacent to Highway 169. The rest area is located one mile north of Le Sueur and occupies a portion of an 8.67 acre plot of land purchased by the State for scenic purposes. See Minn. Stat. §§ 160.81 and 173.04. In addition, scenic easements extend along the highway to the west of the rest area, and along a portion of County Road 28 down the slope from the rest area. Mn/DOT located the rest area at this site to take advantage of the site's scenic qualities. The proposed route for the HVTL would run through the scenic area and between the rest area and the scenic view in the primary viewshed from the rest area lobby. It appears that removal of significant mature woodland vegetation would be required to construct the HVTL along the proposed route.

The federal regulation governing scenic easements appears to restrict Mn/DOT's ability to grant a permit to CapX2020 for this location. The regulation, 23 CFR §645.209(h), provides:

> Scenic areas. New utility installations, including those needed for highway purposes, such as for highway lighting or to serve a weigh station, rest area or recreation area, are not permitted on highway right-of-way or other lands which are acquired or improved with Federal-aid or direct Federal highway funds and are located within or adjacent to areas of scenic enhancement and natural beauty. Such areas include public park and recreational lands, wildlife and waterfowl refuges, historic sites as described in 23 U.S.C. 138, scenic strips, overlooks, rest areas and landscaped areas. The State transportation department may permit exceptions provided the following conditions are met:
>
> (1) New underground or aerial installations may be permitted only when they do not require extensive removal or alteration of trees or terrain features visible to the highway user or impair the aesthetic quality of the lands being traversed.
>
> (2) Aerial installations may be permitted only when:
>
> (i) Other locations are not available or are unusually difficult and costly, or are less desirable from the standpoint of aesthetic quality,
>
> (ii) Placement underground is not technically feasible or is unreasonably costly, and
>
> (iii) The proposed installation will be made at a location, and will employ suitable designs and materials, which give the greatest weight to the aesthetic qualities of the area being traversed. Suitable designs include, but are not limited to, self-supporting armless, single-pole construction with vertical configuration of conductors and cable.
>
> (3) For new utility installations within freeways, the provisions of paragraph (c) of this section must also be satisfied.

Mn/DOT understands that to grant a permit for this location, the conditions specified in both subparts (1) and (2) of 23 CFR §645.209(h) would need to be met. Based on its review of the scenic area, Mn/DOT has not seen a route that would not require extensive removal or alteration of trees in the scenic area. Therefore, it believes it would be unable to issue a permit in this location.

270n. Mr. David Seykora with the MnDOT verbally indicated that the DEIS should have provide more information with regards to the structural integrity of the proposed transmission poles.

Transmission line designs are governed by the National Electrical Safety Code (NESC). The NESC specifies mechanical load requirements, called load cases, for wind, ice, broken conductor, and other conditions.

The applicants, as indicated in a January 6, 2010, email response to the OES, have indicated the proposed CapX2020 design standards are even greater than the NESC requirements. The applicants provide that their requirements are different for different geographic areas and are based on a 200 year occurrence rate; the NESC occurrence rate is 50 years. For example, southern Minnesota is more prone to icing conditions than northern Minnesota. The thicker radial ice results in greater mechanical load on the conductors and structures. Therefore, NESC requires that the conductors be capable of withstanding ice loading in the south of 1 inch of radial ice versus 0.5 inch of radial ice in the north. Wind also creates a mechanical load on structures and conductors. NESC establishes guidelines based on a high wind case that assumes 103 mph winds (tornado strength) and the resulting mechanical load to structures and conductors. Also, since 345

Also relating to US Highway 169, Mn/DOT understands that there has been some discussion of the possibility of using the Highway 169 bridge as part of this route variation. Attaching a high voltage line of the size involved in this proposal would fall outside Mn/DOT's Utility Accommodation Policy. Section VII.A.12 of the Policy addresses high voltage transmission lines attached to bridge structures and states that installations of greater than 35 kV are not permitted except in extraordinary circumstances. Mn/DOT has concerns about the safety of attaching a 345 kV line to the bridge structure and has no data to show that the applicants could satisfy the criteria for obtaining an exception to the Policy.

If the HVTL were located adjacent to the bridge, sufficient clearance would need to be maintained to enable workers on bridge inspection units, known as "snoopers," to safely perform their work. Snoopers have arms with two articulation points that swing out over the side of a bridge and enable the workers to closely inspect the underside of the bridge. Snooper arms require 50 feet of clearance from the side of the bridge to perform their job. Any energized transmission lines would need to be located far enough from the side of the bridge to give the workers sufficient clearance to perform their work safely.

2. US Highway 52

US Highway 52 is an Interregional Corridor connecting the Twin Cities to the high growth area of Rochester, and it carries high volumes of traffic. Segments of Highway 52 have been reconstructed to convert portions of the highway to controlled access freeway standards. The pace of development along this Interregional Corridor has led to calls to upgrade the highway to improve the safety and capacity of the highway. Although an upgrade of the entire corridor to freeway standards is not in Mn/DOT's 10-year planning horizon, the upgrade of portions of Highway 52 to controlled access freeway standards is expected to continue. Due to the anticipated growth of this Interregional Corridor, Mn/DOT prefers that any utility crossings or longitudinal placements meet freeway standards so that future roadway upgrades are not constrained and that the HVTL lines do not need to be relocated to accommodate a highway construction project.

