Brookings County - Hampton
345 kV Transmission Line Project
PUC Docket No. ET2/TL-08-1474

Appendix D
Agricultural Impact Mitigation Plan

The applicants have worked with the Minnesota Department of Agriculture (MDA) to prepare an Agricultural Impact Mitigation Plan (AIMP). The plan outlines actions that will be taken during construction and maintenance of the transmission line in order to minimize and/or ameliorate impacts to agricultural operations along the line, including organic agricultural operations. During the public comment period on the Draft Environmental Impact Statement (DEIS) MDA submitted a comment requesting that the AIMP document be included in the Final Environmental Impact Statement. In response to this comment, the AIMP has been included as Appendix D to the FEIS.

AGRICULTURAL IMPACT MITIGATION PLAN

CapX2020 345 kV Electric Transmission Projects in Minnesota

CapX2020

June 2009

AGRICULTURAL IMPACT MITIGATION PLAN

CapX2020

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AGRICULTURAL IMPACT MITIGATION PLAN

CapX2020

Purpose

This Agricultural Impact Mitigation Plan ("AIMP" or 'the plan') was developed by Northern States Power Company, a Minnesota corporation and wholly-owned subsidiary of Xcel Energy Inc., and Great River Energy, a Minnesota generation and transmission cooperative (together, referred to as "the Utilities"), representing the CapX2020 utility consortium and with the Minnesota Department of Agriculture ("MDA"). The overall objective of this AIMP is to identify measures the Utilities will take to avoid, mitigate, repair and/or provide compensation for impacts that may result from 345 kV electric transmission line construction of the CapX2020 projects on Agricultural Land in Minnesota.

CapX2020 ("CapX2020") is a joint initiative of 11 transmission-owning utilities in Minnesota and the surrounding region. The purpose of CapX2020 is to study, develop, permit and construct electric transmission infrastructure as needed to implement long-term and cost-effective solutions for customers to meet the growth in energy use expected by the year 2020. The three CapX2020 projects included in this AIMP are described as:

1) the 345 kV transmission line from Brookings County, South Dakota to Hampton, Minnesota;

2) the 345 kV transmission line from Monticello, Minnesota to St. Cloud to the Fargo area, North Dakota; and

3) the 345 kV transmission line from Hampton, Minnesota to Rochester to La Crosse, Wisconsin.

Collectively, these three transmission lines are referred to as the "CapX2020 Projects".

The construction standards and policies in this plan apply only to construction activities occurring partially or wholly on privately owned Agricultural Land. The measures do not apply to construction activities occurring entirely on public rights-of-way, railroad rights-of-way, publicly owned land, or private land that is not Agricultural Land. The Utilities will, however, adhere to the same construction standards relating to the repair of agricultural tile (Item No. 3 in the AIMP) when Tiles are encountered on public highway rights-of-way, railroad rights-of-way, or publicly or privately owned land.

Appendix B of this AIMP applies only to Organic Agricultural Land as described in the National Organic Program Rules, 7 CFR Parts 205.100, 205.202, and 205.101.

Unless the Easement or other agreement, regardless of nature, between the Utilities and the Landowner or Tenant specifically provides to the contrary, the mitigative actions specified in the construction standards and policies set forth in this AIMP will be implemented in accordance with the General Provisions.

General Provisions

The mitigative actions are subject to change by Landowners or Tenants, provided such changes are negotiated with and acceptable to the Utilities.

Certain provisions of this AIMP require the Utilities to consult with the Landowner and Tenant of a property. The Utilities will engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases.

Unless otherwise specified, the Utilities will retain qualified contractors to execute mitigative actions. However, the Utilities may negotiate with Landowners or Tenants to carry out the mitigative actions that Landowners or Tenants wish to perform themselves.

Mitigative actions employed by the Utilities pursuant to this AIMP, unless otherwise specified in this AIMP or in an Easement or other agreement negotiated with an individual Landowner or Tenant, will be implemented within 45 days following completion of Final Clean-up on an affected property, weather permitting, or unless otherwise delayed by mutual agreement between Landowner or Tenant and Utility. Temporary repairs will be made by the Utilities during construction as needed to minimize the risk of additional property damage or interference with the Landowner's or Tenant's access to or use of the property that may result from an extended time period to implement mitigative actions.

The Utilities will implement the mitigative actions contained in this AIMP to the extent that they do not conflict with the requirements of any applicable federal and/or state rules and regulations and other permits and approvals that are obtained by the Utilities for the project or they are not determined to be unenforceable by reason of other requirements of federal and state permits issued for the project. To the extent a mitigative action required by this agreement is determined to be unenforceable in the future due to requirements of other federal or state permits issued for the project, the Utilities will so inform the Landowner or Tenant and will work with them to develop a reasonable alternative mitigative action.

Prior to the construction of the transmission line, the Utilities will provide each Landowner and Tenant with a telephone number and address which can be used to contact the Utilities, both during and following the completion of construction, regarding the agricultural impact mitigation work which is performed on their property or other construction-related matter. If the contact information changes at any time before completion of Final Clean-up and/or after the completion of construction, the Utilities will provide the Landowner and Tenant with updated contact information. The Utilities will respond to Landowner and Tenant telephone calls and correspondence within a reasonable time.

The Utilities will use good faith efforts to obtain a written acknowledgement of completion from each Landowner and Tenant upon the completion of Final Clean-up on their respective property.

If any provision of this AIMP is held to be unenforceable, no other provision will be affected by that holding, and the remainder of the AIMP will be interpreted as if it did not contain the unenforceable provision.

Mitigative Actions

The Utilities will reasonably restore or compensate Landowners and/or Tenants, as appropriate, for damages caused by the Utilities as a result of transmission line construction, and as outlined in this plan. The decision to restore land or compensate Landowners will be made by the Utilities after discussion with the Landowner or Tenant.

1. Pole Placement

During the design of the project, the Utilities' engineering, land rights and permitting staff will work together to address pole placement issues. Utilities' staff will work with Landowners on pole placement. When the preliminary design is complete, the land rights agents will review the staked pole locations with the Landowners.

2. Soil and Rock Removal for Bored Holes

Any excess soil and rock will be removed from the site unless otherwise requested by the Landowner.

3. Damaged and Adversely Affected Tile

The Utilities will contact affected Landowners or Tenants for their knowledge of Tile locations prior to the transmission line's installation. Utilities will make every attempt to probe for Tile if the Landowner does not know if Tile is located in the proposed pole location. Tile that is damaged, cut, or removed as a result of this probe will be immediately repaired. The repair will be reported to the Inspector.

If Tile is damaged by the transmission line installation, the Tile will be repaired in a manner that restores the Tile's operating condition at the point of repair. If Tiles on or adjacent to the transmission line's construction area are adversely affected by the construction of the transmission line, the Utilities will take such actions as are necessary to restore the functioning of the Tile, including the relocation, reconfiguration, and replacement of the existing Tile. The affected Landowner or Tenant may elect to negotiate a fair settlement with the Utilities for the Landowner or Tenant to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile. In the event the Landowner or Tenant chooses to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile, the Utilities will not be responsible for correcting Tile repairs after completion of the transmission line (the Utilities are responsible for correcting Tile repairs after completion of the transmission line, provided the repairs were made by the Utilities or their agents or designees).