In the Hampton area, a frontage road/access closure project is being planned for fiscal years 2011/2102 to transition this segment to a controlled access area. This work is being coordinated with Dakota County's construction of ramps and loops at the existing overpass of CSAH 47, thus converting the overpass to a full interchange at this location. Any HVTL poles would need to be placed outside the area of the new interchange.

3. Highway I-35

The alternate route proposed by CapX2020 would run for approximately 6.75 miles along I-35 from 57th Street W. in Rice County to the Lake Marion substation. The proposed alignment is on the east side of I-35 for most of this segment of the route. Much of the right-of-way owned by Mn/DOT on the east side of I-35 and south of the interchange at 250th Street is about 130 feet from the centerline of the northbound roadway in this area. The terrain has rolling hills, and in many locations the ground is higher than the roadway surface. In locations where the right-of-way is relatively wide and there is high ground running along the freeway, Mn/DOT anticipates that it would be able to accommodate placement of the HVTL poles within a few feet of its right-of-way boundary. Along the segment of the freeway north of the 250th Street interchange to the Lake Marion substation, the right-of-way extends about 100 feet from the centerline of the northbound roadway, and the ground at the right-of-way line is frequently lower than the roadway surface. In circumstances such as these, it appears that the utility poles would need to be located some distance away from the right-of-way boundary. The distance would depend on the configuration of the HVTL poles as well as the topography of the area and the width of the right-of-way.

kV transmission lines tend to be the backbone of most transmission systems, electric utilities place higher reliability requirements, such as using steel structures, on 345 kV lines.

These NESC and CapX2020 requirements are taken into account during the design phase. Calculations with several combinations of wind and ice load cases are made, the worst case is determined and the facilities are designed to withstand that worst case scenario. Often times that worst case may be a combination of wind and ice loading.

The incidence of mechanical failure of transmission line facilities is extremely rare. For example, GRE has a 345 kV transmission line of similar design which crosses I94 in Maple Grove and runs parallel in or near the Highway 610 right of way. This line has not had a failure since it was built in 1977.

In the unlikely situation that a conductor were to fail, protective relaying is in place to automatically and essentially instantaneously turn the transmission line off. The protective relaying has back-up systems to further enhance the reliability. Testing and maintenance of protective relaying and other systems are required by NERC. NERC has established strict audit processes to ensure a high level of system reliability.

The New Market Safety Rest Area is located on the west side of I-35 near the midpoint of this segment. Mn/DOT would not be able to grant a permit to run through the rest area if an alignment on the west side of the freeway were being proposed. An alignment on the east side of I-35, however, would not impinge on the operation of this rest area. Therefore, the same considerations would apply in this location as in other portions of the proposed route along I-35.

There is an interchange on I-35 at 260th Street E. Mn/DOT would not grant permits to run through the middle of an interchange such as this. Rather, the HVTL would need to be located outside the exit and entrance ramps. There are light poles located in this interchange. With a bridge crossing the interstate freeway at this location, considerations of the type of equipment needed to inspect, repair and rebuild bridges are applicable to this area.

4. Other Highway Locations

Mn/DOT's letter of April 30, 2009 identified several locations where projects such as resurfacing are being planned on the locations identified in the routes proposed by the applicants. As construction plans get updated, similar projects could be added in the future to these locations as well as the locations added as variations in the draft EIS. In addition, Mn/DOT's right-of-way has varying widths in these locations. Depending on the configuration of the poles, the proximity of the poles to the right-of-way boundary, the topography of the location, and whether other utilities have already been placed in a proposed location, the HVTL could impact construction projects, travel on the highway, or maintenance operations in the ditch. Mn/DOT anticipates working closely with the applicants to determine the locations where the HVTL lines can be accommodated along highway rights-of-way. Mn/DOT will be guided by the key considerations of (1) whether the safety of the traveling public or highway workers would be compromised, and (2) whether a particular location would compromise future plans for highway construction, maintenance or repair.

III. Specific Comments on Matters Discussed in Draft EIS

270a Throughout the draft EIS, the document uses the word "minimizing" to refer to impact of the HVTL and the word "sharing" to refer to the relationship of the HVTL right-of-way to other rights-of-way that may exist. We suggest alternate terminology would better reflect the dynamics of each situation. Where the draft EIS uses the term "minimizing" to describe the process of balancing the interests involved, we believe the term "limiting" such impacts would more accurately reflect the result of balancing the competing land use, human settlement and environmental interests.

270b Where the draft EIS uses the term "sharing" to refer to using a portion of a highway right-of-way, we believe the term "occupying" more accurately reflects the reality of the situation. As discussed earlier in these comments, the rights-of-way managed by Mn/DOT have been acquired for and dedicated to highway purposes. The state and federal governments have made significant investments to acquire and maintain highway rights-of-way. When a utility such as a HVTL obtains a permit from Mn/DOT to use a portion of a highway right of way, the presence of that utility limits or prevents the area so occupied from being used for other purposes. For example, the occupation of an area by a utility under a permit granted by Mn/DOT may hinder or prevent Mn/DOT from adding a lane or an interchange near that location. The term "sharing" of existing rights-of-way implicitly suggests that there is no cost or impacts associated with such a placement of a HVTL. The reality is that there are costs incurred in each such circumstance.

Nevertheless, if there is a failure, a transmission line should be considered energized and 911 should be called immediately. Emergency Responders will secure the location then call the electric utility and MN/DOT, as needed. Utilities will respond promptly to restore service as soon as possible.