Where the damaged Tile is repaired by the Utilities, the following standards and policies will apply to the Title repair:

A. Tiles will be repaired with materials of the same or better quality as that which was damaged.

B. If water is flowing through a damaged Tile, temporary repairs will be promptly installed and maintained until such time that permanent repairs can be made.

C. Before completing permanent Tile repairs, Tiles will be examined within the work area to check for Tile that might have been damaged by construction equipment. If Tiles are found to be damaged, they will be repaired so they operate as well after construction as before construction began.

D. The Utilities will make efforts to complete permanent Tile repairs within a reasonable timeframe after Final Clean-up, taking into account weather and soil conditions.

E. Following completion of the Final Clean-up and damage settlement, the Utilities will be responsible for correcting and repairing Tile breaks, or other damages to Tile systems that are discovered on the Right-of-Way to the extent that such breaks are the result of transmission line construction. These damages are usually discovered after the first significant rain event. The Utilities will not be responsible for Tile repairs the Utilities have paid the Landowner or Tenant to perform.

4. Installation of Additional Tiles

The Utilities will be responsible for installing such additional Tile and other drainage measures as are necessary to properly drain wet areas on the Right-of-Way caused by the construction of the transmission line.

5. Construction Debris

Construction-related debris and material which are not an integral part of the transmission line, and which have been placed there by the Utilities, will be removed from the Landowner's property at the Utilities' cost. Such material to be removed would include excess construction materials or litter generated by the construction crews.

6. Compaction, Rutting, Fertilization, Liming, and Soil Restoration

A. Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions, and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Agricultural Monitor.

B. The Utilities will restore rutted land to as near as practical to its pre-construction condition.

C. If there is a dispute between the Landowner or Tenant and the Utilities as to what areas need to be ripped or chiseled, the depth at which compacted areas should be

ripped or chiseled, or the necessity or rates of lime, fertilizer, and organic material application, the Agricultural Monitor's opinion will be considered by the Utilities.

7. Damaged Soil Conservation Practices

Soil conservation practices such as terraces and grassed waterways which are damaged by the transmission line's construction, will be restored to their pre-construction condition.

8. Weed Control

On land which is owned by Utilities for substation facilities, the Utilities will work with Landowners if requested on weed control activities outside of the substations with the intent to not allow the spread of weeds onto adjacent Agricultural Land. Any weed control spraying will be in accordance with State of Minnesota regulations.

9. Irrigation Systems

A. If the transmission line and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, the Utilities will establish with the Landowner or Tenant, an acceptable amount of time the irrigation system may be out of service.

B. If, as a result of the transmission line construction activities, an irrigation system interruption results in crop damages, either on the Right-of-Way or off the Right-of-Way, compensation of Landowners and/or Tenants, as appropriate, will be determined as described in section 11 of this AIMP.

C. If it is feasible and mutually acceptable to the Utilities and the Landowner or Tenant, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the transmission line is also being constructed. Utilities will work with the Landowner or Tenant to identify a preferable construction time.

10. Temporary Roads

The location of temporary roads to be used for construction purposes will be discussed with the Landowner or Tenant.

A. The temporary roads will be designed so as to not impede proper drainage and will be built to mitigate soil erosion on or near the temporary roads.

B. Upon abandonment, temporary roads may be left intact through mutual agreement of the Landowner or Tenant and the Utilities unless otherwise restricted by federal, state or local regulations.

C. If a temporary road is to be removed, the Agricultural Land upon which the temporary road is constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.

11. Construction in Wet Conditions

If it is necessary to construct during wet conditions, and if the Agricultural Monitor believes conditions are too wet for continued construction, damages which may result from such construction will be paid for by the Utilities and/or appropriate restoration will be conducted. Compensation for Landowners and/or Tenants, as appropriate, will be determined as described in section 12 of this AIMP.

12. Procedures for Determining Construction-Related Damages and Providing Compensation

A. The Utilities will develop and put into place a procedure for the processing of anticipated Landowners' or Tenants' claims for construction-related damages. The procedure will be intended to standardize and minimize Landowner and Tenant concerns in the recovery of damages, to provide a degree of certainty and predictability for Landowners, Tenants and the Utilities, and to foster good relationships among the Utilities, Landowners and their Tenants over the long term.

B. Negotiations between the Utilities and any affected Landowner or Tenant will be voluntary in nature and no party is obligated to follow any particular method for computing the amount of loss for which compensation is sought or paid. The compensation offered is only an offer to settle, and the offer shall not be introduced in any proceeding brought by the Landowner or Tenant to establish the amount of damages the Utilities must pay. In the event the Utilities and a Landowner or Tenant are unable to reach an agreement on the amount of damages, the Landowner or Tenant may seek recourse through mediation.

13. Advance Notice of Access to Private Property

The Utilities will endeavor to provide the Landowner and/or Tenant advanced notice before beginning construction on the property. Prior notice will consist of a personal contact, email, letter or a telephone contact, whereby the Landowner and the Tenant are informed of the Utilities' intent to access the land.

14. Role and Responsibilities of Agricultural Monitor

The Agricultural Monitor will be retained and funded by the Utilities, but will report directly to the MDA. The primary function of the Agricultural Monitor will be to audit the Utilities' compliance with this AIMP. The Agricultural Monitor will not have the authority to direct construction activities and will not have authority to stop construction. The Agricultural Monitor will notify the Utilities' Inspector if he/she believes a compliance issue has been identified. The Agricultural Monitor will have full access to Agricultural Land crossed by the CapX2020 projects and will have the option of

attending meetings where construction on Agricultural Land is discussed. Specific duties of the Agricultural Monitor will include, but are not limited to the following:

1. Participate in preconstruction training activities sponsored by the Utilities.

2. Monitor construction and restoration activities on Agricultural Land for compliance with provisions of this AIMP.

3. Report instances of noncompliance to the Utilities Inspector.

4. Prepare regular compliance reports and submit to MDA, as requested by the MDA.

5. Act as liaison between Landowners and Tenants and MDA, if necessary.

6. Maintain a written log of communications from Landowners and/or Tenants regarding compliance with this AIMP. Report Landowner complaints to the Utilities Inspector and/or Right-of-Way representative.

7. In disputes between Utilities and a Landowner and/or Tenant over restoration, determine if agricultural restoration is reasonably adequate in consultation with the Utilities Inspector.

15. Qualifications and Selection of Agricultural Monitor

The Agricultural Monitor will have a bachelor's degree in agronomy, soil science or equivalent work experience. The Agricultural Monitor will have demonstrated practical experience with pipeline or electric transmission line construction and restoration on Agricultural Land. Final selection of the Agricultural Monitor will be a joint decision between the MDA and the Utilities.

16. Role of the Utilities Inspector

The Utilities Inspector will:

1. Be full-time member of the Utilities inspection team.

2. Be responsible for verifying the Utilities compliance with provisions of this AIMP during construction.

3. Work collaboratively with other Utilities Inspectors, Right-of-Way agents, and the Agricultural Monitor in achieving compliance with this AIMP.

4. Observe construction activities on Agricultural Land on a regular basis.

5. Have the authority to stop construction activities that are determined to be out of compliance with provisions of this AIMP.