270c Section 1.0, Summary: The draft EIS notes that a variety of issues that are critical to a final route decision were evaluated. Mn/DOT believes the list of factors evaluated should be amended to include impacts on the transportation system as one of the issues to be considered.

270d Section 4.4, Right-of-Way Requirements: On page 4-3, the draft EIS states: "When the transmission line parallels roads, railroads, or other transmission lines, a less wide ROW is needed." This statement should be revised to more accurately describe the full dynamics of the situation. An HVTL that runs parallel to a road or railroad will still occupy the same amount of right-of-way. The right-of-way needed by the transmission line may be acquired from a transportation landowner, and the owner of the transmission line may incur lower cost by using an existing right-of-way, but the impacts on the owner of the existing transportation right-of-way can be as significant as the impacts on other landowners along the route. The terminology in this section tends to overlook the impacts of the proposed HVTL route on the owners of existing rights-of-way rather than identifying and evaluating those impacts in the same manner as other potential land use, human settlement and environmental impacts.

The discussion in Section 4.4 of the draft EIS about Mn/DOT's Utility Accommodation Policy raises the question of what circumstances constitute an occupation of a highway right-of-way that triggers the requirement to obtain a permit from Mn/DOT. The answer is readily apparent when a pole is proposed to be installed entirely inside the highway right-of-way boundary. Likewise, it is apparent that a davit arm of a pole that extends out over the highway right-of-way occupies a portion of the right-of-way even if the pole itself is a few feet outside the boundary. In circumstances involving a freeway, concurrence by the FHWA would be required prior to issuance of a permit for these types of installations.

270e The third situation, one which received much discussion by CapX2020, OES and Mn/DOT, is whether lines that sway in the wind (known as "blowout") and occupy air space within the highway right-of-way on an intermittent basis, require a permit from Mn/DOT. Page 4.4 of the draft EIS contains the statement: "Any placement within 75 feet of the trunk highway or interstate ROW would require a permit from the DOT." Mn/DOT agrees with this statement, which recognizes that the intermittent occupation of highway right-of-way associated with blowout of HVTLs does require a permit.

While a permit is required for such a circumstance, Mn/DOT intends to apply its policy in a prudent manner consistent with the approach described earlier in these comments. Mn/DOT understands from discussions with CapX2020 that some HVTL design adjustments may be possible in some circumstances that would minimize the amount of blowout or mitigate its impact on highway operations. Mn/DOT anticipates that it and CapX2020 will evaluate the proposed location for each pole in close proximity to a trunk highway along the designated route to determine where the blowout of the lines over highway right-of-way may occur, and where it may be feasible for Mn/DOT to issue a permit to accommodate such blowout on the highway right-of-way.

Section 4.5, Design Options to Accommodate Future Expansion: The draft EIS notes that portions of the 345 kV transmission line will be constructed using double-circuit capable poles, but with only one circuit initially installed. The reason for installing double-circuit capable poles is to facilitate stringing a second circuit when conditions justify a second circuit in the future. Given the expectation that a second circuit will eventually need to be installed, the poles should be evaluated as if they were to be constructed as double-circuited when considering the potential impact on transportation functions of a highway.

270f That is, when evaluating the proximity of the energized line to the highway operations, both circuits should be evaluated even if only the line on the opposite side of the pole from the highway right-of-way will initially be constructed.

270g

Section 4.7, Aerial Crossing of River: As discussed earlier, attaching a high voltage line of the size involved in this proposal to the Highway 169 bridge at Le Sueur would fall outside Mn/DOT's Utility Accommodation Policy. Section VII.A.12 of the Policy addresses high voltage transmission lines attached to bridge structures and states that installations of greater than 35 kV are not permitted except in extraordinary circumstances. Mn/DOT has concerns about the safety of attaching a 345 kV line to the bridge structure and has no data to show that the applicants could satisfy the criteria for obtaining an exception to the Policy.

270h

Section 6.1.5, Tree Groves/Windbreaks: One of the functions of vegetation planted as a windbreak is to serve as a living snow fence. Off-road plantings help trap snow as it blows across fields, piling it up before it reaches a road. Depending on the location of the transmission line, it could have an impact on the size, placement and function of living snow fences. It would be useful to note the height of vegetation that would be permitted to remain in the HVTL right-of-way.

270i

Section 6.2.3, Induced Voltage/Current: The draft EIS notes the possibility of fuel ignition if vehicles are refueled under a power line. During highway construction and maintenance projects, Mn/DOT frequently refuels vehicles in the field. In addition, accidents in which vehicles carrying large amounts of fuel go far off the roadway into ditches are not uncommon. Some such incidents involve spillage of large amounts of fuel. The EIS should provide more information about the nature and extent of dangers associated with fuels near high voltage transmission lines.

270j

Section 6.9.1, Roadways: Table 6.9.1 lists "No" permanent impacts to road infrastructure. As discussed above, depending on the placement of the HVTL the aerial location of the wires could have a permanent impact on the use of a highway. Additional impact on a highway may occur around the base of the HVTL poles. In areas where the elevation of the roadway is significantly different than the surrounding topography, the utility may need to construct access roads or paths to get maintenance equipment to the poles, and may need to reshape the land to establish flat maintenance landings on which to position its maintenance equipment. The size of the utility's maintenance landings could require regrading the drainage slopes near the highway, tree removal, and construction of retaining structures in the highway right-of-way. If the impact in a specific location is severe, Mn/DOT may have to deny a permit for that location. Under its Utility Accommodation Policy, Mn/DOT may grant a permit despite the fact that the HVTL will have impacts on the highway, and it may require conditions that the owner of the HVTL must comply with as part of the granting of a permit.

270k

Section 6.9.1 includes some discussion of roadway expansion plans and safety requirements as impacts on the highway system. The section should also address the topics of maintenance and repair activities and oversize loads/freight and commercial vehicle operations, which are discussed above in these comments.

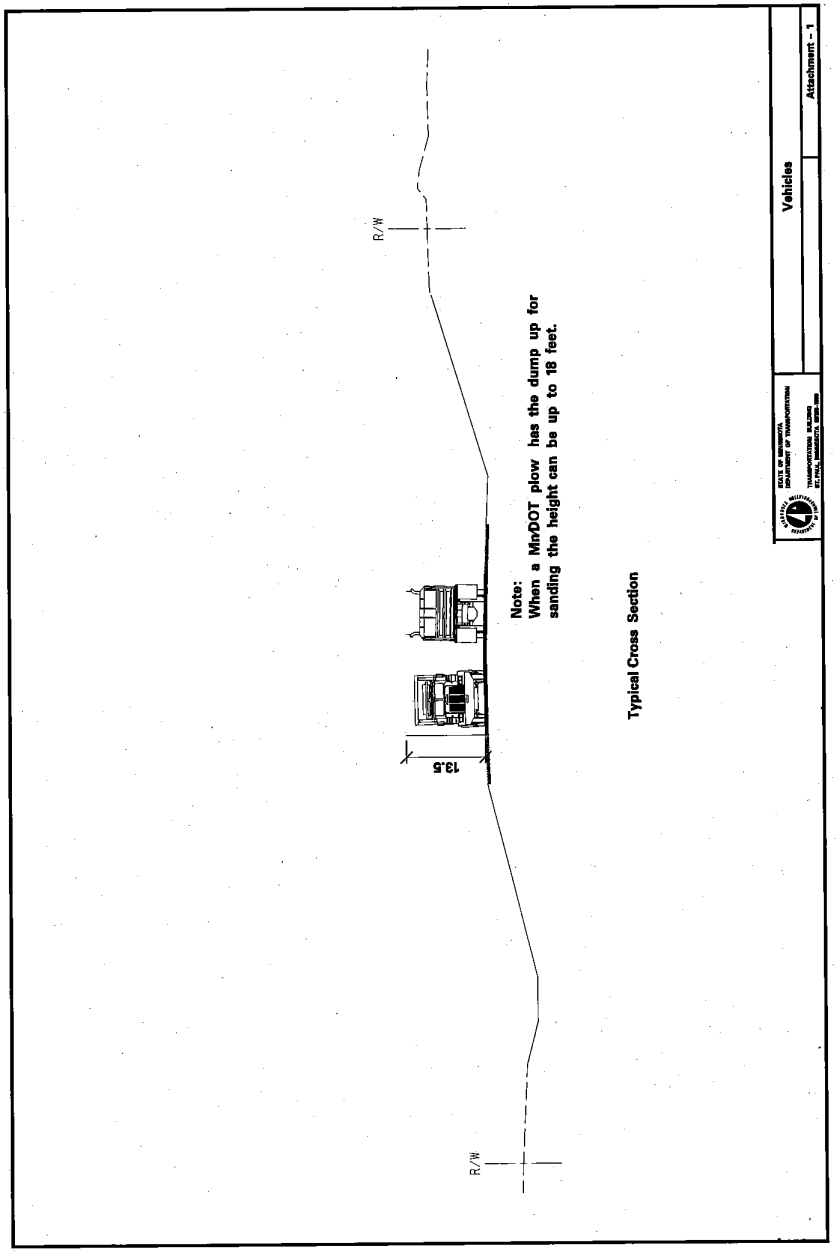
270l

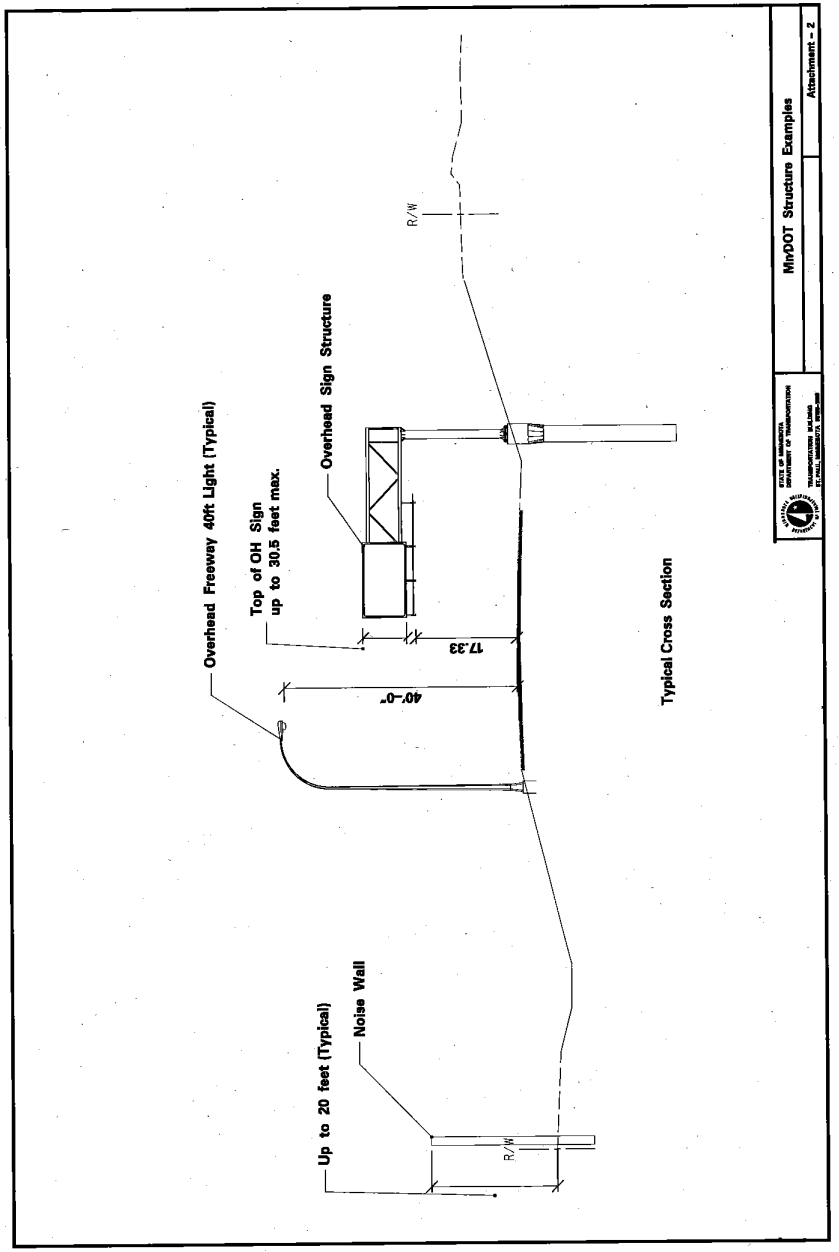
Section 6.10, Recreation: The paragraph on River Crossings/Scenic Byways mentions the Minnesota River Valley National Scenic Byway. The project also crosses and will have visual impacts on another scenic byway, the Highway 75 – King of Trails Minnesota Scenic Byway near Ivanhoe. The impact on Highway 75 – King of Trails