6. Document instances of noncompliance and work with construction personnel to identify and implement appropriate corrective actions as needed.

7. Provide construction personnel with training on provisions of this AIMP before construction begins.

8. Provide construction personnel with field training on specific topics as needed.

Appendix A: **Definitions**

Agricultural Land	Land that is actively managed for cropland, hayland, or pasture, and land in government set-aside programs.
Agricultural Monitor	Monitor retained and funded by the Utilities, reporting directly to the Minnesota Department of Agriculture ("MDA") and responsible for auditing the Utilities' compliance with provisions of this AIMP.
Cropland	Land actively managed for growing row crops, small grains, or hay.
Easement	The agreement(s) and/or interest in privately owned Agricultural Land held by the Utilities by virtue of which it has the right to construct, operate and maintain the transmission line together with such other rights and obligations as may be set forth in such agreement.
Final Clean-up	Transmission line activity that occurs after the power line has been constructed. Final Clean-up activities include but are not limited to: removal of construction debris, de-compaction of soil as required, installation of permanent erosion control structures, final grading, and restoration of fences and required reseeding. Once Final Clean-up is finished, Landowners will be contacted to settle all damage issues and will be provided a form to sign confirming final settlement.
Landowner	Person(s) holding legal title to Agricultural Land on the transmission line route from whom the Utilities is seeking, or has obtained, a temporary or permanent Easement, or their representatives.
Non-Agricultural Land	Any land that is not "Agricultural Land" as defined above.
Right-of-Way	The Agricultural Land included in permanent and temporary Easements which the Utilities acquires for the purpose of constructing, operating and maintaining the transmission line.
Tenant	Any Person lawfully renting or sharing land for agricultural production which makes up the "Right-of-Way" as defined in this AIMP.
Tile	Artificial subsurface drainage system.
Topsoil	The uppermost horizon (layer) of the soil, typically with the darkest color and highest content of organic matter.
Utilities Inspector	Full-time on-site inspector retained by the Utilities to verify compliance with requirements of this AIMP during construction of the transmission line. The Inspector will have demonstrated experience with transmission line construction on Agricultural Land.

Appendix B: Mitigative Actions for Organic Agricultural Land

Introduction

The Utilities recognize that Organic Agricultural Land is a unique feature of the landscape and will treat this land with the same level of care as other sensitive environmental features. This Appendix identifies mitigation measures that apply specifically to farms that are Organic Certified or farms that are in active transition to become Organic Certified, and is intended to address the unique management and certification requirements of these operations. All protections provided in the Agricultural Impact Mitigation Plan will also be provided to Organic Agricultural Land in addition to the provisions of this Appendix.

The provisions of this Appendix will apply to Organic Agricultural Land for which the Landowner or Tenant has provided to the Utilities a true, correct and current version of the Organic System Plan within 60 days after the signing of the Easement for such land or 60 days after the issuance of a Route Permit to the Utilities by the PUC, whichever is sooner, or, in the event the Easement is signed later than 60 days after the issuance of the Route Permit. The provisions of this Appendix are applicable when the Organic System Plan is provided to the Utilities at the time of the signing of the Easement.

Organic System Plan

The Utilities recognize the importance of the individualized Organic System Plan (OSP) to the Organic Certification process. The Utilities will work with the Landowner or Tenant, the Landowner or Tenant's Certifying Agent, and/or a mutually acceptable third-party Organic consultant to identify site-specific construction practices that will minimize the potential for Decertification as a result of construction activities. Possible practices may include, but are not limited to: equipment cleaning, planting a deep-rooted cover crop in lieu of mechanical decompaction, applications of composted manure or rock phosphate, preventing the introduction of disease vectors from tobacco use, restoration and replacement of beneficial bird and insect habitat, maintenance of organic buffer zones, use of organic seeds for any cover crop, or similar measures. The Utilities recognizes that Organic System Plans are proprietary in nature and will respect the need for confidentiality.

Prohibited Substances

The Utilities will avoid the application of Prohibited Substances onto Organic Agricultural Land. No herbicides, pesticides, fertilizers or seed will be applied unless requested and approved by the Landowner. Likewise, no refueling, fuel or lubricant storage or routine equipment maintenance will be allowed on Organic Agricultural Land. Equipment will be checked prior to entry to make sure that fuel, hydraulic and lubrication systems are in good working order before working on Organic Agricultural Land. If Prohibited Substances are used on land adjacent to Organic Agricultural Land, these substances will be used in such a way as to prevent them from entering Organic Agricultural Land.

Temporary Road Impacts

Topsoil and subsoil layers that are removed during construction on Organic Agricultural Land for temporary road impacts will be stored separately and replaced in the proper sequence after the transmission line is installed. Unless otherwise specified in the site-specific plan described above, the Utilities will not use this soil for other purposes, including creating access ramps at road crossings. No topsoil or subsoil (other than incidental amounts) may be removed from Organic Agricultural Land. Likewise, Organic Agricultural Land will not be used for storage of soil from non-Organic Agricultural Land.

Erosion Control

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement erosion control methods consistent with the Landowner or Tenant's Organic System Plan. On land adjacent to Organic Agricultural Land, the Utilities' erosion control procedures will be designed so that sediment from adjacent non-Organic Agricultural Land will not flow along the Right-of-Way and be deposited on Organic Agricultural Land. Treated lumber, non-organic hay bales, non-approved metal fence posts, etc. will not be used in erosion control on Organic Agricultural Land.

Weed Control

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement weed control methods consistent with the Landowner's or Tenant's Organic System Plan. Prohibited Substances will not be used in weed control on Organic Agricultural Land. In addition, the Utilities will not use Prohibited Substances in weed control on land adjacent to Organic Agricultural Land in such a way as to allow these materials to drift onto Organic Agricultural Land.

Monitoring

In addition to the responsibilities of the Agricultural Monitor described in the AIMP, the following will apply:

A. The Agricultural Monitor will monitor construction and restoration activities on Organic Agricultural Land for compliance with the provisions of this appendix and will document any activities that may result in Decertification.

B. Instances of non-compliance will be documented according to Independent Organic Inspectors Association protocol consistent with the Landowner's Organic System Plan, and will be made available to the MDA, the Landowner, the Tenant, the Landowner's or Tenant's Certifying Agent, the Utilities Inspector and to the Utilities.

If the Agricultural Monitor is responsible for monitoring activities on Organic Agricultural Land, he/she will be trained, at the Utilities' expense, in organic inspection, by the Independent Organic Inspectors Association, unless the Agricultural Monitor received such training during the previous three years.

Compensation for Construction Damages

The settlement of damages will be based on crop yield and/or crop quality determination and the need for additional restoration measures. Unless the Landowner or Tenant of Organic Agricultural Land and Company agree otherwise, at the Utilities expense, a mutually agreed upon professional agronomist will make crop yield determinations, and the Minnesota Department of Agriculture Fruit and Vegetable Inspection Unit will make crop quality determinations. If the crop yield and/or crop quality determinations indicate the need for soil testing, the testing will be conducted by a commercial laboratory that is properly certified to conduct the necessary tests and is mutually agreeable to the Utilities and the Landowner or Tenant. Field work for soil testing will be conducted by a Professional Soil Scientist or Professional Engineer licensed by the State of Minnesota. The Utilities will be responsible for the cost of sampling, testing and additional restoration activities, if needed. Landowners or Tenants may elect to settle damages with the Utilities in advance of construction on a mutually acceptable basis or to settle after construction based on a mutually agreeable determination of actual damages.

Compensation for Damages Due to Decertification

Should any portion of Organic Agricultural Land be Decertified as a result of construction activities, the settlement of damages will be based on the difference between revenue generated from the land affected before Decertification and after Decertification so long as a good faith effort is made by the Landowner or Tenant to regain Certification.

Definitions

Unless otherwise provided to the contrary in this Appendix, capitalized terms used in this Appendix shall have the meanings provided below and in the AIMP. In the event of a conflict between this Appendix and the AIMP with respect to definitions, the definition provided in this Appendix will prevail but only to the extent such conflicting terms are used in this Appendix. The definition provided for the defined words used herein shall apply to all forms of the words.

Apply	To intentionally or inadvertently spread or distribute any substance onto the exposed surface of the soil.
Certifying Agent	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Decertified or Decertification	Loss of Organic Certification.
Organic Agricultural Land	Farms or portions thereof described in 7 CFR Parts 205.100, 205.202, and 205.101.
Organic Buffer Zone	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Organic Certification or Organic Certified	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.100 and 7 CFR Part 205.101.
Organic System Plan	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Prohibited Substance	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.600 through 7 CFR 205.605 using the criteria provided in 7 USC 6517 and 7 USC 6518.

Brookings County - Hampton
345 kV Transmission Line Project
PUC Docket No. ET2/TL-08-1474

Appendix E
FEIS ID#254: Applicant Comment Letter

During the public comment period for the Draft Environmental Impact Statement (DEIS), Craig Poorker applicant submitted a comment letter on behalf of the applicants providing information in response to concerns raised by the Minnesota Department of Transportation (MN/DOT). This comment letter includes detailed information relevant to coordination of routing and construction with MN/DoT. The letter has been attached here for reference as Appendix E.

November 30, 2009

VIA EMAIL

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

Re: Comments Regarding the Draft Environmental Impact Statement—General Comments

In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, South Dakota, to Hampton, Minnesota
MPUC Docket No.: ET2/TL-08-1474

Dear Mr. Ek:

Great River Energy, a Minnesota cooperative corporation, and Northern States Power Company, a Minnesota corporation ("the Applicants"), submit the following comments regarding the Draft Environmental Impact Statement ("DEIS") issued by the Department of Commerce Office of Energy Security ("OES") on October 20, 2009 for the Brookings County – Hampton 345 kV Project ("Project"). Applicants have reviewed the DEIS in detail, and believe that for the most part the DEIS fairly, accurately, and in a detailed fashion analyzes the potential environmental impacts associated with all of the proposed and alternative routes, fully evaluates reasonable alternatives, and provides the Public Utilities Commission with ample environmental information to make informed decisions on the Project. Applicants appreciate the hard work that OES staff put into preparing the DEIS.

Applicants have only limited suggestions regarding additional information that would be appropriate to supplement in the Final EIS. They are described below. In addition, in a separate letter, Applicants will be offering comments in response to concerns raised by the Minnesota Department of Transportation in its comments on the scope of the DEIS dated April 30, 2009.

115 kV Connections

The DEIS describes the 115 kV connections at the Cedar Mountain Substation. Applicants note that as stated in the pre-filed direct testimony of Craig Poorker and Kevin Lennon, the 115 kV line will need to connect at the Cedar Mountain Substation and at the

Franklin Substation. Applicants suggest that the Final EIS include additional information regarding these connections and associated impacts.

CSAH 70

As part of its analysis of County State Aid Highway ("CSAH") 70 segment alternatives, Applicants considered overhead and underground construction options and concluded that a CSAH 70 alternative is a not a reasonable alternative to the comparable segment of Applicants' preferred segment in this area. Applicants' analyses are described in the Route Permit Application and the pre-filed direct testimony of Craig Poorker and Kevin Lennon. Applicants believe it would be appropriate to supplement the DEIS with additional information regarding CSAH 70 route alternatives.

Thank you for considering our comments. Please contact me at (763) 445-5980 or cpoorker@grenergy.com if you have any questions.

Sincerely,

Craig Poorker
Manager of Land Rights
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369

2423273v3

November 30, 2009

VIA EMAIL

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

Re: Comments Regarding Draft Environmental Impact Statement – Issues Raised by Minnesota Department of Transportation

In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, South Dakota, to Hampton, Minnesota
MPUC Docket No.: ET2/TL-08-1474

Dear Mr. Ek:

Great River Energy, a Minnesota cooperative corporation, and Northern States Power Company, a Minnesota corporation ("the Applicants"), submit the following responses to several issues raised by the Minnesota Department of Transportation ("Mn/DOT") in its comment letter dated April 30, 2009 on the scope of the Draft Environmental Impact Statement ("DEIS") for the Brookings County – Hampton 345 kV Project ("Project").

Mn/DOT's comments focus on transmission line alignments that are within 75 feet of the trunk highway right-of-way. Mn/DOT stated concerns regarding the proximity of the proposed transmission lines to trunk highway right-of-way and how this may affect Mn/DOT's maintenance, reconstruction, or new construction of roads and interchanges.

Mn/DOT's stated concern and Applicants' specific responses are provided below:

A. General Comments

1. Conductor Blow Out

Mn/DOT stated its "[t]raditional activities to maintain roadways and bridges could be impacted if the work area is within the 'blow out' zone" of a transmission line. Conductor "blow out" occurs when, under certain wind conditions the actual conductors sway or blow out horizontally from the "at rest" centerline of the transmission line. In the case of high winds, the conductors could cross into the airspace above an adjacent right-of-way even though there is no physical presence of the poles, or arms in the adjacent right-of-way.

Applicants' Response: The construction of transmission lines is governed by the National Electrical Safety Code ("NESC") which requires transmission lines be designed to have minimum clearances to certain activities under certain circumstances. These activities include those often undertaken by Mn/DOT. Known obstacles and potential interference can be taken into account as part of the planning process to produce a line design that adheres to the NESC for the activities being contemplated. Blow out is a physical phenomenon that is well understood and its occurrence can be predicted and controlled to minimize impacts on adjacent land uses. Techniques for reducing the impact of blow out include strategic pole placement, taller poles, reduced span length and v-string insulators. Applicants note that not all activities that occur in proximity to transmission lines occur during maximum blow out condition (103 M.P.H. winds). For example, crane operation generally occurs at wind speeds less than 30 mph and therefore the impacts of blow out above that wind speed are not relevant to that activity. In rare instances where adequate clearance may not be available, typically individualized solutions can be developed.

Applicants have provided Mn/DOT with a diagram and a table regarding blow out and clearances, which are attached.

2. Weather

Mn/DOT stated that "[i]t is expected that weather events (tornado, ice, or blizzard conditions, heavy winds, lightning, etc.) that disrupt transmission services due to downed lines could also disrupt access to the trunk highway system."