Scenic Byway is noted in Section 7.1.4.10 on page 7-19 of the draft EIS. Mn/DOT had anticipated that Sections 7.1.4.10 and 7.3.4.10 of the draft EIS would provide information about a dialogue with the groups that sponsored these scenic byways about the impact that a HTVL crossing may have on the factors that led to the highway's designation as a scenic byway, and the potential for minimizing the impact on the scenic byways.

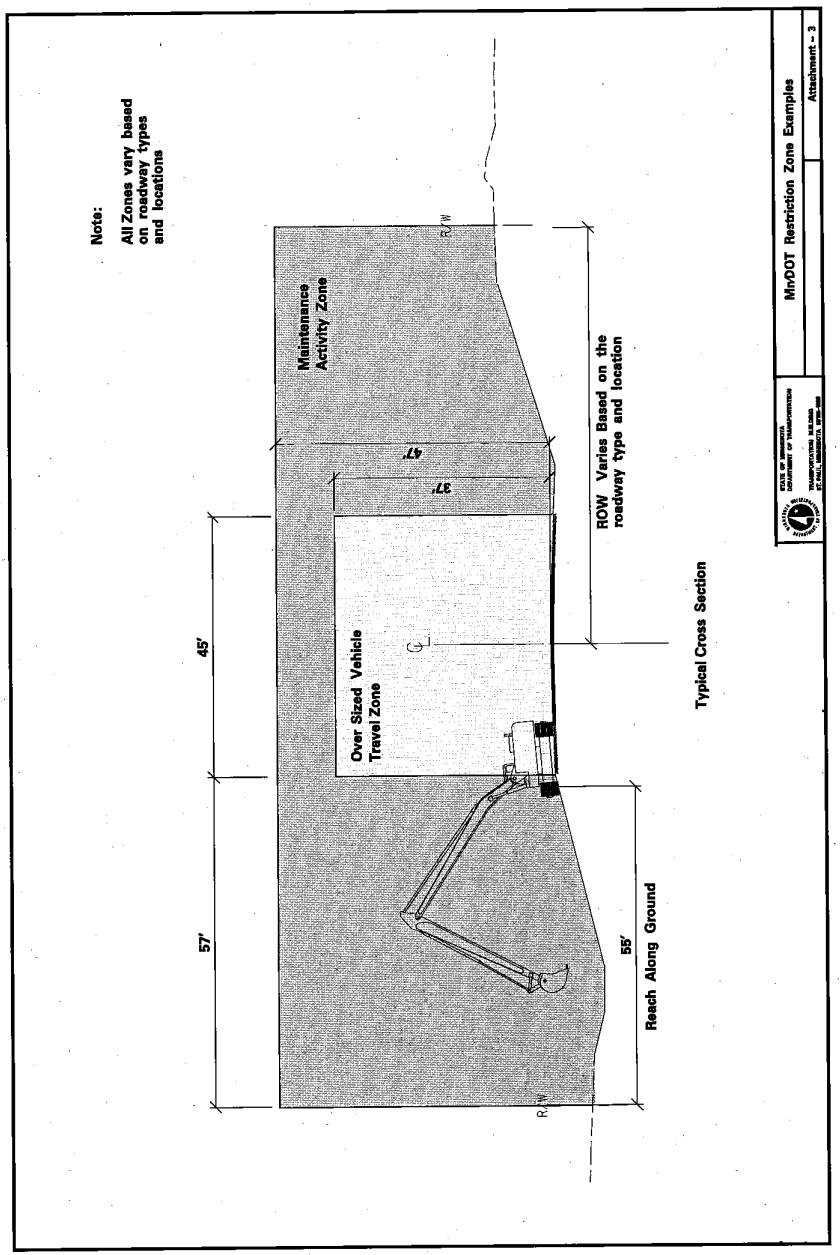
Sections 7.1.4.9, 7.2.4.9, 7.3.4.9, 7.4.4.9, 7.5.4.9 and 7.6.4.9: These sections address anticipated impacts to the transportation system and state that impacts to roads are expected to be limited to the temporary impacts associated with HVTL construction