Applicants' Response: Applicants believe that the risk of a weather related event creating a downed line that disrupts accesses to a trunk highway is remote. This is due in part to the current infrequent occurrence experienced with existing facilities, and the more robust nature of the line design being planned for the CapX2020 facilities. Applicants have reviewed system data from January 2004 through June 2009 for transmission lines 69 kV and above owned and operated by Xcel Energy (approximately 4,100 miles) and identified only two reported incidents. One of these incidents occurred on May 26, 2005 when an insulator string from Xcel Energy's Main Street – Riverside 115 kV transmission line broke free from the cross arm and came to rest across the 3rd Avenue Bridge in Minneapolis. The second incident occurred on June 8, 2005 when the Hutchinson – Winthrop – Hector 69 kV line failed and conductors were reported on Highway 212 near Stewart, Minnesota.

Similarly, Great River Energy, which owns approximately 3,600 miles of facilities 69 kV and above has been unable to identify any incident in recent history where a downed line has interfered with State trunk highway use.

3. Impacts or Limitations to Equipment Use Near or Along 345 kV Lines and Mn/DOT ROW

Mn/DOT has expressed concern that placing 345 kV transmission structures near or along Mn/DOT ROW could impact or limit Mn/DOT's use of certain equipment, such as excavating equipment, that can be up to 35-feet tall.

Applicants' Response: *See response to A.1. It should also be noted that there are currently numerous examples of transmission line facilities, including 345 kV transmission lines, that are in or near interstate right-of-way, including along I-494, I-35, and I-94.*

B. Detailed Comments by Districts

1. Mn/DOT District 6 (Rice County)

District 6 identified two areas where the Alternate Route may impact Mn/DOT right-of-way:

- The vicinity of Lonsdale along Minnesota Highway 19 between Rice County State Aid Highway ("CSAH") 2 and 60th Street. District 6 has a bituminous mill and overlay project scheduled in 2010 for the portion of MN 19 from MN 13 east to Third Avenue SE in Lonsdale, including the area highlighted in the CapX 2020 project.

Applicants' Response: *Bituminous mill and overlay projects typically are not affected by adjacent transmission lines.*

- I-35 from 57th Street in Webster Township north to the District 6 Metro District boundary at Scott CSAH 2. Mn/DOT does not allow longitudinal utilities within freeway right of way. An exception to the Utility Accommodation Policy would require a federal action as noted above. There are no major construction projects scheduled in the District 6 portion of I-35 within the next four years.

Applicants' Response: *Applicants do not currently know on what terms Mn/DOT would issue Utility Permits for a utility installation along I-35. Applicants will continue to work with Mn/DOT in an effort to add information into the record to clarify the alignments (5-feet and 25-feet) for which a permit can be issued.*

2. Mn/DOT District 7 (Brown, Renville, Sibley and Le Sueur Counties)

Routes running parallel to state trunk highways warranted the following comments:

- The 2 mile segment of TH 19 west of Winthrop - No construction is planned at this time but this area may contain clear zone issues even though the right of way seems adequate.

Applicants' Response: *Applicants propose to place transmission line poles for the 345 kV line outside of the right-of-way of trunk Highway 19.*

- The 1 mile segment of TH 22 north of Gaylord -- A mill and overlay project is planned for 2011 (this is also a tier 2 federal stimulus project). This segment has a narrow right-of-way so it will be challenging to identify a safe and proper location for towers within or immediately adjacent to the right-of-way.

Applicants' Response: *Bituminous mill and overlay projects typically are not affected by adjacent*

transmission lines.

- The 3 mile segment of TH 169 from TH 93, north, out of the valley - this section of roadway is an Interregional Corridor and while there is no construction currently planned, this is a high volume corridor. The study corridor is extra wide in this location, likely due to the serious topographical challenges that exist; right-of-way and clear zone issues will need to be studied and evaluated.

Applicants' Response: *Applicants have requested a wide route corridor through here for the reasons stated by Mn/DOT. Applicants plan to construct the proposed structures outside of highway right-of-way. Applicants desire to continue discussions with Mn/DOT to identify possible locations in this area where the transmission facilities can cross the Minnesota River and minimize impacts to the river and Mn/DOT's scenic easements.*

- Geologic and groundwater conditions in the general area of the Minnesota River should be thoroughly investigated. Artesian wells exist in the vicinity of TH 25 and have complicated construction of bridge foundations in the recent past.

Applicants' Response: *Applicants appreciate learning of Mn/DOT's prior construction experience in this area. Applicants' engineers plan to conduct soil studies after the final route is selected and prior to construction.*

- There is a Mn/DOT rest area in this segment.

Applicants' Response: The Minnesota River Valley Rest Area is located on US 169. The proposed alignment crosses US 169 in an area on the southwest side of the rest area. The proposed alignment for the Preferred Route crosses the rest area property as well as parcels across which Mn/DOT has scenic easements. Applicants are working with Mn/DOT to identify permitting requirements and to address Mn/DOT's concerns.

3. Mn/DOT District 8 (Renville, Redwood, Lyon and Lincoln Counties)

Routes running parallel to state trunk highways warranted the following comments:

- An alternative to the proposed transmission route would parallel State Highway 19 west of the city of Redwood Falls, from the junction of State Highway 19 and 67 and travel west to the Highway 19 and Redwood County Highway 7 junction. This segment of roadway has narrow and variable right of way lines and it is doubtful that a transmission line, without the use of easements or land purchases, could be placed outside of the clear zone.

Applicants' Response: Applicants propose to construct the Project outside of the right-of-way of trunk Highway 19.

- Listed also as an alternate route, another transmission line would parallel State Highway

23 in Yellow Medicine County from 210th Avenue to 530th Avenue. In 2015, Mn/DOT District 8 plans on completing an overlay of State Highway 23 from Hanley Falls to Granite Falls. At this time, the project does not require additional right of way but the project could have an impact on the proposed alternate transmission line route.

Applicants' Response: Bituminous mill and overlay projects typically are not affected by adjacent transmission lines. Applicants will coordinate with Mn/DOT in locating the lines to accommodate anticipated expansion areas.

4. Mn/DOT Metro District (Dakota and Scott Counties)

- USTH 169 and USTH 52 have been identified as Interregional Corridors linking trade centers in the state of Minnesota. While reconstruction of these corridors in their entirety is not within the 10 year planning horizon, smaller segments of these routes have been converted to controlled access freeways and sections continue to be reconstructed to transform these routes to freeways. It is preferred to have crossings meet freeway standards on all parts of these higher growth corridors so future roadway upgrades to freeways would not be limited.

Applicants' Response: Applicants will collaborate with Mn/DOT on where its future intersection projects may be.

- There is a proposed substation located off USTH 52 near Hampton in an existing farm field. As noted above, the long term goal is to transition USTH 52 to a controlled access freeway. It is recommended that the access for any proposed utility in this area be from the local road system. We would appreciate more information about the site of the proposed substation located near USTH 52 in Hampton so that we can coordinate that with our USTH 52 Frontage Road/Access Closure project.

Applicants' Response: As stated in pre-filed direct testimony, Applicants have narrowed the number of possible substation sites for the new Hampton Substation to two locations that are each located on the west side of Highway 52 near 215th Street. One substation site is located on the north side of 215th Street and the other is located on the south side of 215th Street. Maps showing these two substation locations are attached as Schedule 13 to the Direct Testimony of Craig Poorker. Both of these substation locations allow for access from the local road system.

- While it appears that the proposed routes will not impact commercial navigation, the navigable sections of the Minnesota River should be identified and assessed for potential impacts.

Applicants' Response: It is Applicants' understanding that commercial boat traffic on the Minnesota River does not go beyond Shakopee. Applicants have also been in contact with the U. S. Coast Guard regarding the Project to ensure no conflict with navigation.

Routes running parallel to state trunk highways warranted the following comments:

- The one mile segment of USTH 52 between CSAH 47 and TH 50 in Hampton - A Hampton Frontage Road/Access Closure project is being planned for fiscal years 2011/2012 to transition this Interregional Corridor to a controlled access section. This work is being coordinated with Dakota County's construction of ramps and loops at CSAH 47/USTH 52, thus converting the existing overpass to a full interchange at this location. This is a high volume corridor and placing lines within or immediately adjacent to the right of way would limit future options for highway expansion.

Applicants' Response: Applicants 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.

- 1-35 north of the District 6 Metro boundary at Scott CSAH 2 - Although there is no planned project in this area, discussions with local partners are underway to plan for reconstruction of this interchange. Thus, routes running parallel to highway right of way in this vicinity would present challenges for future reconstruction. Mn/DOT does not allow longitudinal utilities within freeway right of way. An exception to the Utility Accommodation Policy would require a federal action as noted above.

Applicants' Response: See response above.

Thank you for considering our comments. Please contact me at (763) 445-5980 or cpoorker@grenergy.com if you have any questions.

Sincerely,

Craig Poorker
Manager of Land Rights
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369

Enclosure

cc: Michael Barnes, Mn/DOT
Dave Seykora, Mn/DOT

2435339v2

414 Nicollet Mall
Minneapolis, Minnesota 55401-1993

November 25, 2009

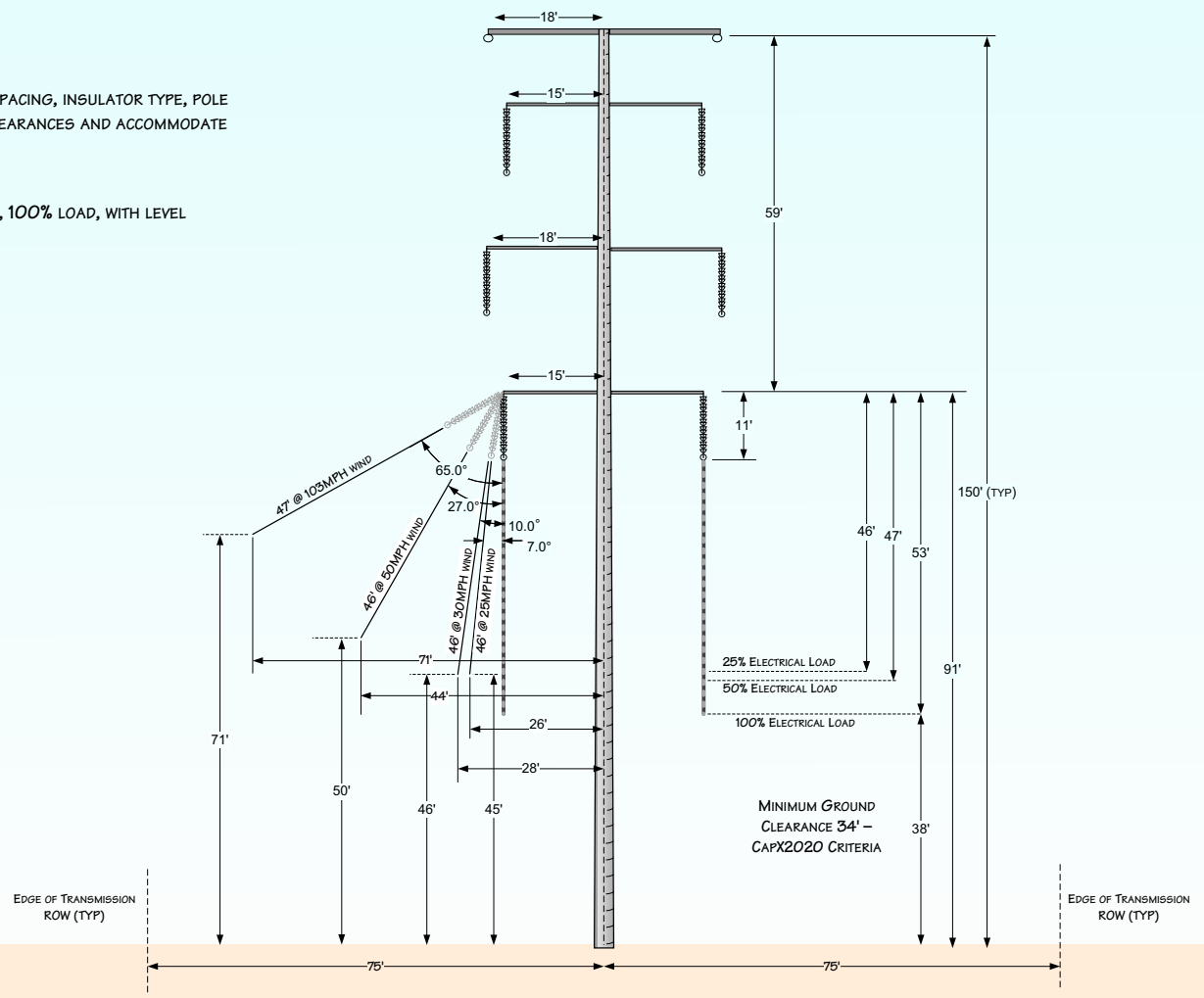
As part of the ongoing discussions with MNDOT regarding appropriate clearances from transportation activities and energized 345 kV electric lines Xcel Energy provides the following information. The 345 kV transmission lines will be designed to have a minimum 34 ft. ground clearance.

Activity Type	**Recommended Clearance from Energized 345 kV Conductor**
Roads or land traversed by vehicles 14 feet in height or less	34 ft. ground to conductor*
Noise walls or signs	16 ft. vertical, 13 ft. 9 in. horizontal
Light standards and traffic signals	12 ft. vertical, 10 ft. 9 in. horizontal
Cranes and boomed equipment	25 ft.
**Oversized loads on ground - contact the utility for verification	Must be verified with utility, generally 16 ft. from load to conductor

*Note: NESC minimum required clearance from a 345 kV conductor to a vehicle without a boom, box, or other part that can be raised is 10 ft. 9 in., Xcel Energy recommended clearance is 16 ft.
**This chart is derived from more comprehensive standards documentation that contains additional activities. In the event a specific activity is not identified in this chart the utility must be contacted to determine appropriate clearances prior to the activity being conducted.

Notes:

1. Representative pole, design changes such as spacing, insulator type, pole height, etc. can usually be made to increase clearances and accommodate operations near poles.
2. Assumed span length is 1,000 feet.
3. Conductor blow-out shown occurs at mid-span, 100% load, with level terrain.