activities. As discussed elsewhere in these comments, depending on the width of the highway right-of-way and the proximity of the HVTL to the roadway, there could be permanent impacts on the highway system associated with the HVTL's occupation of a portion of a highway right-of-way. Mn/DOT has been working with CapX2020 to identify the nature, extent and locations of those impacts in an effort to find ways to limit or avoid those impacts. The EIS should recognize the existence and nature of impacts discussed in these comments.

270m Sections 7.4.4.7 and 7.4.4.9: These sections should include discussion of the scenic easement along US Highway 169.


R/W
13.5
Note:
When a MnDOT plow has the dump up for
sanding the height can be up to 18 feet.
Typical Cross Section
Vehicles
Attachment – 1


MnDOT Structure Examples
Attachment – 2
Typical Cross Section
Overhead Freeway 40ft Light (Typical)
Top of OH Sign
up to 30.5 feet max.
Overhead Sign Structure
R/W
17.33
40'-0"
Up to 20 feet (Typical)
Noise Wall
R/W


Note:
All Zones vary based on roadway types and locations
Maintenance Activity Zone
R/W
47'
37'
ROW Varies Based on the roadway type and location
Over Sized Vehicle Travel Zone
45'
57'
55'
Reach Along Ground
R/W
Typical Cross Section
MnDOT Restriction Zone Examples
Attachment – 3

Minnesota Pollution Control Agency
520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-675-3843 | 651-282-5332 TTY | www.pca.state.mn.us

November 25, 2009

RECEIVED
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MAILROOM

Mr. Scott Ek
Project Manager
Minnesota Office of Energy Security
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Brookings to Hampton 345 kV Transmission Line Project
Draft Environmental Impact Statement (EIS)
Docket Number: ET2/TL-08-1474

Dear Mr. Ek:

Thank you for the opportunity to review and comment on Brookings to Hampton, a proposed 345 kV transmission line project. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA has the following comments to provide at this time.

- A National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit is required from the MPCA prior to construction, and was noted as being reissued on August 1, 2008, in Section 6.11.5 of the Draft EIS. Also, all preferred, alternative and variations on a route are analyzed in concurrent sections for potential impact to waterways. Information regarding the MPCA's Construction Stormwater Program can be found on the MPCA's Web site at: http://www.pca.state.mn.us/water/stormwater/stormwater-c.html.

271a

- Sophisticated maps were provided that greatly benefitted review; however, it is noted that impaired waters were not listed on these maps. The MPCA suggests that the 2008 303(d) Total Maximum Daily Load (TMDL) List of Impaired Waters (found at the MPCA Web site at http://www.pca.state.mn.us/water/tmdl/tmdl-303dlist.html) be included on these maps. Impairments will dictate additional increased stormwater treatment both during construction and require additional increased permanent treatment post construction. Having these listed on the maps would greatly benefit review. As the proposer is aware, any project that will result in over 50 acres of disturbed area and has a discharge point within one mile of impaired water is required to submit their Stormwater Pollution Prevention Plan to the MPCA for a review at least 30 days prior to the commencement of land disturbing activities. The MPCA encourages the project proposer to contact staff at preliminary points to avoid this situation.

- Based on this project's need to obtain a United States Army Corp of Engineers Section 404 Permit and the project's proximity to impaired waters, this project may also require a Clean Water Act Section 401 Water Quality Certification or waiver from the MPCA to verify compliance with state water quality standards. For further information about the 401 Water Quality Certification process, please contact Kevin Molloy at 651-757-2577.

271a.

While the DEIS does not include maps showing waters included in the Total Maximum Daily Load (TMDL) List of Impaired Waters, Section 6.1.1 (Water Resources) of the DEIS does addresses the List of Impaired Waters in Minnesota. Should a route be permitted and prior to construction of the transmission facilities, the applicants would need to review the List of Impaired Waters and consult with the MPCA on the need for and requirements of a NPDES permit. Section 6.11.5 further explains that, "The construction stormwater permit [NPDES permit] requires the preparation of a project specific pollution prevention plan that identifies controls and practices that would be implemented during construction to prevent erosion and sediment from impacting surface waters. In addition, when construction projects are located near (within one mile) certain protected waters, such as trout streams or waters that have been designated as impaired, additional precautions, erosion controls and sediment removal practices would be required." This would likely also be a condition of a route permit, if issued.

Mr. Scott Ek
November 25, 2009
Page 2

271b Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this project, please contact Elise Doucette of my staff by e-mail at elise.doucette@state.mn.us or by telephone at 651-757-2316.

Sincerely,

Craig Affeldt

Craig Affeldt
Supervisor
Environmental Review and Feedlot Section
Regional Division

CA/EMD:mbo

271b.

Section 8.0 of the DEIS lists the permits and approvals that may be required for the proposed project, should a route permit be issued. The list includes the mention of the Section 404 Clean Water Act Permit and the Section 401 Clean Water Act, Water Quality Certification.

United States Department of the Interior

U.S. FISH & WILDLIFE SERVICE
Twin Cities Ecological Services Field Office
4101 American Blvd E.
Bloomington, MN 55425

IN REPLY REFER TO
FWS/TCFO

November 30, 2009

Mr. Scott Ek
Minnesota Office of Energy Security
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

Dear Mr. Ek:

The U.S. Fish & Wildlife Service (FWS) has reviewed the October 2009 Draft Environmental Impact Statement (DEIS) for the Brookings County – Hampton 345 kV Transmission Line Project (Project). This letter is provided as the consolidated response of the FWS Twin Cities Ecological Services Field Office and the Minnesota Valley National Wildlife Refuge and Wetland Management District (Refuge). Our comments are based upon the information found within the DEIS or are provided to add additional support for key topics. These comments have been made with continued emphasis on preserving large wetland and lake complexes, avoiding new aerial transmission line crossing sites over the Minnesota River and minimizing impacts to permanently protected lands for the purpose of preserving corridors and habitats for migratory birds and eagles. General comment topics provided for inclusion in the final EIS are: cumulative impacts, locally specific climatic conditions, Minnesota River crossing methods, repayment rates for the estimated cost of non-aerial Minnesota River crossing, comparison of the connector routes and clarification of previously provided FWS material and labeling.

Several items were found within the DEIS which require further clarification and rewording for accuracy. These items have been listed in order reflecting how they occur within the DEIS. Comments are as follows:

272a
- Page 4-6 of Section 4.6 contains discussion on maintenance intervals. For the estimated life of the Project, or an appropriate interval for meaningful comparison, what is the maintenance interval and costs of an aerial verses underground transmission line configuration?

272b
- Pages 4-5 and 4-6 of Sections 4.6 and 4.7 present much information on river crossing methods such as aerial, non-aerial (submarine cable, trenching and directional boring) and line attachment to bridge structures. These crossing methods all have notable degrees of environmental impact, permitting requirements and cost estimates. To fully develop this section, cost estimates for attaching additional support structures to the Highway 169 Bridge or constructing self supporting piers directly adjacent to the Highway 169 Bridge should be provided. An additional table with this new information

272a.

The applicants indicate that for 345 kV aerial transmission lines NERC requires annual ground line inspection. GRE also performs monthly inspections via aircraft. Total annual cost of inspections and maintenance for aerial lines is $300 to $500 per mile. For underground lines a monthly inspection of termination locations are typical. Annual inspection cost is similar to aerial, $300 to $500 per mile. Maintenance is most often associated with a cable or termination failure.

272b.

In addition to discussing underground crossing options of the Minnesota River in this area, Section 4.7 (Aerial Crossing of River) also discusses the possibility of an aerial crossing and states, "One proposed option for crossing the Minnesota River near Le Sueur is installation of the transmission line on the Highway 169 bridge. The MN/DOT's Utility Accommodation Policy includes policies and procedures for the installation of utilities on highway bridge structures. However, placement on the Highway 169 bridge does not appear to be possible."

Constructing self-supporting piers adjacent to the Highway 169 bridge would create

Project Manager, Scott Ek

combined with that already found within the section to outline repayment rates over time would be helpful.

272c

- Page 6-18 section 6.10 should also list FWS managed Waterfowl Production Areas (WPAs) and Refuge lands. Refuge lands provide six wildlife-dependent public uses including hunting, fishing, wildlife observation and photography and environmental education and interpretation. These six "priority public uses" are outlined in the 1997 National Wildlife Refuge System Improvement Act. The section should also describe in separate boxes; "What is a Waterfowl Production Area?" and "What are Refuge Lands?" WPAs and Refuge lands are scattered throughout the Project area as outlined in the DEIS maps.

272d

- Page 6-21 of Section 6.11.3 identifies the Le Sueur Treatment Pond Crossing. It is our understanding that this facility will soon be retired. The DEIS does not mention the likely plans for the facility when it is retired. Future use of the treatment ponds as wildlife habitat will not be mutually compatible within an aerial transmission line corridor. Regardless of whether this area has been defined as a disturbance corridor, it provides significant habitat to nesting and migrating songbirds, raptors, and waterfowl- all of which are protected under the Migratory Bird Treaty Act.

272e

- Pages 6-24 and 6-25 of Section 6.12.2.2 discusses in some detail impacts to migratory birds related to aerial transmission lines. This section also should assess impacts to nocturnal migratory species, impacts to migratory birds and bald eagles as a result of local climatic conditions found within riverine corridors such as fog, and impacts resulting from placing transmission lines above tree canopy height within woodland habitat which is shown to increase the number of bird strikes.

272f

- Page 6-26 of Section 6.12.2.2 references the four north-south examples for connection routes between the Proposed and Alternative route corridors located between the Cedar Mountain Substation and the Helena Substation. The "USFWS/MnDNR Route" should be renamed to "Example 4" throughout the DEIS. While this corridor has been derived from comments from these two agencies, the specific route was proposed by the Applicant. Identifying the route as a USFWS/MnDNR alternative will be misinterpreted by the public as a specific route proposed by these two agencies.