CapX2020
Delivering electricity you can rely on

Typical Double Circuit Tangent Pole

DATE: 11/17/2009
REVISED: 11/20/2009
SCALE:
DRAWN BY: MLTeichert
K:\925\CAPX\CAPX_TRANSMISSION_POLE.VSD

Notes:

1. Representative design changes such as spacing, insulator type, pole height, etc. can usually be made to increase clearances and accommodate operations near poles.
2. Assumed span length is 1,000 feet.
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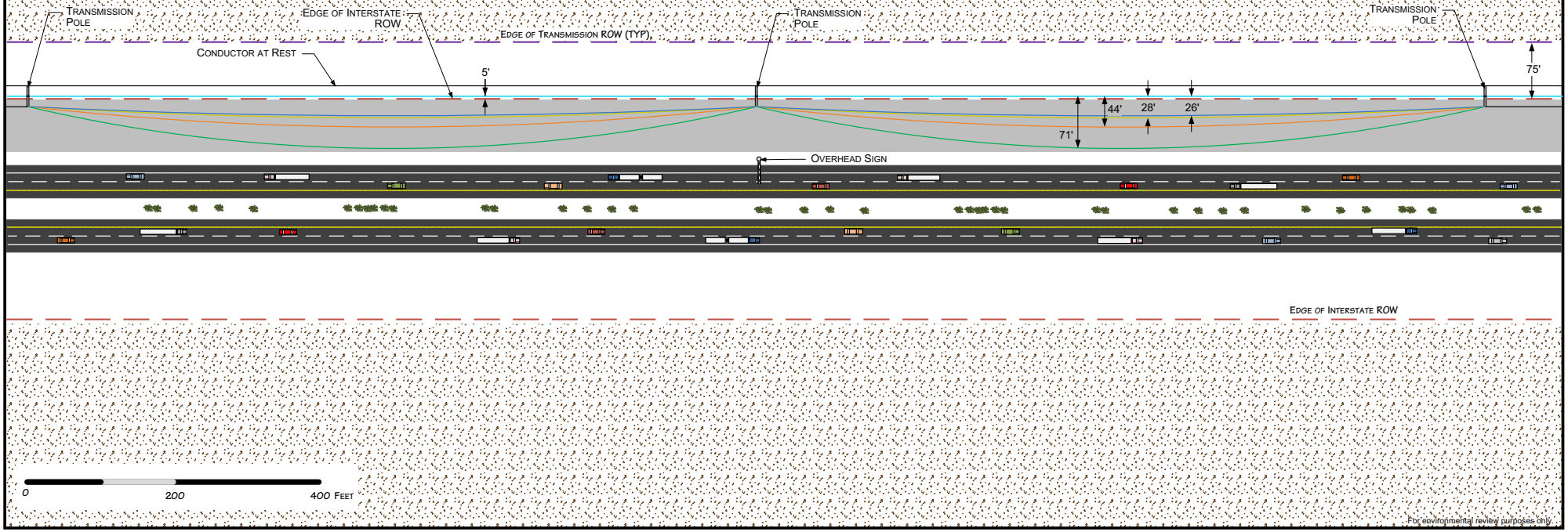


For environmental review purposes only.

CapX2020
Delivering electricity you can rely on

Typical Double Circuit Tangent Pole

Overhead View

- Edge of Interstate ROW
- Edge of Transmission ROW (TYP)
- Transmission Centerline
- Blowout Conductor @ 25 mph wind
- Blowout Conductor @ 30 mph wind
- Blowout Conductor @ 50 mph wind
- Blowout Conductor @ 103 mph wind
- Shared Corridor

DATE: 11/17/2009
REVISED: 11/25/2009
SCALE:
DRAWN BY: MLTeichert

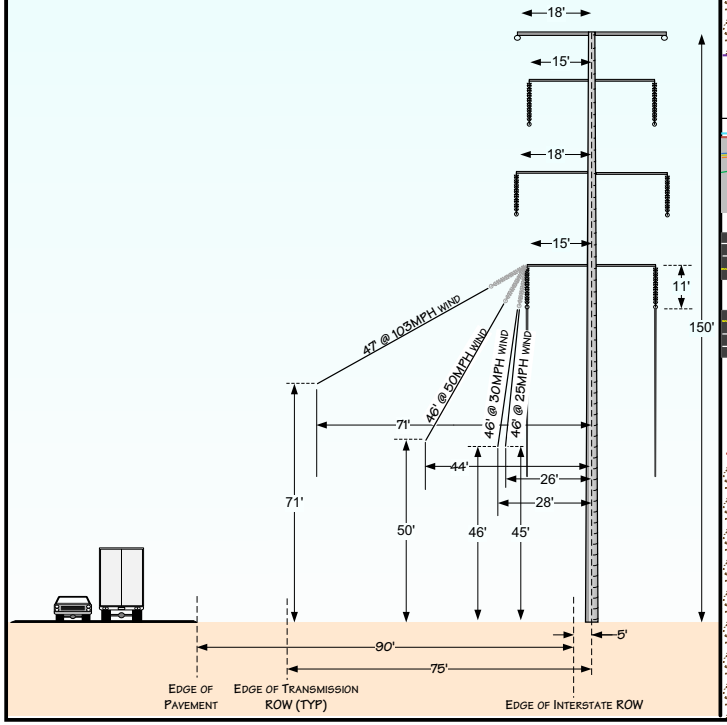
K:\925\CAPX\CAPX_TRANSMISSION_LINES_OVERHEAD_V2.VSD