- Map 7.4-24E on page 7-122 labels land outlined by polygons as "National Wildlife Refuge." Most polygons labeled as such are in fact portions of the Refuge's Expansion Boundary and currently are not owned in fee title by the FWS, as this map suggests. The Mission of the Refuge is to restore and manage the ecological communities of the Lower

significantly more issues to the riverine area when compared to an overhead lines, undergrounding options, or selection of an alternate route. Self-supporting piers would entail far greater construction related impacts when compared to an aerial crossing, such as disturbing the riverbed and aquatic vegetation which in turn could impact water quality and aquatic organisms. The river is assumed to be approximately 250 feet wide based aerial photos. Piers would be located approximately 25 feet apart for each of the four pipes. Thus, about 40 footings would be placed in the river. In addition, vehicles, equipment, and materials to construct such a crossing would likely impact the surrounding environment more than the equipment required for installation of overhead lines. This method effectively trades the cost of boring for the cost of self supporting structures making the total estimated cost of either method $400M. There are many factors that make a self-supported transmission line crossing of the Minnesota River in this area far less superior than the identified alternatives.

272c.

This comment refers to the style of the document and not to substance of the DEIS. Section 6.12 of the DEIS discusses WPAs and specifically

Project Manager, Scott Ek

3

272g Minnesota River Valley and its watershed while providing environmental education and wildlife dependent recreation. The Refuge is currently realigning Expansion Boundaries and already manages lands upstream of the proposed Belle Plaine crossing site; these lands are not represented on the DEIS maps. Lands within Sibley, Le Sueur, Scott, Rice and Dakota Counties are potential expansion zones for the Minnesota Valley National Wildlife Refuge or Minnesota Valley Wetland Management District.

272h Under Environmental Review Rules (2008 Environmental Quality Board), the Responsible Governmental Unit (RGU) is obligated to consider cumulative potential effects from other projects. No discussion has been presented in the DEIS about the potential cumulative effects from other projects to the environment in addition to this project.

We appreciate the opportunity to comment and look forward to working with you in the future. If you have questions regarding our comments, please call Tony Sullins of the Twin Cites Field Office at or (612) 725-3548 Charlie Blair of Minnesota Valley National Wildlife Refuge at (952) 854-5900 and Chris Trosen for the location of FWS managed lands upstream of the potential Belle Plaine Crossing.

Sincerely,

For Tony Sullins
Field Supervisor
Twin Cities ES Field Office

Charles Blair
Refuge Manager
Minnesota Valley National Wildlife Refuge

CC: Randall Doneen, Minnesota Department of Natural Resources
Craig Poorker, Great River Energy

indicates that, "WPAs are managed to promote waterfowl populations and to conserve ecologically and recreationally valuable wetlands and lakes." In addition, Section 7.1 to 7.6 contain figures indicating the number of WPAs located at different distances from the various proposed alignment for each segment, as applicable.

272d.

Although plans exist, retirement has not been identified. It is further not known how the ponds will be decommissioned and what the future use of the area will be. This will be determined in part by requirements of the MPCA. Installation of the transmission system would precede possible retirement. The DEIS was unable to comment on such future use as it has not been developed.

272e.

Section 6.2.12 (Impacts to Wildlife) goes into great detail explaining the mitigation methods the applicants would be required employ to avoid avian collision with the proposed transmission facilities, particularly in this area of the proposed route.

Also, on April 19, 2002, Xcel Energy and the USFWS entered into a Memorandum of Understanding (MOU) to establish procedures and policies to be employed by the Company's operating companies and the Service in dealing with migratory birds that may be present injured or killed on the Company's property. Although Xcel Energy may not ultimately own this transmission line, they are one of the listed applicants for the route permit.

Additionally, fog reduces visibility in general and typically has been determined to cause birds to descend to the ground and cease migration. (<http://nationalzoo.si.edu/ConservationAndScience/MigratoryBirds/Fact_Sheets/default.cfm?fxsht=9>).

272f.

A meeting was held with representatives of the applicants, OES, USFWS, and DNR on October 5, 2009, specifically to discuss the potential of connecting the preferred and alternate routes west of the lower Minnesota River due to concerns regarding riverine corridors. The routes depicted in Appendix G of the DEIS describe and evaluate potential north-south connector routes including the USFWS/MnDNR route discussed at the October 5, 2009 meeting.

The route that was identified as the USFWS/MnDNR alternative route was not indented to imply any agency preference for the route, rather the origin. The purpose of the connectors was to allow for greater flexibility in selecting a route and river crossing location posing the least all around impacts. The connector examples were selected from routes previously evaluated by the applicants in their RPA along with the USFWS/MnDNR route modified per their comments.

272g.

Detailed Map Sheets CH61 and CH62A in Appendix A of the DEIS show the boundaries of the National Wildlife Refuge in that area above the Belle Plaine crossing.

272h.

When preparing an EIS for a HVTL, the OES does not follow Chapter 4410 (Environmental Quality Board Rules). Route permit applications for high voltage transmission lines are subject to environmental review in accordance with Minnesota Rules 7850.1000 to 7850.55600. The OES is responsible for completing an EIS for high-voltage transmission lines pursuant to Minn. R. 7850.2500.

During the scoping period for the DEIS potential projects as defined by local government and state agencies were included and addressed in the DEIS. As for future transmission line projects the DEIS did consider and evaluate potential impacts and mitigation for a second 345 kV circuit that may be strung within certain segments of this proposed project.