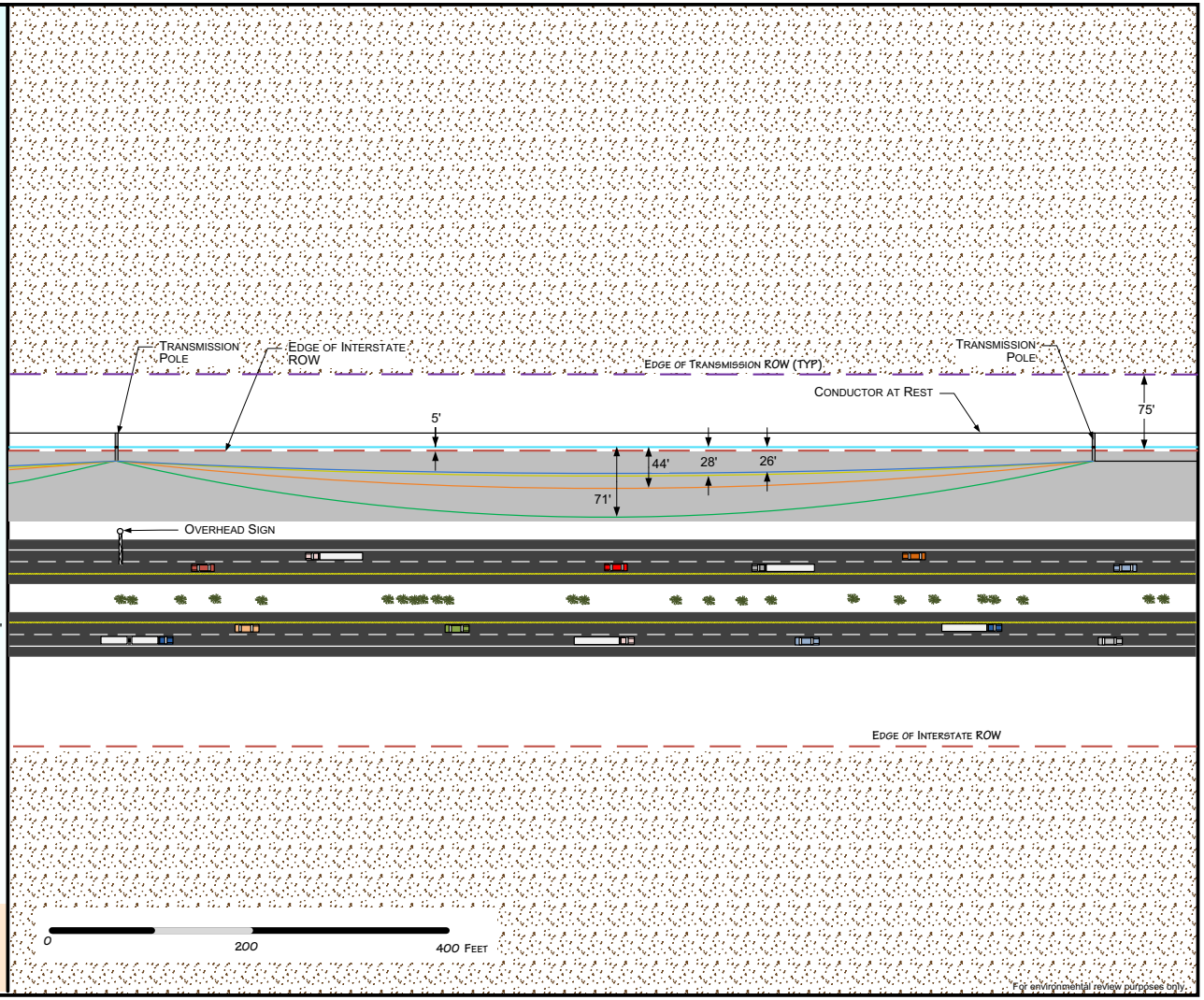
NATURAL RESOURCE GROUP

Notes:

1. Representative design changes such as spacing, insulator type, pole height, etc. can usually be made to increase clearances and accommodate operations near poles.
2. Assumed span length is 1,000 feet.
3. Conductor blow-out shown occurs at mid-span, 100% load, with level terrain.

0 25 50 feet





For environmental review purposes only.

CapX2020
Delivering electricity you can rely on

Typical Double Circuit Tangent Pole

- Edge of Interstate ROW
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DATE: 11/17/2009
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SCALE:
DRAWN BY: MLTeichert

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NATURAL RESOURCE GROUP

Brookings County - Hampton
345 kV Transmission Line Project
PUC Docket No. ET2/TL-08-1474

Appendix F
Updated House Count

A description of the house count methodology used in the Draft Environmental Impact Statement (DEIS) to assess potential impacts to homes is discussed in section 6.1.3 of the DEIS. The process included (1) reviewing the applicants' information (2) updating it using high-resolution aerial photographs, and (3) ground verification of the applicant's data including locations of houses and other human settlement features.

During the DEIS comment period, a number of comments were received regarding homes that were potentially missing or mis-aligned when impacts to homes were assessed for the DEIS. During the DEIS comment period additional houses were added or removed based on individual comments; home owners pointed out houses on maps at public meetings or sent in maps with their house location circled. Additional review was also done in portions of Dakota, Scott, Rice and Le Sueur Counties using the counties online interactive GIS mapping websites. These websites were used to view parcel boundaries, ownership and registered use. The websites also provided information on the types of buildings on the properties and was used to help verify residential structures versus barns, garages or commercial buildings. These websites also provide Bird's Eye View imagery which is an oblique view allowing the image to rotate 360 degrees to get a better view of the type of structure on a property. Updated house counts are provided in Table 1 of this appendix.

Appendix G. Table 1

Updated Summary of Homes within proposed route width

Name	Homes (75ft)	Homes (150ft)	Homes (300ft)	Homes (500ft)
Segment 1				
Preferred Route	0	2	19	31
1P-01	0	2	18	31
1P-02	0	4	18	31
Alternate Route	0	2	17	26
1A-01	0	2	18	28
1A-02	0	3	23	32
1A-03	0	4	23	33
Segment 2				
Preferred Route	1	6	21	33
2B-01	0	1	7	14
2B-02	0	4	16	26
Alternate Route	0	1	9	15
Segment 3				
Preferred Route	0	7	17	23
3P-01	0	6	16	23
3P-02	0	6	16	23
3P-03	0	6	17	23
3P-04	0	6	16	23
3P-05	0	6	16	23
3P-06	0	7	17	21
Alternate Route	0	0	5	13
3A-01	0	0	5	13
Segment 4				
Preferred Route	1	14	42	68
4P-01	0	11	35	63
4P-02	0	12	40	67
4P-03	1	15	42	66
4P-04	1	14	43	69
4P-05	1	15	46	74
4P-06	1	10	40	59
4B-01	0	11	48	83
4B-02	0	10	49	84
4B-03	0	6	40	70
4B-04	1	12	34	57
4B-05	3	10	41	78
4B-06	1	12	47	72
4B-07	3	18	53	83
4B-08	1	14	47	70
4B-09	1	12	36	57
Alternate Route	0	7	37	73
Segment 5				
Preferred Route	0	6	54	94
5P-01	0	7	55	101
5P-02	0	6	50	92
5P-03	5	29	94	173
5B-01	1	10	40	79
5B-02	1	20	63	116
5B-03	2	10	64	112
Alternate Route	1	11	40	79
5A-01	1	11	39	80
5A-02	1	11	39	80
5A-03	2	17	41	74
5A-04	1	12	42	78
Segment 6				
Preferred Route	1	8	32	67
6P-01	1	13	82	142
6P-02	1	8	31	66
6P-03	1	6	27	54
6P-04	1	8	41	76
6P-05	2	14	58	110
6P-06	1	6	26	52
6P-07	1	11	38	73
6P-08	1	8	36	58
Alternate Route	0	6	57	115
6A-01	0	11	74	116
6A-02	0	7	64	127
6A-03	0	6	63	110
6A-04	13	53	144	205

= house count has been updated since DEIS publication

Brookings County - Hampton
345 kV Transmission Line Project
PUC Docket No. ET2/TL-08-1474

Appendix G
Acronyms

Acronyms

Agricultural Impact Mitigation Plan	AIMP
Department of Natural Resources	DNR
Department of Transportation	DOT
Electric and magnetic fields	EMF
Federal Aviation Administration	FAA
Final Environmental Impact Statement	FEIS
Geographical Information System	GIS
Global Positioning System	GPS
High-voltage Transmission Lines	HVTL
Kilovolt	kV
Midwest Independent Transmission System Operator	MISO
Minnesota County Biological Survey	MCBS
Minnesota Department of Agriculture	MDA
Minnesota Department of Transportation	MN/DOT
Minnesota Pollution Control Agency	MPCA
National Electrical Reliability Corporation	NERC
National Electrical Safety Code	NESC
National Pollutant Discharge Elimination System	NPDES
National Wetlands Inventory	NWI
Office of Energy Security	OES
Right of Way	ROW
Right of Way	ROW
Route Permit Application	RPA
Scientific Natural Area	SNA
Total Maximum Daily Load	TMDL
United States Fish and Wildlife Service	USFWS
Very High Frequency Omnidirectional Range	VOR
Wildlife Management Area	WMA